VOLUME 1

THEORIES OF LEARNING

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THEORIES OF LEARNING

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VOLUME I

Philosophical, Sociological and Psychological Theories of Learning

Edited by

David Scott

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Editor's Introduction: Learning

David Scott

Introduction

This major work covers the essential areas that constitute the field of learning. It is arranged in four volumes: *Philosophical, Sociological and Psychological Theories of Learning; Models of Learning; Learning, Curriculum, Pedagogy and Assessment*; and *Learning Dispositions, Life-Long Learning and Learning Environments*. The theories, frameworks, thematic approaches and conceptual relations discussed in the four volumes are central to each and every learning episode, and it is, therefore, possible to characterise such episodes as learning sets or sequences. Each learning set has a series of elements: a determination of the circumstances in which learning can take place in the specific environment; a set of resources and technologies to allow that learning to take place; a particular type of relationship between teacher and learner to effect that learning; a theory of learning, that is, an account of how the learning (expressed as a knowledge set, skill or disposition/inclination) can be assimilated; and a further account of how the learning which has taken place in a particular set of circumstances, for example, in a classroom, with a set of learners, in a particular way, with a particular theory of learning underpinning it, and so forth, can transfer to other environments in other places and times. The articles chosen for this four-volume work are variants on learning in general and on aspects or elements of these learning sets, in particular.

Learning can be theorised as a process, with a range of characteristics. It has a set of pedagogic relations, that is, it incorporates a relationship between a learner and a catalyst, which could be a person, an object in nature, an artefact, a particular array of resources, an allocation of a role or function to a person, a text or a sensory object. A change process is required, either internal to the learner or external to the community of which this learner is a member. In any learning episode, there are temporal arrangements,

and these should be understood in two ways: first, that learning involves a temporal sequence of activities, i.e. a_1 leads to a_2 which leads to a_3, and second, that learning episodes are internally sequenced.

Learning is conditioned by an arrangement of resources, including spatial and temporal configurations. These arrangements may be embodied, discursive, institutional, systemic or agential. This has implications for the types of learning that can take place: overlays retain the original; fusions include discards as well as insertions; deletions or subtractions involve a loss; additions or attachments are accretions; progression implies a movement in relation to a set of criteria. Each learning episode has socio-historical roots. What is learnt in the first place is formed in society and outside the individual. It is shaped by the life that the person is leading. It is thus both externally and internally mediated, and the form taken is determined by whether the process is cognitive, affective, meta-cognitive, conative or expressive. Finally, learning has an internalisation element, where what is formally external to the learner is interiorised by the learner, and a performative element, where what is formally internal to the learner is exteriorised by the learner in the world.

Two Theories of Learning

In relation to internalisation, externalisation and performative mechanisms in learning, Jerome Bruner (1966; 1996; and represented in this four-volume set by his theory of mind and development – see volume one; and by his theory of instruction – see volume two) distinguishes between symbol-processing and socio-cultural views of learning. In typical fashion, he strives to avoid taking a position in which the one is seen as the opposite of the other, so that, if one position is advocated, all reference to the other is excluded. However, he does distinguish between two theories of learning. The first of these theories, the computational or symbol-processing view, understands learning as the sorting, storing and retrieving of coded information from and about the world, and it works in the same way that a computer processes data. The mind is treated as a blank screen. Information is inputted into the mind, and this consists of pre-digested facts about the world, which represent in some unambiguous way how the world works. The mind, in the act of learning, receives that information, incorporates it into the store of facts and theories that it already holds and then makes adjustments to this world-view in the light of this new information. This is a mechanistic process, and the notion of interpretation is subsequently reduced to the assimilation of new information and the reformulation of the mind-set of the learner. Learning is understood as a passive reflection of the world, with particular learning episodes being understood as more or less efficiently realised.

Symbol processing approaches have their origins in the philosophical theory of empiricism, which understands the world as given and then received by individual minds. It separates out language from reality, mind from body and the individual from society (cf. Bredo, 1990). Empiricism suggests that facts can be collected about the world, free of the value assumptions and belief systems of the collector. These facts constitute unequivocal and true statements about the world. Furthermore, learning comprises discovering what they are and developing adequate models to explain them.

However, this implies that we understand the world as fixed by language and as language being a transparent medium for representing reality. This, of course, doesn't mean that an individual can create the world as they like; but it does suggest that the source of understanding, learning and indeed, being, resides in society, and in particular, in communities of learners located in time and place. Furthermore, it challenges assumptions that there is a world or reality out there which is separate from our knowledge of it and that human beings have invented symbolic systems such as language and mathematical notation which mirror that reality. In contrast, there is a more radical solution to the problem of the relationship between mind and reality and this is that representations of reality are not given in a prior sense because of the nature of reality or because the mind is constructed in a certain way, but as a result of individual human beings actively constructing and reconstructing that reality in conjunction with other human beings, some contemporary, some long since dead. This brings to the fore the dispute between constructivists and situated cognitivists, in that the former suggest that this active process of learning occurs in the mind, while the latter locate the process of categorising, classifying and framing the world in society and not in individual minds. Paul Cobb (in the first volume of this work) argues that there is a considerable debate about whether mind is located in the head or in individual-in-social-action and whether development is cognitive self-organisation or enculturation into established practices. For Cobb, the choice between constructivist and socio-cultural perspectives is a false one. Socio-cultural perspectives focus on the conditions for or the possibility of learning, whereas theories developed from the constructivist perspective focus on what students learn and the processes by which they do so.

Symbol-processing approaches to cognition also suggest a further dualism, between mind and body. This separation of mind and body locates learning and cognition in the mind, as the mind passively receives from the bodily senses information which it then processes. The mind is conceived of as separate from the material body and from the environment in which the body is located. Learning is understood as a passive process of acquiring information from the environment. On the contrary, situated-cognitionists argue that learning involves intimate and interactive contact with the environment and this contributes to further understanding for the individual.

and changes or transforms the environment itself. In other words, knowledge is not understood as a passive body of knowledge, skills and dispositions to be acquired from the environment but as an interactive process of construction and re-contextualisation.

Finally, it is important to discuss, as Bredo (1990) does, the third dualism which critics of symbol-processing approaches have suggested is problematic. This is the separation of the individual from society. If a learner is given a task to complete, they have to figure out for themselves what the problem is and how it can be solved. The task moreover, is framed by a set of social assumptions made by the teacher. The problem with the symbol-processing view is that an assumption is made that the task and the way it can be solved are understood in the same way by both learner and teacher. However, this is an assumption which shouldn't be made, and one of the consequences of making it is that the learner who then fails to solve the problem is considered to be inadequate in some specified way, rather than someone who has reconfigured or interpreted the problem in a way which is incongruent with that of the teacher or observer. The individual/societal distinction which is central to a symbol-processing view of cognition separates out individual mental operations from the construction of knowledge by communities of people and this leaves it incomplete as a theory of learning.

This symbol-processing or computational view of learning can be compared with learning theories which emphasise cultural aspects which are situated or embedded in society. Situated-cognition or socio-cultural theories of learning view the person and the environment as mutually constructed and mutually constructing. As a result, they stress active, transformative and relational dimensions to learning; indeed, they understand learning as contextualised.

This point can be illustrated by an example from the field of informal learning, learning how to be a parent. What characterises this type of learning is that there is as yet no formal type of training which a putative parent has to undergo. It is an example of learning generated from the actual practice itself. More fundamentally, the parent is immersed in particular discourses about parenting which act to close off other possibilities; these discourses reflect the way society is structured. The putative parent has a view about him or herself and how this relates to parenting. Parenting itself takes place within particular environments, and these are structured in different ways. Single parenting is a qualitatively different experience from parenting by two or more adults. We, therefore, need to understand learning how to be a parent as situated and as making reference to discursive structures or significations of gender, sexuality, ethnicity and class; pre-organised meanings about parenting which reflect particular understandings about knowledge, i.e. views of childhood, adulthood, learning, identity and the like; and other viewpoints, discourses and knowledge structures which act as points of

comparison. What this means is that learning is situated and that it has constructed or social features. As a result, it can only be understood by making reference to those knowledge structures, discourses and practices which reflect particular time and space bound pre-occupations and values of particular communities.

Furthermore, these communities are stratified in various ways. First, some individuals in society have a greater influence than others in determining what counts as legitimate knowledge and what doesn't. Second, knowledge-gathering takes place in settings and environments in which individuals have different access to resources. The subject matter of learning is in part those differences and this means that power is a necessary element in explanations of social life. Third, there are power dimensions of the learning situation itself. This is most obvious in formal learning situations where the teacher has a greater opportunity to impose their version of knowledge on the learner than the learner has to construct it for themselves. However, even in the most informal of learning situations there are power dimensions present, as the learner is situated within arrangements of knowledge, how it should be organised and how it should, therefore, be assimilated, which acts to restrict the capacity of the learner to progress their own learning. Finally, learning acts to fix reality in a particular way which is never entirely justified and cannot be legitimated by reference to a notion of what the world is really like. This act of closure is a part of the reality within which the learner is embedded. By adopting a particular way of working, a particular understanding of knowledge, the learner is rejecting or turning aside from other frameworks and this itself is an act of power.

However, within this general framework, learners have more control in some settings than in others. The teaching and learning strategy is constructed strongly or weakly, where strong and weak refer to the capacity of the message system to restrict or allow different meanings, interpretations and actions. Each learning moment focusses on a particular aspect of knowledge, whether chosen by a teacher or not. This is made visible by the act of delivery. However, there are always invisible dimensions: what is not chosen and why it was not chosen are invisible. This approach is one that Basil Bernstein used extensively. Bernstein features in volume one of this work as the progenitor of a model which proposes the development of a language of learning relating to the internal structure of specialised knowledges, the positional nature of their fields or arenas of practice, identity constructions and their changes, and the forms of acquisition for successful performances.

Finally, there are structural dimensions of the learning setting. These comprise in part particular spatial and temporal arrangements. Distance learning approaches are constructed in particular ways so that the learner is allowed some licence for when and where they choose to study. Face-to-face teaching settings are constructed in terms of timetables, sequences of learning, particular relations between teachers and learners and organised places

where the teaching takes place. All these various forms of structuring influence what is learnt, how it is learnt and how that knowledge is used in other settings and other environments. Situated-learning approaches acknowledge that these arrangements for learning are constructed in communities of people. They also suggest that learning is itself a social practice which has the potential to transform the practice itself. What this means is that learning, knowledge and its outcomes have to be understood historically and as being socially embedded.

Constructivism, Socio-Culturalism and Behaviourism

Constructivist and socio-cultural theories of learning can be contrasted with, and indeed were originally conceived as a reaction against, behaviourist forms of learning. Behaviourism works on the principle of stimulus-response and is mechanistic in orientation. B.F.Skinner (1972) was an early exponent of this learning theory. The initial hypothesis is that pleasant experiences (such as rewards or praise) are positive reinforcers and unpleasant experiences (such as punishment) are negative reinforcers. Learners naturally seek out pleasant experiences and avoid unpleasant ones. Continuous reinforcement of both types increases the rate of learning and both shape behaviour. All behaviour then can be explained without recourse to internal mental states or a notion of free will. Learning is essentially a passive process. Rejecting behaviourist and individualist assumptions, Michael Young and David Guile, in volume four, suggest that these approaches are dependent on transmission pedagogies and cognitive science accounts of expertise. They propose replacing it with a more inclusive social theory of learning.

In contrast, constructivist and socio-cultural theorists of learning, using a Vygotskian metaphysic, offer an alternative. This focusses on the notion of scaffolding. Scaffolding in teaching is a well established concept in education. It essentially means an aid which is developed and offered to the learner by a more experienced person in support of the learning process. The conventional notion of scaffolding has a number of characteristics: it is a temporary support; it is offered to the learner in relation to specific tasks that they are asked to perform; the learner is unlikely to complete the task without it (cf. van de Pol *et al.*, 2010; and featured in volume three of this work), and the scaffold is provided to the learner by the teacher in their capacity as 'expert' in relation to the satisfactory completion of the task (Sharma and Hannafin, 2007).

According to Wood and Wood (1996a and b, and featured in volume two of this work), scaffolding comprises the overcoming of task uncertainty and contingency. If the learner is uncertain about the contours of the task, what the task entails and therefore, what a proper solution to the task might be, they are unlikely to be able to complete it without assistance. The expert

again, assuming a process role, delineates the features of the task, and this might include examples of how similar tasks have been completed, to bridge the gap between novice and teacher. The expert, therefore, has the role of reducing uncertainty; however, this does not imply that the learner is given the solution which is then internalised. What is internalised is a way of solving such tasks which can then be applied to a number of other similar tasks. The second of their principles, contingency, comprises support for the learner which involves progressively reducing the amount of control exerted by the expert until the learner is able to perform the task independently. The expert, thus intervenes in the learning process in relation to the learner's needs, moving from more structured to less structured approaches until the learner can perform the action independently.

Langer and Applebee (1986) suggest five key factors in this scaffolding process: ownership by the learner; appropriateness of the task to the learner's stage of development; a structured approach to the completion of the task; collaboration between teacher and learner; and finally internalisation so that the learner can perform the task independently. Two other principles are relevant in this context. The first is the need to enhance the ability of the learner to predict what will be given to them next; and the second is a need to make visible the process by which the expert performs the action. Making visible the process of task completion may involve instruction where the process is not immediately revealed to the learner, but only subsequently in a carefully staged sequence in relation to the learner's needs. Some information for the completion of the task is not immediately made explicit.

Scaffolding then involves the following processes (Tharp and Gallimore, 1988; 1991): modelling (offering behaviour for imitation); feedback (providing information on a performance as it compares to a standard); instructing (requesting specific actions); questioning (requesting a verbal response that helps by producing a mental operation that the learner cannot or would not produce alone); cognitive structuring (providing explanations); and task structuring (chunking, segregating, sequencing, or otherwise structuring a task into or from components). While almost any learning aid can be a scaffold, scaffolding in teaching takes place only when the teacher provides specific help that is contingent: the teacher's support is attuned to the student's current state of understanding; the student accomplishes the task with the teacher's situated help, and the student performs the task independently; fading: the level and amount of support is gradually withdrawn from the student; and involves a transfer of responsibility: the student takes increasing control of their own learning in the performance of a task.

What these various writers have attempted is an adaptation of a Vygotskian perspective to learning. Moore (2000) summarises Vygotsky's views on development, instruction and consciousness in relation to school children. Children's cognitive development is achieved most effectively by elaborating ideas and understandings in discussion with their teachers and peers. Children

perform and develop better with help than without help, and should be given tasks that will test what is developing in them rather than what has already developed (the notion of stretching not just 'able' students, but those who may be perceived as underachieving in comparison with any accepted developmental norms). Children should develop 'conscious mastery' over what they have learned rather than merely being able to recite facts which may have little meaning for them. The development of such expertise is not subject-specific, and once acquired becomes a tool through which all learning is facilitated and enhanced.

Moore goes on to suggest that this has a number of implications for classroom practice. The child in order to learn a particular aspect of the curriculum, for example, reading, needs to be ready to do so. Furthermore, they do not automatically progress to a higher stage of learning at a particular chronological age. Formal tests, whether of a diagnostic or summative type, can actually give misleading information about the child because they are conducted in environments which do not allow that child to fully express what they know and can do. Indeed, it is the active presence of adults and peers in the articulation and realisation of knowledge which allows them to express in a fundamental sense what they know. This implies a view of pedagogy, which is interactive and non-didactic, and which rejects a regurgitation of pre-conceived facts and ideas. It also implies that knowledge acquisition may be artificially restricted if confined within existing curriculum boundaries and traditional knowledge structures. Teacher-learner relations, therefore, need to be dialogic rather than monologic, involve collaborative learning, both with peers and the teacher, recognise learning as an active and inter-active process concerned with the provisional nature of the learner's knowledge, and emphasise articulation and meta-processes of learning.

Scaffolding is understood as an interpersonal process where both teacher and students are actively engaged. To better understand the teacher/student(s) interaction, Wood (1996a) developed two broad categories: funnel pattern interaction, where students are supported by leading questions which are designed to guide them to a predetermined procedural solution; and focussing pattern interaction, where teacher and student(s) engage in discussion and the teacher's principal function is to pose questions and summarise the shared knowledge, whilst also at the same time focussing attention on a specific issue that has not yet been understood.

Despite its apparent simplicity, the broader notion of scaffolding in teaching is rather complex and its utilisation in everyday teaching comes with a number of qualifications: first, there is no universal agreement on the definition of scaffolding and on closely related mechanisms such as 'contingency', 'fading', and 'transfer of responsibility' (van de Pol *et al.*, 2010 p. 285). Secondly, scaffolding is portrayed in the recent literature as a dynamic intervention which is then adjusted (for better functioning) to accommodate the learner's ongoing progress. For these reasons, the 'scaffolding' support given

by the teacher depends on both the situation and the student's response. Hence, scaffolding operates differently in different situations and is not a one-size-fits-all technique (*ibid.*, p. 272). As a result, scholars are beginning to draw a distinction between the scaffold's means and its intentions.

Learning Sequences

From this Vygotskian perspective, it is possible to identify a series of learning sets or sequences. The first of these is observation. Here, the teacher displays the action which the learner is required to imitate in the classroom, and then later in the context of application. There are three principal types: a live model involving a demonstration or acting out of the behaviours to be learnt; a verbal instructional model where this comprises descriptions and explanations of behaviours; and a symbolic model, examples of which are scenarios and expressive performances. These are stimuli for learning. The learning skills required of the learner are: observing a performance by the teacher, whether this comprises live modelling, verbal instruction or symbolic modelling; comparing the performance with an embodied form of that display already held by the learner; adjusting their current construct through modification or substitution; practice by the learner whilst being supported within the artificial environment; practice by the learner without support within the artificial environment; transferring the skill to the real environment whilst being supported; and consolidation without support through use in the real environment (cf. Bandura, 1977). Jean Grusec provides an account in volume one of the development of social learning theory, comparing the theories of Robert Sears and Albert Bandura. Bandura in effect abandoned the psychoanalytical and drive features of Sear's approach and focussed on cognitive and information capacities that mediate social behaviour.

The second of these is a coaching model. Here, the focus is on a series of steps: modelling by the expert; coaching whilst the learner practices; scaffolding where the learner is supported during the initial stages with that support gradually being withdrawn as the learner becomes more proficient (coaching here involves the teacher in identifying for the learner deviations from the model in the performance of the learner, and then supporting the learner as they make attempts to correct this performance); articulation by the learner of that process; reflection on those processes and comparison with the expert's reasons for action; and exploration where the learner undertakes the various activities without support (cf. Collins *et al.*, 1989).

Goal clarity is a component of effective learning. To that end, teachers need to provide learners with explicit statements and explanations about the instructional objectives in a lesson or series of lessons (Zimmerman and Schunk, 2011). Goal clarity has three learner focussed aspects: explanations

about how they are expected to perform the tasks assigned to them; opportunities for them to grasp what is expected of them; and reflections about their capacity as self-directed learners in the completion of the task (cf. Schott *et al.*, 1984). Goal-oriented teaching requires that the teacher undertakes specific actions to ensure goal clarity and a focus on task completion at three stages of the learning process: at the beginning, setting learning goals and providing learners with a model of the meta-cognitive strategies to start the task; in the middle or during the lesson, monitoring and assessing their goal progress, motivating learners to look for explanations by means of exploration, and supporting them when they struggle, for example, by suggesting relevant learning strategies and giving them personalised feedback such as how to adjust those strategies; and at the conclusion, providing learners with an overall assessment of their goal progress, motivating them to extend their efforts, to persist and to keep adjusting their strategies, and developing new goals as they fulfil the old ones (Meece *et al.*, 2006).

A fourth form is mentoring. This supports the informal transmission of content knowledge, social capital or resources with a psychosocial function. It is usually conducted face-to-face and involves a relationship between two people, one of whom is considered to have greater knowledge, wisdom or experience. Five possible mentoring techniques have been identified (cf. Aubrey and Cohen, 1995): supporting the student and even taking part in the same activity and learning side-by-side with the learner; preparing the student for the future even if they are not ready or able to learn what is being offered to them in the present; catalysing learning, provoking a different way of thinking, a change in identity or a re-ordering of values; showing through personal example; and finally, helping and supporting the learner in reflecting back on their previous learning.

Learning can also take place between equals or peers. The other forms of learning comprise unequal relations between the teacher and the learner. Here, the assumption is made that the learning relationship is between equals, and thus a different form of learning is implied. Examples of this type of learning include: affective support, i.e. being offered emotional support if learning proves to be difficult and this is always a better form of support if given by someone who is going through the same learning process; dyadic performance confrontations, i.e. learning is provoked by confrontational exchanges between students so that each student can test their theories, ideas and constructs against those held by learners engaging in the same form of learning; pair-problem-solving, i.e. learning is enabled through cooperation between two learners of roughly equal standing, so that in a problem-solving exercise, better solutions are forthcoming because there are two problem-solvers rather than one; reciprocal peer tutoring, i.e. non-expert tutoring between equals has the advantage of each person being able to make their own evaluation of the advice being offered unencumbered by

status or hierarchy; and scripted cooperative dyads, i.e. peer engagement is focussed on the joint production of a script, artefact, performance or text with the advantage that alternative and new interpretations/readings are forthcoming (cf. Falchikov, 2001).

A sixth form of learning involves simulation. Simulation is a reproduction of an event or activity, conducted outside the environment in which that event or activity usually takes place. Simulations can be produced through computer games, role-plays, scenarios, presentations and affective and conceptual modelling. The purpose of this learning process is to simulate a real event, and this is to allow the person or persons taking part in that simulation to explore it, to experiment within it, to understand the process, to begin the process of internalisation, to experience albeit in a limited way the emotions and feelings that would normally accompany the experience in real-life, and fundamentally, to allow learning to take place through trial and error and making mistakes in safe situations, which do not have the consequences they would have in real-life situations. Simulations compress time and remove extraneous detail. They are immersive learning experiences, where skills and performances can be enhanced in a way that is not possible outside the simulation.

With instruction, the teacher needs to: gain the attention of the group of learners; inform the learners of the objectives of the learning exercise; stimulate recall of prior learning amongst the group of learners, so that the new information is related productively to previous and current learning; present content to the learner; implement appropriate scaffolding processes; stimulate a performance by the learner; provide feedback to the learner which is a comment on their performance and allows corrective action to take place; and evaluate the corrected performance (cf. Gagne, 1985).

A concept-formation learning process focusses on the re-forming of conceptual schema held by the learner. Learning is complex and potentially rich and rewarding, where the learner is presented with a mass of information, ideas, and opinions from a number of different sources (i.e. books, articles, lectures, seminars, emails, e-seminars, personal communications and so on). What the learner does is shape this mass of information, and this shaping can take a number of different forms: partial shaping, complete shaping, discarding with no replacement, confusion, on-going, going backwards and forwards and so on. Shaping takes place against a scholarly background; aspects of which may or may not be implicit and where some but not all of its aspects can be surfaced for deliberation. For individuals mediating between their various multiple identities, conceptual learning is irredeemably social, embedded, and selective. So the learner has to absorb some of the ideas they are presented with and discard or partially discard others. Even if the learner is prepared to operate through a notion of multiple identities, they are still selecting, filtering, endorsing, rejecting, enhancing and discarding.

Reflection is a seminal form of learning. The learning cycle, developed by David Kolb (1984), is based on the belief that deep learning (learning for real comprehension) comes from a sequence of experience, reflection, abstraction, and active testing. Reflection is a form of evaluative thinking. It is applied to ideas for which there is no obvious solution and is largely based on the further processing of knowledge and understanding and possibly emotions that we already possess. It is thus a second-order internal activity, which can in certain circumstances be transformed into a learning strategy. There are some optimum conditions for reflection: time and space, a good facilitator, a supportive curricular or institutional environment, and an emotionally supportive environment. (See also, Stephen Brookfield on a phenomenography of adult critical reflection, and Sharon Bailin and her colleagues in two related articles in volume four of this work on conceptualising critical thinking as a learning process.)

Meta-Cognitive Learning refers to learners' awareness of their own knowledge and their ability to understand, control, and manipulate their own cognitive processes. However, most meta-cognitive processes can be placed within three categories (cf. Harris and Graham, 1992). The first is meta-memorisation. This refers to the learners' awareness of their own memory systems and their ability to deploy strategies for using their memories effectively. The second is meta-comprehension. This refers to the learners' ability to monitor the degree to which they understand information being communicated to them, to recognise failures to comprehend, and to employ repair strategies. And the third is self-regulation. This term refers to the learner's ability to make adjustments in their own learning processes. The concept of self-regulation overlaps with meta-memorisation and meta-comprehension; its focus is on the capacity of the learners themselves to monitor their own learning (without external stimuli or persuasion) and to act independently.

A problem-solving approach is where the learner finds out for themselves rather than being given answers to problems. The learner is required to engage in a series of interrogative processes with regards to texts, people and objects in the environment, and come up with solutions to problems. The learner is also required to use the skills of information retrieval, information synthesis and analysis, and knowledge organisation. The learner may come up with inadequate, incorrect and faulty syntheses and analyses. However, this is acceptable because the learning resides in the process rather than in the end-product. Problem-solving learning involves the learner in judging their own work against a curriculum standard and engaging in meta-processes of learning, that is, understanding about processes related to their own learning: the development of learning pathways; the utilisation of formative assessment processes; the development of personal learning strategies; and the internalisation of the curriculum.

Finally, there is practice. Practice is the act of rehearsing a behaviour over and over again, or engaging in an activity again and again. This reinforces, enhances and deepens the learning associated with the behaviour or activity.

Internality, Externality and Vertexicality

These learning sets are all characterised by a relation between an internal and an external process. Lev Vygotsky (1978, p. 45) suggested that:

> Child logic develops only along with the growth of the child's social speech and whole experience. It is through others that we develop ourselves and . . . this is true not only with regard to the history of every function. . . . Any higher mental function was external because it was social at some point before becoming an internal, truly mental functioning.

Thus learning is social, both in the sense that learning takes place in society and with people in society, but more fundamentally, because the contents and processes of learning are social phenomena. We are, therefore, confronted in relation to learning with a particular set of relations between external structures and internal or agential processes, and it is the vertexical relations between the two which produces learning. These structures (i.e. embodied, discursive, agential, institutional and systemic) are fluid, transitive and at times contradictory (but not in equal measure), and the learner is inserted in them, though never so that their freedom of action and re-creation is absolutely circumscribed. Examples of discursive formations expressed in narrative mode are: mastery, coping, expansion, autonomy, self-actualisation, and performance. Each of these discursive formations is temporally sequenced, though in different ways, so for example, a learning narrative might consist of exchanges between teachers and students where the purposes of these exchanges is to dissolve, fragment or otherwise disrupt the model of knowledge held by the student. This implies a non-linear learning narrative and thus it has implications for an understanding of how time impacts on learning. All learning sequence then are characterised by movement from one time moment (T_a) to another (T_b), and onwards to a series of other time moments (T_c to T_n). However, this sequence should not be understood as exclusively linear or non-recursive.

In any learning sequence or set, the learner is confronted with a set of relational resources or structured discourses, and in addition, they are embedded in another set of structures, or what Nash (2005) refers to as 'structures of agency'. These structures of agency mediate, for the individual learner, entry into those discursive structures which act as a resource for their belief systems: as a result, learning theorists have to confront notions of formal and informal learning and therefore, of assimilation, discarding,

layering, organising, synthesising, selecting, and meta-processes connected to learning. Discursive structures may be characterised as those ideational resources which sustain the learner, and they include a range of stories, narratives, arguments and chronologies that have a number of distinctive features: they have a specific time-place location, and thus are subject to change and amendment; they are structured in turn and thus different patterns of storytelling or narrative genre are possible; and they compete with other genres. In addition, they play a role in the construction and maintenance of structures of agency.

It is this relationship then between these structures and the agential capacity of the learner which determines whether and in what way learning can take place. These vertexical modes have five forms. The first refers to the knowledgeability of the learner, that is, the amount and type of knowledge held, with this type of knowledge comprising cognitions, skills and dispositions. The second vertexical mode again refers to the agential learner but this time to those factors which impact on the knowledgeability of the agent, i.e. unconscious beliefs, unacknowledged conditions of action, tacit knowledge and unintended consequences (Giddens, 1984). The third vertexical mode refers to the degree and type of give in the structure. We have identified above five types of structure (embodied, discursive, agential, institutional/systemic, and social markers), and each of these has a different type of give, or a different shaping capacity. An embodied structure such as a notion of sexuality, compared with a discursive structure is an example of this, and this is in part because the discursive structure can in certain circumstances be ignored, though there are consequences or sanctions as a result. The fourth vertexical mode refers to the degree and type of give in the agent or in those structures of agency, which provide the conditions for those agents to make the decisions they do. And finally, the fifth mode relates to the consequences of that vertexical relation in learning. There are different consequences depending on the type of vertexical relation that is implicated in each and every learning episode.

Margaret Archer (1995) has sought in her extensive writings to explain the relationship between structure and agency, and its impact on learning. She has focussed on the irreducibly situated nature of human conversation between the learner and the external world and the capacity of the learner to reflexively organise their life. She identifies a number of modes of reflexivity and identifies their centrality to the process of learning. Hanan Alexander, in the same volume, suggests that a curriculum should engage students with worthwhile knowledge, which requires an understanding of what it means for something to be worthwhile: a substantive conception of the good. Yet a number of influential curriculum theories deny or undermine one or another aspect of the key assumption upon which a meaningful account of the good depends, with their denial focussing on learners as the agents of their own beliefs, desires and actions.

Learning, Assessment and the Lifecourse

The final element in this four-volume set of writings on learning focusses on three important relations: those of time, space and assessment. We have already referred to some aspects of time and space as they impact on learning. Here, the concern is to understand the relationship between learning and assessment. Michael Scriven (1967) originally used the term, formative assessment, in relation to curriculum and teaching. However, it was Bloom *et al.* (1971) who made the distinction between this and summative forms of assessment clearer. For them, summative evaluation referred to tests given at the end of a programme of learning with the specific purpose of evaluating what students had learnt, and thus the effectiveness of the curriculum at a set point in time. However, this could be compared with a form of assessment 'which all who are involved – student, teacher, curriculum maker – would welcome because they find it so useful in helping them improve what they wish to do' (ibid., p. 117). They labelled this formative evaluation. To conflate the two forms of assessment is to commit oneself to a serious reduction in the capacity of the curriculum and subsequently in what is and can be learnt. Howard Gardner, in volume three, draws a much stronger distinction between formative and summative assessment, and concludes that conflating the two, both in theory and practice, is a serious category error. Wynn Harlen and Mary James, again in the same volume, suggest that formative and summative purposes of assessment have become confused in practice and that as a consequence assessment fails to have a truly formative role in learning.

A further distinction can be made between formative assessment and assessment for learning':

> Assessment for learning is any assessment for which the first priority in its design and practice is to serve the purpose of promoting students' learning.[. . .] An assessment activity can help learning if it provides *information to be used as feedback, by teachers, and by their students in assessing themselves and each other, to modify the teaching and learning activities in which they are engaged.* Such assessment becomes 'formative assessment' when the evidence is actually used to adapt the teaching work to meet learning needs (Black *et al.*, 2004, p. 8).

Reviews (Black and Wiliam, 1998; Crooks, 1988; and Natriello, 1987) provide clear evidence that improving the quality of formative assessment increases student achievement. While the literature on assessment for learning suggests that effective implementation has a significant impact on student achievement, there is much less agreement about how to implement it, or indeed, what is encompassed by the term. It has been suggested that formative assessment involves 'making students' thinking visible by providing

frequent opportunities for assessment, feedback, and revision, as well as teaching students to engage in self-assessment (*ibid.*, p.9). However, two further elements appear to be essential for effective implementation of assessment for learning. The first is that students must come to understand the criteria for success:

> The indispensable conditions for improvement are that the student comes to hold a concept of quality roughly similar to that held by the teacher, is continuously able to monitor the quality of what is being produced during the act of production itself, and has a repertoire of alternative moves or strategies from which to draw at any given point (Sadler, 1989, p. 121).

The second is that peer assessment may be a necessary step towards effective self-assessment.

As Black et al. (2003) suggest, assessment for learning can be presented, as five key strategies and one cohering idea. The five key strategies are: engineering effective classroom discussions, questions, and learning tasks; clarifying and sharing learning intentions and criteria for success; providing feedback that moves learners forward (see also, John Hattie and Helen Timperley, in volume three, on the power of feedback.); activating students as the owners of their own learning; and activating students as instructional resources for one another. And the cohering idea is that evidence about student learning is used to adapt instruction to better meet learning needs; in other words, that teaching is *adaptive* to the student's learning needs (*ibid.*). Black and Wiliam's article is reproduced in volume three of this work. The article is a review of the literature on classroom formative assessment. The central claim they make is that innovations designed to strengthen the frequent feedback that learners receive about their learning yield substantial learning gains.

Finally, there is the issue of contextualising learning as a part of the life course. If we put to one side the issue of time flows, i.e. linear, stepped, recursive, we can identify the lifecourse in different ways. The first of these is where the life course is understood as a stepped system of statuses. The learner moves from a lower status to a higher status, a series of status steps, where status is understood as the accord given to the position attained by the person. A learning transition is understood as movement between these steps. The second way that the life course can be understood is as a stepped system of learning markers. This can be understood in two ways. The first is in formal terms, an example might be sectorial, i.e. pre-school to primary to secondary to post-compulsory, etc. The second is in terms of informal conceptually-orientated learning stages, for example, Jean Piaget's schema comprising progression from concrete operational to formal operational thinking, or Lawrence Kohlberg's stages of moral thought, where the subject

progresses from pre-moral and conventional rule conformity levels to the acceptance of general rights and standards, and even to adopting individual principles of conduct. A learning transition is then understood as movement between these stages. A third way is where the life course is understood as a stepped system of resource accumulations. Resources are here defined as capital accumulations, such as cultural, social, economic and emotional. A transition is understood as movement in one direction between the different accumulation episodes. A fourth way is where the life course is conceived of as a stepped system of learning events, and thus it is age-related. Here the formal system is given priority. This is the traditional form given to the life course, and it refers to learning events such as: birth, school, marriage, motherhood, death, etc. Movement then is understood as progression through these life determining moments. And finally, the life course can be understood as a stepped system of identity moments. This is the most controversial because it involves the identification of a stable system of identity – or in this case, a series of stable identities, and the person moves between them. Some examples are induction, self-realisation, progression in learning, etc. The learning transition is from one identity moment to another.

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Introduction: Philosophical, Sociological and Psychological Theories of Learning

David Scott

The eighteen articles in the first volume of this work focus on philosophical, sociological and psychological theories of learning, ranging from behaviourism to socio-culturalism to constructivism, and they represent in their entirety current knowledge about learning. Learning is understood in this work as contextualised (see Strathern, on the importance of context in learning), both in place and time, and as having three elements or stages: exteriorisation, interiorisation, and a performative moment. Philosophical perspectives focus on those ethical and conceptual frameworks which allow learning to take place. So, for example, Alexander explores the relationship between learning and human agency through four seminal curriculum theories, and develops an ethical framework for engaging with the curriculum. Sociological perspectives focus on learning as it acts to constitute and re-constitute social life. Bernstein, for example, offers a critical account of knowledge and develops a model of learning which incorporates specialised knowledge, field position and identity construction. Psychological theories of learning, focusing on the relationship between the internal (to the learner) and the external (to society), identify the characteristics of and distinguish between socio-cultural and constructivist perspectives on learning. Cobb, coming from a similar perspective to that of Bruner in this volume, distinguishes between socio-cultural and constructivist frameworks of learning, by arguing that the former focusses on the conditions for allowing learning to take place, and the latter on what students learn and the processes they go through to do this.

Brookfield examines dialogic traditions and practices central to the field of learning. Kemmis draws upon Habermas' theory of communicative action, in particular, his theory of system and lifeworld and the critique of 'the philosophy of the subject', to explore learning as a process. Dahlin contrasts the different learning theories of Martin Heidegger and Rudolf Steiner. Deacon examines the influence of the French philosopher Michael Foucault, on formal learning processes, and in particular, his historical or

'technico-political' account of the rise of the school, from its negatively oriented seventeenth century origins to its more positively conceived nineteenth century entrenchment and expansion. Foucault understood the everyday mechanics of schooling as 'a disciplinary technology or moral orthopedics'; and contemporary educational institutions and practices as a 'block of capacity-communication-power'. Grusec compares the social learning theories and developmental approaches of Robert Sears and Albert Bandura.

Gardner and Hatch develop a theory of multiple intelligences, each of which is a relatively independent form of information processing, with individuals differing from one another in the specific profile of intelligences that they exhibit. Tweed and Lehman contrast Confucian and Socratic approaches to learning and teaching; Weiler writes about Paulo Freire; Winch discusses the work of the French philosopher, Jean-Jacques Rousseau; and Zimring examines the learning theory of Carl Rogers. Kristjonssen evaluates the educational theory held by Aristotle, and in particular, his notion of habituated reason which develops within an individual through successful upbringing into a critical reasoning and heteronomously formed self. Finally, Piaget documents the intellectual development of the learner from adolescence to adulthood, using his well-known developmental stage theory; and Rogoff compares this to a Vygotskian perspective on learning.

Intellectual Evolution from Adolescence to Adulthood

Jean Piaget

We are relatively well informed about the important changes that take place in cognitive function and structure at adolescence. Such changes show how much this essential phase in ontogenic development concerns all aspects of mental and psychophysiological evolution and not only the more "instinctive", emotional and sociological aspects to which this period is often limited. In contrast, however, we know very little about the period which separates adolescence from adulthood and we feel that the Institution FONEME's decision to draw the attention of various research workers to this essential problem is extremely well founded.

In this paper we would first like to recall the principle characteristics of the intellectual changes that occur during the period from 12 to 15 years, as, in wishing to reduce the psychology of adolescence to the psychology of puberty, these characteristics are too frequently forgotten. We shall then refer to the more general problems that arise in the next period (15 to 20 years); on the one hand those dealing with the diversification of aptitudes and on the other hand those concerning the degree of generality of cognitive structures acquired between the age of 12 and 15 years and the problem of what happens to them later on.

I) The Structures of Formal Thought

Between birth and the age of 12 to 15 years intellectual structures grow slowly, forming stages in development. The order of succession of these stages has been shown to be extremely regular and comparable to the stages

Source: *Human Development*, 15(1) (1972): 1–12.

of an ontogenesis. The speed of development, however, can vary from one individual to another and also from one social environment to another: in other words, we may find some children who seem to advance more quickly than the children around them, or others who appear backwards, but this will not change the order of succession of the stages through which they pass. Thus, long before the appearance of language, all normal children pass through a number of stages which lead to the creation of a sensori-motor or practical intelligence. Sensori-motor intelligence can be characterised by certain "instrumental" behaviour patterns, i.e. the child learns to use an instrument as a means to reach an end; such patterns bear witness to the existence of a logic which is inherent to the coordination of the actions themselves.

Once language has been acquired and symbolical play and mental imagery developed, or in other words, the symbolic function (more generally known as the semiotic function), actions turn inwards and become representations, this supposes a reconstruction and a reorganisation on a new plane which will be that of representative thought. However the logic of this period remains incomplete until the child is 7 or 8 years old. These internal actions or representations are still preoperational and only later become "operational" if we take operations to mean actions that are entirely reversible (as adding and subtracting, or judging that the distance between AB is the same as the distance between BA, etc.). Due to the lack of reversibility, there is not yet any comprehension of the idea of transitivity ($A \leq C$, if $A \leq B$ and $B \leq C$) nor has the child acquired the concept of conservation (for a pre-operational child, if an object's shape changes, the quantity of matter and the weight of the object change also).

Between the age of 7 to 8 and 11 to 12 years a logic of reversible actions is constituted, characterised by the formation of a certain number of stable and coherent structures, for example: a classification system, and ordering system, the construction of natural numbers, the concept of measurement of lines and surfaces, projective relations (perspectives), certain general types of causality (transmission of movement through intermediaries), etc.

Several very general characteristics distinguish this logic from the logic that will be constituted during the preadolescence period (between 12 and 15 years). Firstly, these are "concrete" operations, that is to say, in using them the child still reasons in terms of objects (classes, relations, numbers, etc.) and not in terms of hypotheses that can be thought out before knowing whether they are true or false. Secondly, these operations, which involve sorting, establishing relations between or enumerating objects, always proceed by relating an element to its neighbouring element – they cannot yet link any term whatsoever to any other term, as would be the case in a combinatorial system: thus, when carrying out a classification, a child, capable of concrete reasoning, associates one term with the term it most resembles and there is no "natural" class that relates two very different objects. Thirdly,

these operations have two types of reversibility that are not yet linked together (in the sense of being composed one with the other): the first type of reversibility is by inversion or negation, the result of this operation is an annulment, for example, $+A -A = 0$, or $1 n -n = 0$; the second type of reversibility is by reciprocity and this characterises operations on relations, for example, if A = B then B = A, or if A is to the left of B, then B is to the right of A, etc.

On the contrary from the age of 11/12 years to 14/15 years, a whole series of novelties highlight the arrival of a more complete logic, that will attain a state of equilibrium once the child reaches adolescence at about 14–15 years. We must, therefore, analyse this new logic in order to understand what might also happen between adolescence and adulthood.

The principle novelty of this period is the capacity to reason in terms of verbally stated hypotheses and no longer in terms of concrete objects and their manipulation. This is a decisive turning point because to reason hypothetically is to deduce the consequences that the hypotheses necessarily imply (independent of the intrinsic truth or falseness of the premises); this is the formal reasoning process and it provides the logical procedure used in these deductions with a power of demonstration which was not the case in the previous stages. From 7/8 years the child is capable of certain logical reasoning processes but only to the extent of applying them to concrete objects or events in the immediate present: in other words the operational reasoning process, at this level, is not yet sufficiently detached from its content, and is, therefore, subordinated to the contingencies of the real world. On the contrary, however, hypothetical reasoning implies the subordination of the real world to the realm of the possible, and consequently the linking of all possibilities to one another by necessary implications that not only encompass the real, but at the same time, go beyond it.

From the social point of view, there is also an important conquest. On the one hand, hypothetical reasoning changes the nature of discussion: a constructive and fecund discussion means that by using hypothesis we can adopt the point of view of the adversary (although not necessarily believing it) and draw the logical consequences it implies. In this way, we can judge its value after having verified the consequences. On the other hand, the individual who becomes capable of hypothetical reasoning, by this very fact, will interest himself in problems that go beyond his immediate field of experience. This can be seen with the adolescent whose capacity to understand and even construct theories will create for him an entry into the society and ideology of adults; this is often, of course, accompanied by a desire to change that society and, if necessary, (in his imagination) destroy the present one in order to elaborate better ones.

In the field of physics and particularly in what concerns the induction of certain elementary laws (many experiments have been carried out under the direction of B. Inhelder on this particular topic), the difference in attitude

between children of 12/15 years, already capable of formal reasoning, and children of 7/10 years, still at the concrete level, is extremely noticeable. The 7/10 year old children when placed in an experimental situation (laws concerning the swing of a pendulum, factors involved in the flexibility of certain materials, problems of increasing acceleration on an inclined plane) act directly upon the material placed in front of them without trying to dissociate the factors involved. They simply try to classify or order what happened by looking at the results of the covariations. The formal level children, after various tries, stop experimenting with the material and begin to list all the possible hypotheses. It is only after having done this that they start to test them, trying progressively to dissociate the factors involved and study the effects of each one in turn – "all other factors remaining constant".

This type of experimental behaviour, directed by hypotheses which are based on more or less refined causal models, implies the elaboration of two new structures that we find constantly intervening in formal reasoning.

The first of these structures is a combinatorial system, an example of which is clearly seen in "the set of all subsets", $2n^2$ or simplex. We have, in fact, previously mentioned that the reasoning process of the child at the concrete level (7/10 years old) progresses by linking an element with a neighbouring one, and cannot relate any element whatsoever to any other. On the contrary it is this generalised combinatorial faculty (1 to 1, 2 to 2, 3 to 3, etc.) that becomes effective when the subject can reason in a hypothetical manner. In fact psychological research shows that between the ages of 12 and 15 years the preadolescent and adolescent start to carry out (independent of all school training) operations involving combinatorial analysis, permutation systems, etc. They cannot, of course, figure out the mathematical formulae but they discover experimentally exhaustive methods that involve these operations. We would mention that when a child is placed in an experimental situation where it is necessary to use combinatorial method (for example, given five bottles of colourless, odorless liquid, three of which combine to make a coloured liquid, the four is a reducing agent and the fifth is water), the child discovers quite easily the law after having tried all the possible ways of combining the liquids in this particular case.

This combinatorial property of thought constitutes an essential structure from the logical point of view. If on the one hand the elementary classification and order systems, observed between the ages of 7 and 10 years, do not constitute a combinatorial system, propositional logic on the other hand implies, for two propositions "p" and "q" and their negation, that we not only consider the four base associations (p and q, p and not q, not p and q, not p and not q) but also the 16 combinations that can be obtained by linking these base associations 1 to 1, 2 to 2, 3 to 3 (one link being all four base associations and the other being the empty set). In this way it can be seen that implication, disjunction and incompatibility are fundamental propositional operations that result from the combination of three of these base

associations. At the level of formal operations it is extremely interesting to see that this combinatorial property of thought not only shows itself to be effective in all experimental fields, but that the subject also becomes capable of combining propositions; it would, therefore, seem that propositional logic appears to be one of the essential conquests of formal thought. When in fact, the reasoning processes of children between 11/12 years and 14/15 years are analysed in detail it is easy to find the 16 operations or binary functions of a bivalent logic of propositions.

However, there is still more to formal thought: when we examine the way in which subjects use these 16 operations we can recognize numerous cases of the four-group which is isomorphic to the Klein group and which reveals itself in the following manner. Let us take, for example, the implication $p \supset q$, if this stays unchanged we can say it characterises the identical transformation, if this proposition is changed into its negation N (reversibility by negation or inversion) we obtain $N = p$ and not q. The subject can change this same proposition into its reciprocal (reversibility by reciprocity) that is, $R = q \supset p$, and it is also possible to change the statement into its correlative C (or dual) namely, $C =$ not p and q. Thus we obtain a commutative four-group such that $CR = N$, $CN = R$, $RN = O$ and $CRN = I$. This group allows the subject to combine in one operation the negation and the reciprocal which was not possible at the level of concrete operations. An example of these transformations that occurs frequently is the comprehension of the relationship between action (I and N) and reaction (R and C) in physics experiments; or again, the understanding of the relationship between two reference systems, for example: a moving object can go forwards or backwards (I and N) on a board which itself can go forwards or backwards (R and C) in relation to an exterior reference system. Generally speaking the group structure intervenes when the subject understands the difference between the cancelling or undoing of an effect (N in relation to I) and the compensation of this effect by another variable (R and its negation C) which does not eliminate but neutralizes the effect.

In conclusion to this first part we can see that the adolescent's logic is a complex but coherent system that is relatively different from the logic of the child, and that constitutes the essence of the logic of cultured adults and even provides the basis for elementary forms of scientific thought.

II) The Problems of the Passage from Adolescent to Adult Thought

The experiments on which the above-mentioned results are based, were carried out with secondary school children aged 11 to 15 years, taken from the better schools in Geneva. However, recent research has shown that subjects from other types of schools or different social environments sometimes give

results differing more or less from the norms indicated: for the same experiments it is as though these subjects had stayed at the concrete operational level of thinking.

Other information gathered about adults in Nancy and adolescents of different levels in New York has also shown that we cannot generalise to all subjects the conclusions of our research which were, perhaps, based on a privileged population. This does not mean that our observations have not been confirmed in many cases: they seem to be true for certain populations, but the main problem is to understand why there are exceptions and also whether these are real or apparent.

A first problem, is the speed of development, that is to say, the differences that can be observed in the rapidity of the temporal succession of the stages. We have distinguished four periods in the development of cognitive functions (see beginning of part 1): the sensori-motor period before the appearance of language; the preoperational period which in Geneva seems, on the average, to extend from about 1½/2 years to 6/7 years; the period of concrete operations from 7/8 years to 11/12 years (according to research with children in Geneva and Paris) and the formal operations period from 11/12 years to 14/15 years as observed in the schools studied in Geneva. However, if the order of succession has shown itself to be constant – as each stage is necessary to the construction of the following one – the average age at which children go through each stage can vary considerably from one social environment to another, or from one country or even region within a country to another. In this way the Canadian psychologists in La Martinique have observed a systematic slowness in development; in Iran notable differences were found between children of the city of Teheran and young analphabetic children of the villages. In Italy, N. Peluffo has shown that there is a significant gap between children from regions of Southern Italy and those from the North; he has carried out some particularly interesting studies showing how children from Southern families immigrating North have counterbalanced these differences: similar comparative research is at present taking place in Indian reserves in North America, etc.

In general, a first possibility is to envisage a difference in speeds of development without any modification of the order of succession of the stages. These different speeds would be due to the quality and frequency of intellectual stimulation received from adults or obtained through the possibilities available to children for spontaneous activity which, of course, would be proper to the environment considered. In the case of poor stimulation and activity, it goes without saying that the development of the first three of the four periods mentioned above will be slowed down. When it comes to formal thought, we could ascertain that it will probably be extremely slow in constituting itself (for example, between 15 and 20 years and not 11 and 15 years); or that, perhaps in extremely disadvantageous conditions, such a

type of thought will never really take shape or will only develop in those individuals who change their environment when development is still possible.

This does not mean that formal structures are exclusively the result of a process of social transmission, as we still have to consider what are the spontaneous and endogenous factors of construction proper to each normal subject. This signifies, however, that the formation and completion of cognitive structures require a whole series of exchanges and a stimulating environment: the formation of operations always gives rise to a favorable environment for cooperation, that is to say, operations carried out in common (the role of discussion, mutual criticism, problems raised as the result of exchanges of information, or extensive curiosity due to the cultural influence of a social group, etc.). Briefly, our first interpretation would mean that in principle all normal individuals are capable of reaching the level of formal structures, on the condition however, that the social environment and the acquired experience provide the subject with the cognitive elements and intellectual stimulation necessary for such a construction.

A second interpretation is possible which would take into account the diversification of aptitudes with age but this would mean excluding certain categories of normal individuals, even in favorable environments, from the possibility of attaining a formal level of thinking. It is a well known fact, however, that the aptitudes of individuals differentiate progressively with age. Bearing this in mind, a model of intellectual growth would be comparable to a hand fan open and erect, the concentric layers of which would represent the successive stages in development whereas the sectors, opening wider and wider towards the periphery, correspond to the growing differences in aptitude.

We would go so far as to say that certain behaviour patterns can be characterised by the way in which they form stages with very general properties: this occurs until a certain level in development; from this point onwards, however, individual aptitudes will become more important than these general characteristics and will create greater and greater differences between subjects. A good example of this type of development is the evolution of drawing. Until the stage at which the child can represent perspectives graphically, we observe a very general progress to the extent that the "draw a man" test, to quote a particular case as an example, can be used as a general test of mental development. On the contrary, however, if the drawings of 13/14 year old children were to be compared to the drawing of 19/20 year olds (this is sometimes done with recruits for the army) it is extremely surprising to observe the differences that separate individuals: the quality of the drawing no longer has anything to do with the level of intelligence. In this instance we have a good example of a behaviour pattern which is, first, subordinate to a general evolution in stages (cf. those described by Luquet and other authors for children from 2/3 years until about 8/9 years old) and which, afterwards, gradually becomes diversified according to criteria of

individual aptitudes and no longer general development (i.e. common to all individuals). This same type of pattern occurs in several fields including certain which appear to be more of a cognitive nature. One example is provided by the representation of space which firstly depends on operational factors with the usual four intellectual stages – sensor-motor (cf. the practical group of displacements), preoperational, concrete operations (measure, perspectives, etc.) and formal operations. However, the construction of space also depends on figural factors (perception and mental imagery) which are partially subordinated to operational factors and which then become more and more differentiated as symbolical and representative mechanisms. The final result is that for space in general, as for drawing, we can distinguish a primary evolution characterised by the stages in the ordinary sense of the terms, and then a growing diversification with age due to the gradually differentiating aptitudes with regard to imaged representation and figural instruments. We know, for example, that there exist big differences between mathematicians in the way which they define "geometrical intuition": Poincaré distinguished two types of mathematicians "the geometricians", who are more of a concrete nature, and the "algebristes" or "analystes", who are more of an abstract nature.

There are many other fields where we could also think along similar lines. It becomes possible, at a certain moment, for example, to distinguish between adolescents who, on the one hand, are more talented for physics or problems dealing with causality than for logic or mathematics and those who, on the other hand, show the opposite aptitude. We can see the same tendencies in questions concerning linguistics, literature, etc.

There are many other fields where we could also think along similar lines. It becomes possible, at a certain moment, for example, to distinguish between adolescents who, on the one hand, are more talented for physics or problems dealing with causality than for logic or mathematics and those who, on the other hand, show the opposite aptitude. We can see the same tendencies in questions concerning linguistics, literature, etc.

We could, therefore, formulate the hypothesis that if the formal structures described in part do not appear in all children of 14/15 years and are, therefore, less general than the concrete structures of children from 7/10 years old, this could be due to the diversification of aptitudes with age. According to this interpretation, however, we would have to admit that only individuals talented from the logical-mathematical and physics point of view would manage to construct such formal structures whereas literary, artistic and practical individuals would be incapable of doing so. In this case it would not be a problem of underdevelopment compared to normal development but more simply a growing diversification in individuals, the span of aptitudes being greater at 12/15 years, and above all between 15/20 years, than at 7 to 10 years. In other words, our fourth period cannot really

be characterised as a stage, but would already seem to be an advancement in the direction of a specialisation.

But there is the possibility of a third hypothesis and, bearing in mind our present state of knowledge, this last interpretation seems the most probable as it allows us to reconcile the concept of stages with the idea of progressively differentiating aptitudes. In brief, our third hypothesis would state that all normal subjects attain the stage of formal thought if not between 11/12 to 14/15 years in any case between 15/20 years. However this type of thought will reveal itself in the different activities of the individual according to their aptitudes and their professional specialisations (advanced studies or different types of apprenticeship for the various trades): the way in which these formal structures are used, however, is not necessarily the same in all cases.

In our research to investigate formal structures we used rather specific types of experimental situations which were mainly of a physics and logical-mathematical nature as these seemed to be better understood by the school children we questioned. However, it is not out of the question that these situations are, fundamentally, very general and, therefore, applicable to any school or professional environment. Let us consider the example of carpenters, locksmiths, or mechanics who have shown sufficient aptitudes for successful integration into the trades they have chosen but whose general culture is not very extensive. It is highly likely that they will know how to reason in a hypothetical manner in their speciality, that is to say, dissociating variables involved, relating terms in a combinatorial manner and reasoning with propositions involving negations and reciprocities. They would, therefore, be capable of thinking formally in their particular field, whereas faced with our experimental situations, the lack of knowledge or the fact they have forgotten certain ideas that are particularly familiar to children still in school or college, would hinder them from reasoning in a formal way, and they would give the appearance of being at the concrete level. Let us also consider the example of young people studying law – in the field of juridical concepts, and verbal discourse, their logic would be far superior to any form of logic they might use when faced with certain problems in the field of physics, involving notions they certainly once knew but have long since forgotten.

One of the essential characteristics of formal thought is that its form seems to be independent and detached from its reality content. At the concrete operational level, however, a structure cannot be generalised to different heterogeneous contents but remains attached to a system of objects or to the properties of these objects (thus the concept of weight only becomes logically structured after the development of the concept of matter, and the concept of physical volume after weight): a formal structure seems, therefore, to be more easily generalisable as it deals with hypotheses. However

it is one thing to dissociate the form from the content in a field which is of interest to the subject, and within which he will be able to show his curiosity and initiative, and it is another to be able to generalise this same spontaneity of research and comprehension to a field foreign to the subject's career and interests. To ask a future lawyer to reason on the Theory of Relativity, or to ask a student in physics to reason on the Code of Civil Rights is quite different to asking a child to generalise what he has discovered in the conservation of matter to a problem of the conservation of weight. In the latter instance it is the passage from one content to a different but comparable content, whereas, in the former, it is to go out of the subject's field of vital activities and enter a totally new field, completely foreign to his interests and projects. Briefly, we can retain the idea that formal operations liberate themselves from their physical content but on the condition we also add that this is true in situations involving "aptitudes similar to" or "vital interests comparable to" those already reflected by the subject.

III) Conclusion

If we wish to draw a general conclusion from these reflections, we are obliged to say from the cognitive point of view, that the passage from adolescence to adulthood still raises a number of unresolved questions that need to be studied in greater detail.

The period from 15 to 20 years marks the beginning of professional specialisation and consequently also the construction of a life programme corresponding to the aptitudes of the individual. The vital question that we feel must be answered is to discover whether, at this level of development as at previous levels, there exist cognitive structures common to all individuals, which will, however, be applied or used differently by each person according to his particular activities.

The reply will probably be positive but this must be established by experimental methods that have been used in psychology and sociology. However, even if the reply is positive, the next essential step is to analyse all the probable processes of differentiation: that is to say whether, in the one instance, the same structures are sufficient for the organisation of many varying fields of activity but with differences in the way they are applied; or, in the other instance, there will appear new and special structures that still remain to be discovered and studied.

It is to the credit of the FONEME Institution to have realised the existence of these problems and to have understood their importance and complexity, particularly as, generally speaking, developmental psychology believed that its work was completed with the study of adolescence. Fortunately today certain research workers are conscious of these facts and we can hope to know more about this subject in the near future.

Unfortunately the study of young adults is much more difficult than the study of the young child as they are less creative, and already part of an organised society that not only limits them and slows them down but sometimes even rouses them to revolt. We know, however, that the study of the child and the adolescent can help us to understand the further development of the individual as an adult and that, in turn, the new research on young adults will retroactively throw light on what we already know about child development.

Note

Translation by Joan Bliss of the "Institut des Sciences de l'Education," Geneva.

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Social Learning Theory and Developmental Psychology: The Legacies of Robert Sears and Albert Bandura

Joan E. Grusec

This article offers an evaluation of social learning theory from a historical perspective. It focuses on the work of two major exponents of the position: Robert Sears and Albert Bandura. The undertaking is somewhat difficult in the case of Bandura, because he continues to be an active contributor to psychology. On the other hand, it is probably fair to say that Bandura's major substantive contributions to developmental psychology were in the work he and his students did during the 1960s and 1970s and that his energies now are directed more toward other fields such as health psychology. Thus the main focus here is on his research and theory in the 1960s and 1970s which, of course, is also more easily seen in its historical context.

This analysis of social learning theory involves consideration of the work of two individuals who were very different in their approaches, even though united by a common theoretical label. Sears and Bandura were not collaborators at any point in their respective careers, although they were colleagues at the same university and had a strong influence on each other. Bandura is clearly the intellectual heir of Sears, influenced by but also reacting against the tradition that Sears represented. The two overlapped in their published contributions to social developmental psychology by approximately 6 years (from *Adolescent Aggression* in 1959, the first book by Bandura and Richard

Source: *Developmental Psychology*, 28(5) (1992): 776–786.

Walters, to Sears, Rau, and Alpert's 1965 publication of *Identification and Child Rearing*). However, except for a very brief theoretical overlap in Bandura and Walters (1959), they charted quite distinct courses for developmental psychology. What they did have in common was their use of a set of learning principles to understand issues in human social development. Hence the label of social learning theorist for each of them, although the form of learning theory was different for the two. For Sears it was stimulus–response theory. For Bandura it began with some influence from Skinner's radical behaviorism, although with added concepts such as modeling. It quickly evolved, however, into a form of learning theory heavily informed by concepts from information-processing theory.

The social learning theory of Sears has little direct influence on modern conceptualizations of development. Even Bandura's approach is less central as a formalized theory in developmental psychology than it once was. This is probably because it is not a theory that focuses primarily on age-related changes in behavior and thinking, although both Sears and Bandura were obviously developmentalists in the sense of being interested in processes of behavior acquisition and change. Nor do biology or notions of evolutionary adaptiveness figure strongly in Bandura's approach to development. It nevertheless continues to be a strong force in current thinking and provides, among other things, a critical skepticism that guards against too-ready acceptance of stage theoretical, constructivist, or evolutionary theses. It should also be noted that social learning theory no longer holds center stage simply because its basic concepts, those of observational learning and learning through direct consequences, have become an accepted part of our knowledge base.

A brief comment about terminology is in order. As noted earlier, although Sears and Bandura are both social learning theorists, their brands of social learning theory are markedly different. Not only was the learning theory of Sears adapted from Hullian learning theory, but it also had a strong overlay of psychoanalytic theory. Bandura's social learning theory, somewhat more influenced by the operant tradition, completely disavowed the influence of psychoanalytic theory in anything other than its content areas. But, in Bandura's hands, the operant theory of Skinner quickly acquired a most non-Skinnerian cognitive flavor. As he struggled to make theoretical sense of the phenomenon of modeling, Bandura quickly abandoned mechanistic conditioning explanations and turned instead to the concepts of information processing. As his interest in self-regulative capacities and self-efficacy grew, he became even more distant from the anticognitive stance of the behaviorist tradition. In 1986, in fact, Bandura relabeled his approach "social cognitive theory" as a more suitable and adequate description of what he had been advocating since the late 1960s. The relabeling was useful because it made the features of his position clearer. On the other hand, there is nothing in the concept of learning that denies the importance of cognitive mechanisms

in behavior change. It is only the historical association of the study of learning with strong anticognitivist views that may have led to misunderstanding or misinterpretation on the part of some of what Bandura was attempting.

In this article the major theses of Sears and Bandura are outlined, along with a chronology of their theoretical developments. Then their contributions are evaluated in the context of current approaches to the study of social development.

Social Learning Theory: Sears and His Colleagues

Freud provided us with a first theory of personality development, one with impressive staying power. Through the work of his disciples as well as his numerous critics who nevertheless remained within the general structure he proposed, a rich and creative insight into human nature evolved over the years. It has always been the contention of psychoanalysts, however, that the hypotheses of psychoanalytic theory are not amenable to scientific testing but can be assessed only through use of the psychoanalytic method, that is, the free associations of patients undergoing analysis or the behavior of children during structured play. Academic psychologists, seriously interested in the development of a theory of personality and impressed by the insightfulness of Freud's, found these limitations on their scientific activities troublesome. A movement thus arose to make psychoanalytic principles amenable to scientific investigation in spite of objections that it could not be done. It was possible to operationalize psychoanalytic constructs and to make predictions, even if the operationalization was considered inadequate by exponents of the theory. But even further rigor could be achieved by joining psychoanalytic theory to theories more amenable to scientific investigation; during the 1930s and 1940s, behaviorism and learning theory provided the ultimate in scientific rigor.

The major formal effort to combine learning and psychoanalytic theories in order to understand personality and social development throughout the life span began at the Yale Institute of Human Relations. The institute's mission was to construct a unified science of behavior, which it started to do in 1935. The enterprise commenced under the direction of Mark May and with the intellectual leadership of Clark Hull (who had arrived at Yale in 1929 with an active program of research on hypnosis and a dedication to the principles of behaviorist psychology), as well as with input from representatives of a variety of related disciplines. From psychoanalytic theory and from "the closely charted regions of rigorous stimulus response theory" (Sears, 1975, p. 61), Hull, Sears, and others including John Dollard and Neal Miller welded together a new approach to the science of human development and behavior. Their first undertaking was an account of frustration and aggression (Dollard, Doob, Miller, Mowrer, & Sears, 1939) that included an analysis of

the socialization of aggression throughout childhood, a problem on which Sears continued to work (e.g., Sears, 1941). In 1941 Miller and Dollard published *Social Learning and Imitation*, in which they presented the first major account of social learning theory supported in part by experiments on imitation in young children.

The attempt to marry psychoanalytic and stimulus–response (S-R) theories appeared promising. It was, of course, little more than a reinterpretation of Freudian hypotheses within the framework of S-R formulations, a translation made relatively straightforward by certain similarities between the two theories. Both, for example, viewed the goal of behavior as drive reduction, and reinforcement and the pleasure principle were concepts that could be equated easily. Certainly the individual integrity of each theory was to an extent violated by the marriage, but the exercise did serve to suggest that ideas based on the richness of clinical observation and interpretation could be subjected to rigorous scientific evaluation and therefore made acceptable to the scientific community. Yarrow and Yarrow (1955) summarized the contributions of social learning theory when they noted that

> Rather slowly, but very perceptibly, a new point of view is emerging in child psychology. It is not a point of view which is an irresponsible, radical departure from the conservative empiricism which has epitomized this discipline, but it is a reformulation of the problems in terms of a more dynamic conception of behavior and development. (p. 1)

In fact, the approach was particularly exciting because it was an attempt to account for developmental phenomena through concepts that formed part of a general theory of human behavior. Moreover, it offered a stimulating change from the more descriptive approaches characterizing the field in the 1940s and early 1950s, enabling the generation of theoretical propositions about social development that could be empirically tested.

Some Features of the Approach

It was the focus of Sears on socialization processes that had a particularly strong impact on research and theory in social developmental psychology. Much of his theoretical effort was expended on developing an understanding of the way that children come to internalize, or to take on as their own, the values, attitudes, and behavior of the culture in which they are raised. His interest centered on issues having to do with the control of aggression, the growth of resistance to temptation and guilt, and the acquisition of culturally approved *sex*-role behaviors. Sears stressed the place of parents in the fostering of internalization, concentrating on features of parental behavior that either facilitated or hampered the process, features that included both general relationship variables such as parental warmth and permissiveness

and specific behaviors such as punishment in the form of love withdrawal and power assertion, as well as reasoning.

Aggression, Dependency, and Identification

Three content areas, largely dictated by the focus of psychoanalytic theory, attracted the attention of Sears: aggression, dependency, and identification (subsuming moral and sex-role development). With the exception of altruism, achievement, and peer social competence, they remain the major areas of interest to social developmentalists to this day, although the focus on dependency has been transformed into one on attachment.

The initial efforts of the Yale group had been directed toward an analysis of aggression. The work was influenced by Freud's early notions of aggression, in which he maintained that the cause of aggression is exposure to frustration. Thus frustration of an activity induces a behavior whose goal is injury to a person or object. Aggression is attributed to a drive – not the instinctual drive (Thanatos) of later Freudian theory but one whose strength is linked to experience with frustrating events. Although the early social learning view of aggression (Dollard et al., 1939) stated that frustration led inevitably to aggression, Sears (1941) argued that reactions to frustration could be altered through learning. Nevertheless, although dependency, regression, or increased problem solving could become the predominant response to frustration through learning, aggression was viewed as the dominant one in the hierarchy of responses elicited by frustration. Aggression's dominance was accounted for either on the basis of an innate connection between frustration and aggression or because aggression in response to frustration has a high probability of being acquired during socialization.

Several specific hypotheses amenable to empirical test were derived from the general frustration–aggression hypothesis. One example of these hypotheses is that the strength of instigation to aggression would be a function of the strength of instigation to and the degree of interference with the frustrated response. Another is that the extent to which aggressive behavior was inhibited would be a function of the amount of punishment it elicited. Although Dollard et al. (1939) also realized that punishment is frustrating and might therefore also increase the instigation to aggression. In the latter case one would expect displacement of aggression to another object or person, with increased amounts of punishment meaning that increasingly dissimilar events would be sought out for the displacement. The Dollard et al. formulation also suggested that acts of aggression were functionally equivalent, so that all aggressive behaviors would work to reduce the aggressive impulse, a position corresponding to the psychoanalytic notion of catharsis. The problem with this conclusion, however, was that it failed to take into account another obvious prediction from learning theory, that aggressive responses that successfully remove sources of frustration will be reinforced

and, hence, aggression is likely to be increased rather than decreased. In 1958 Sears addressed the as yet unclear issue of how an aggressive drive is acquired, suggesting that the motive to injure is learned through secondary reinforcement. The successful elimination of frustrating conditions by an aggressive response, as well as the possible evocation of pain in the frustrator by that act, is primarily reinforcing. Pairing of this primary reinforcement with the aggressive response thereby causes aggression to acquire secondary reinforcement properties.

The importance of secondary drives and their development is seen again in the manner in which Sears wrote about dependency. How does the young child learn to want to be near his or her primary caretaker? According to Sears, Whiting, Nowlis, and Sears (1953), dependency results from the fact that the child from birth has so many drive states reduced by others, particularly the mother. Through the pairing of the mother – her appearance, voice, and so on – with reduction of hunger, thirst, and provision of warmth and comfort, her attributes take on secondary reward value. (In fact, Sears and his colleagues emphasized feeding experiences in their research on dependency apparently for no other reason than the major importance assigned to feeding by Freud.) Thus being near the mother and being held and touched by her become secondarily reinforcing events. And this desire to be near her produces "dependent" behaviors – clinging, following, and reaching out – that are reinforced by maternal attention.

Some would have been content to leave the story at this point, with the mother established simply as a secondary reinforcer. But both the Hullian and Freudian tradition necessitated further development of the concept of dependency. Some kind of motivational system had to be invoked, given that dependency seemed to be displayed even when all primary drives had been reduced and when, therefore, conditioned reinforcers ought to have lost their effectiveness. Thus, Sears et al. (1953) proposed that dependency acquires drive properties. The source of these drive properties, they proposed, lay in the fact that dependent behaviors are sometimes reinforced and sometimes punished. The incompatible expectancies of reward and frustration produce conflict that provides the drive strength for energization of the dependent action. From this viewpoint it is easy to see that punishment for dependency should heighten dependent behaviors by increasing the level of drive. Punishment also makes it likely that displacement will occur, with the new object of dependency being increasingly different from the mother as a function of the extent to which dependent behavior directed toward her has been punished. In later years Sears (1963) acknowledged the lack of evidence to support these speculations but was not yet ready to give up the notion of drive completely.

Building on the notion of a dependency drive, Sears also proposed a theory of identification. Once a dependency drive has been established, young children, because they cannot discriminate between themselves and their

mothers, perceive her actions as an integral part of their own action sequences. The reproduction of her actions is reinforcing, and thus a stable habit of responding imitatively is built up along with a secondary motivational system for which "acting like the mother" is the goal response (Sears, 1957). In this account, "what Sears has ingeniously accomplished is to restate in the language of learning theory Freud's theory of anaclitic identification" (Bronfenbrenner, 1960, p. 28). On the other hand, the formulation was far from totally satisfying. In the mid 1960s (Sears et al., 1965) Sears noted the lack of a mechanism for explaining why the child begins to imitate the mother and suggested simple acceptance of the fact that observational learning (as the term was used by Bandura & Walters, 1963) occurs early in life and that this tendency to reproduce maternal acts provides a way in which children can reward themselves.

Testing Hypotheses: The Research

At the same time as these theoretical proposals were being made, Sears and his colleagues were engaged in a series of studies to test them. The results of the first large-scale assessment of parenting practices and children's social development guided by the social learning tradition were published in *Patterns of Child Rearing* (Sears, Maccoby, & Levin, 1957). The study was based on interviews of 379 mothers. In the research Sears et al. determined how these mothers reared their children, what the effects of this rearing were, and what determined the choice of one rearing method over another, for example, the effects of marital satisfaction, self-esteem, and personal attitudes on parenting technique. Techniques of discipline, permissiveness, and severity of training were targeted as some variables important for socialization, and a variety of deductions from social learning theory were assessed. Sears et al. found a relationship between the use of withdrawal of love by warm mothers and conscience (compliance with parental dictate in the absence of surveillance); here the explanation was that the absence of valued parental attention motivates the child to imitate and, therefore, to incorporate parent behaviors including standards for morality. Other predictions that also were supported in this work were that the strength of identification (or conscience development) would vary positively with the amount of affectionate nurturance given to the child as well as with the severity of the demands placed on the child by the mother (the more the demands, the more the mother would not provide immediate help and the more the child would have to reproduce her behavior). Punishment for aggression was correlated with immediate suppression of aggression but later high levels of aggression, presumably because punishment elicited hostility in the child and because physical punishment provided a model for aggressiveness.

Patterns of Child Rearing had serious methodological problems. Sears, trained as an experimentalist, was far from successful in his use of the interview

method. Data about both child-rearing practices and child outcomes came from one source, the mother, and so were subject to maternal perceptual biases. Mothers were assumed to be giving accurate accounts of when and how such events as weaning and toilet training were carried out, even though we now know that they are highly likely to be inaccurate in their memories of such events. It is to his credit that Sears improved his assessment methods in a second major research program (Sears et al., 1965). Thus the methodology was extended from parent interviews to also include observation of mother–child interactions in a playroom, the administration of attitude scales, observations of child behavior, and doll play. The focus of the study now was exclusively on identification, with a search for the child-rearing correlates of behaviors such as self-control, prosocial aggression, guilt, and sex-role behaviors. The work nevertheless had less impact on the field, probably because social learning theory as it had been developed by the Yale group was being supplanted by newer approaches to the understanding of human behavior and development.

Mechanisms of Development

Social learning theory is not a stage theory. The developmental aspects of psychoanalytic theory – critical periods and stages – had been omitted in the translation from psychoanalytic to social learning theory. Instead, Sears (1957) offered a set of developmental mechanisms that are simple and straightforward to say the least. First, there is learning by which the child acquires appropriate actions or responses. Second, there is physical maturation of the child, a mechanism "so obvious as to require no discussion" (Sears, 1957, p. 151). In fact, the main impact of physical change is through its social implication; that is, influences on behavior do not come about directly due to physical change but rather through the differential reaction of agents of socialization as they expect new actions in accord with increasing maturity. Changes in kind and amount of dependency, for example, are a reflection of what adults consider acceptable; clinging is rewarded in the very young but punished or extinguished as the child grows older and different forms of dependency are tolerated. The final change mechanism rests on the expectancies for action held by agents of socialization, expectancies determined not only by physical changes but also by realization that the child is learning new things.

Commentary and Evaluation

The contributions of Sears and his Yale colleagues to developmental psychology were substantial. They set the study of personality and social development on its scientific course, proposing a theory of human development in such a way that it was amenable to empirical study. They relied on a

variety of methods in the course of this study, including parental interview, projective techniques, measures of parent attitudes, behavioral observations, and behavioral ratings. *Patterns of Child Rearing* provided a model for a multitude of subsequent studies addressing the central problem of socialization, that is, how parents transmit the values and standards of society in a variety of domains to their children. Socialization processes remain a central focus of study for developmental researchers, and Sears and his colleagues clearly demonstrated how one could begin to tackle these important issues. Probably the only recent breakthrough that is at all comparable in its importance for research in social development is the formulation of attachment theory and of a methodology for assessing the quality of caretaker–infant relationships.

The Limitations

Many of the details of the theory have not stood up to the test of time. Psychoanalytic and learning theory make such different basic assumptions about human behavior that they seem strange bedfellows indeed. For example, biological emphases and critical periods are central to the former and foreign to the latter, so Sears chose simply to ignore them. Clearly, Sears found himself in some difficulty in his attempts to explain the growth of drives, attempts necessitated by the importance of motivation for both psychoanalytic and stimulus–response theory; eventually he was forced to abandon the concept of drive and rely on notions of reinforcement and incentive alone. As a result, some of the theory's distinctiveness was lost.

The Successes

Data generated. One criterion for a good theory lies not so much in whether its predictions are ultimately confirmed but whether or not it generates data that are useful and important. By this criterion, social learning theory as formulated by Sears has been a success. He identified variables that are still of central interest to socialization researchers and established empirical relationships that have continued to be replicated. Distinctions between short- and long-term compliance with parental dictate; a concern with differential treatment of boys and girls; and a focus on the effects of maternal self-esteem, marital adjustment, perceptions of child-rearing self-efficacy, and social class on discipline practices are but a few examples of topics that have a very contemporary ring. In identifying specific relationships between parent discipline and internalization of societal standards, Sears et al. (1957) set the stage for a view of discipline effectiveness that has remained relatively unchanged to this day. Any modern textbook in developmental psychology still points to parental warmth and psychological techniques of discipline as facilitative of internalization. It is true that a variety of other theoretical

explanations have been provided for the relationships, but the basic ideas remain unchanged even after more than 30 years of relatively intense investigation in the area.

The importance of the dyad. Sears (1951) was among the first to argue that the study of personality and social development must acknowledge not only that the external world acts on an individual, but also that the individual has an effect on the external world. He maintained that a dyadic rather than a monadic analysis of behavior was necessary for the understanding of social relationships. Personality is the result of learning experiences, but experiences are also determined by an individual's personality. This is a position developmentalists have all come to accept, and technological developments and modern methods of research design and analysis have made it easier to deal with the complexities of dyadic analyses. It was the social learning theorists, however, who first alerted researchers to the fact that both agents of socialization and the objects of their attention are subject to the laws of learning.

The interview as a research tool. In addition to asking important questions, Sears also was responsible for methodological innovations that have left their imprint on current research practices. For example, he demonstrated that a wealth of information could be acquired from intensive but structured interviews of parents. Some of the features of the approach have been modified so that now we tend to focus on self-report concerning concrete and specific situations and actions that are reasonably fresh in the mind of the interviewee rather than on self-report based on more generalized questions (e.g., "How do you handle it if X is saucy or deliberately disobedient?"). Nevertheless, it was Sears et al. (1957) who demonstrated the usefulness of this major methodological tool for students of socialization.

Setting the stage for future developments. A final contribution of Sears and his collaborators was their refinement of a way of thinking about development that was a precursor of Bandura's sociobehavioristic and, ultimately, social cognitive approach to social development. Sears sensitized Bandura to (a) the importance of identification as a process in personality development, (b) the crucial nature of a dyadic analysis of social behavior, and (c) the problems of pursuing a drive model.

Social Learning Theory: Bandura and His Colleagues

Albert Bandura did his graduate work at the University of Iowa, a choice dictated in part by the presence there of Kenneth Spence. Spence's association with Hullian theory made the activities of the Yale social learning group salient to Iowa psychologists. In addition, Bandura's first academic appointment was at Stanford University, where he arrived at the same time that Sears also joined the faculty there. It is hardly surprising then that his work

should bear the strong impact of social learning theory. Bandura's first graduate student was Richard Walters, and the two began an immensely fruitful collaboration that resulted in two books. It was the second of these books that turned the study of social and personality development in yet another direction, inspired a large number of researchers for a great many years, and still remains a strong force in current thinking in developmental psychology.

The first book by Bandura and Walters was *Adolescent Aggression*, published in 1959; it was still very much in keeping with social learning theory as it then existed, a juxtaposition of psychoanalytic and learning principles. The data reported in the book came from interviews of adolescent boys – half of them engaged in delinquent activity – and their parents, as well as from the boys' responses to a projective test consisting of pictures and stories involving the possibility of deviant action. The theoretical structure drew on the old notions of drive and reinforcement. Specifically, Bandura and Walters elaborated a theory of dependency that suggested that aggressive boys were suffering from dependency anxiety arising from rejection and punishment of dependent responses and that the frustration created by neglect and rejection was in large part responsible for their antisocial behavior. Bandura and Walters also turned their attention to the role of identification in the internalization of controls over behavior. The theory of identification they put forward was that of Sears, and the predictions they made about the relationship between parental warmth, use of withdrawal of love, and conscience development was similar to those of Sears et al. (1957).

Even while the finishing touches were being put on *Adolescent Aggression*, however, its authors were being attracted to a different approach to social development. In their second book, *Social Learning and Personality Development* (Bandura & Walters, 1963), they rejected psychoanalytic ideas and adopted a "purer" learning approach. In fact, Bandura and Walters labeled the new theory a "sociobehavioristic approach," presumably to distinguish it both from the Yale form of social learning theory and also from the current operant or learning theory approach to personality development, deviant behavior, and psychotherapy that seemed to them deficient in its failure to consider social issues.

On the very first page of *Social Learning and Personality Development*, Bandura and Walters (1963) argued that most prior applications of learning theory (including Miller & Dollard's [1941] analysis of imitation) had relied too heavily on a limited range of principles established from studies of animal and human learning in situations involving only one organism. They noted as well the 1951 call of Sears for the study of principles developed in dyadic or group situations. Bandura and Walters used analyses of displacement as an example of failure to appreciate the operation of social forces in human life. On the basis of animal learning data, learning theorists (e.g., Miller, 1948) had hypothesized that when an organism was both reinforced and punished for a given response, this would give rise to an approach-avoidance conflict.

with the behavioral outcome of that conflict dependent on the relative strength of the approach and avoidance responses. Assuming that avoidance gradients are steeper than approach gradients, and using the notion that responses can generalize to stimulus situations similar to those in which they were originally learned, Miller was able to predict at what point along a continuum of stimulus similarity a punished response would reappear. The model, then, predicted behavior from knowledge of three variables only: the strength of instigation to a behavior, the severity of punishment of the response, and the dimension of stimulus similarity. What it failed to take into account, however, was the fact that original agents of punishment continue to act in ways that may influence the trajectory of the response in question. Through teaching, example, and control of reinforcement contingencies, they determine the exact nature of the displaced response. For example, the parents of highly aggressive boys punish aggression in the home but reward it outside the home (Bandura & Walters, 1959). Thus apparent displacement is, in reality, simply an account of discrimination training.

The most important omission of learning theories, however, lay in their account of observational learning.

> The weaknesses of learning approaches that discount the influence of social variables are nowhere more clearly revealed than in their treatment of the acquisition of novel responses, a crucial issue for any adequate theory of learning. (Bandura & Walters, 1963, pp. 1–2)

Skinner suggested that novel responses could be acquired through the process of successive approximation, but the experimental work of both Bandura and Walters had drawn attention to a much more effective process: imitation. This process formed the central core of the new approach. Miller and Dollard (1941) had written a book about the role of imitation in social learning, but they saw it as a special case of instrumental conditioning, with social cues serving as discriminative stimuli and behavioral matches to those cues being reinforced. Indeed, in their book on personality and psychotherapy (Dollard & Miller, 1950), there were only three passing references to imitation, certainly an indication that it was not considered very important. But, for Bandura and Walters, imitation was elevated to a position of central importance. Contrary to the learning theory treatments of imitation, they documented that observational learning occurs even when a model's responses are not reproduced during acquisition and, therefore, could receive no reinforcement. In addition, they pointed to a fact previously unnoted, that the response consequence experienced by a model can influence the subsequent behavior of the observer by inhibiting or disinhibiting behavior. Thus behaviors that might previously have been displayed are suppressed even though the child has never actually had to engage in the behavior and be punished for it. Similarly, the stage can be set for acts that might

have been suppressed in the past but that are engaged in again through the acquisition of information gained by observing an unpunished model.

In their conception of imitation, Bandura and Walters (1963) differed in several respects from Sears. First of all, they gave up the Freudian term of identification. Second, they had no need for the concept of drive or for imitative responses to be reinforced in order for observational learning to occur. Third, they moved observational learning into primary position among learning mechanisms, arguing that it was a much more efficient technique of behavior change than either direct learning or successive approximation.

> One would not . . . permit an adolescent to learn to drive a car by means of trial- and-error procedures, nor would one entrust a firearm to an armed services recruit without a demonstration of how it should be handled. (Bandura & Walters, 1963, p. 52)

Some Features of the Approach

Throughout the 1960s and 1970s, Bandura presented a theory of social development that in fact has changed very little in its basic premises in the intervening years. It was markedly different from extant conditioning approaches, including that of Sears as well as those put forward by individuals with a more Skinnerian bent. Bandura's theory is mainly concerned with how children and adults operate cognitively on their social experiences and with how these cognitive operations then come to influence their behavior and development. Individuals are believed to abstract and integrate information that is encountered in a variety of social experiences, such as exposure to models, verbal discussions, and discipline encounters. Through this abstraction and integration, they mentally represent their environments and themselves in terms of certain crucial classes of cognitions that include response-outcome expectancies, perceptions of self-efficacy, and standards for evaluative self-reactions. These cognitions are believed to affect not only how they respond to environmental stimuli but also the sorts of environments they seek out for themselves. The discussion that follows demonstrates how Bandura emphasizes the role of cognition, abstraction, and integration in several areas that were of particular interest to him as he developed his own form of social learning theory. From now on, that form of social learning theory is referred to as social cognitive theory in keeping with contemporary terminology.

Observational Learning, Self-Regulation, Self-Efficacy, and Reciprocal Determinism

Observational learning. According to Bandura's theory of observational learning (see Bandura, 1969, 1977b, 1986), there are four components involved in the process of modeling. Each of these components has a role to play

either in the acquisition of information about events and of rules or in the decision to put this information to use in guiding behavior. First, the observer must pay attention to events – live or symbolic – that are modeled. Attention is determined by a variety of variables, including the power and attractiveness of the model as well as the conditions under which behavior is viewed: Television, for example, is a compelling medium for capturing and holding attention. Second, when material has been attended to, it must then be retained, with the observed behavior represented in memory through either an imaginal or a verbal representational system. In the third step, symbolic representation now must be converted into appropriate actions similar to the originally modeled behavior. For instance, motoric reproduction of complex actions is much less likely to be successful than that of simple actions. The final process governing observational learning involves motivational variables. There must, for example, be sufficient incentive to motivate the actual performance of modeled actions.

Self-regulation and self-efficacy. A significant challenge for any theory of socialization is to explain how control over behavior shifts from external sources to the individual. How does one move from prosocial behavior that is maintained by expectation of externally administered consequences to behavior that is maintained by the self? Sears found the mechanism for internalization in identification. Bandura found it in self-regulation. People do not behave like weather vanes, constantly shifting their behavior in accord with momentary influences; rather they hold to ideological positions in spite of a changing situation. They can do this because they bring judgmental self-reactions into play whenever they perform an action. Actions that measure up to internal standards are judged positively, and those that fall short of these standards are judged negatively (Bandura, 1977b).

The source of self-regulative functions lies in modeling and in direct tuition. Adults respond differentially to children's behaviors, and this differential responsivity is one kind of information children take into account when formulating personal standards or ideas about which behaviors are worthy of self-blame or self-praise. Children observe that people prescribe self-evaluative standards for themselves as well, and this behavior is also considered when formulating personal standards. In addition to imitating the evaluative behavior of others, children are also reinforced by agents of socialization for engaging in self-regulation. In the end, self-regulation depends, then, on external forces. It may, however, also produce personal benefits that maintain it as, for example, when self-denial pays off in weight reduction for the fat person.

It is important to note that people do not passively absorb standards of behavior from whatever influences they experience. Indeed, they must select from numerous evaluations that are prescribed and modeled by different individuals as well as by the same individual in differing circumstances. This conflicting information must be integrated so that rules can be generated,

general standards formed, against which individuals judge their own behavior. The selection of standards depends on the weighting of such factors as disparities in perceived competence between the model and the self, how much a specific activity is valued, and the extent to which individuals see their behavior as a function of their own effort and ability rather than external factors over which they have little control.

Self-efficacy is a major determinant of self-regulation and has been a central focus of Bandura's research since the late 1970s. Bandura's interest in self-efficacy arose from his studies of the role of participant modeling in the treatment of phobic disorders. A striking feature of the outcomes of these studies was the extent to which individuals' perceptions of their own feelings of effectiveness determined how easily changes in behavior and fear arousal were achieved and maintained. According to self-efficacy theory (first formalized in Bandura, 1977a), people develop domain-specific beliefs about their own abilities and characteristics that guide their behavior by determining what they try to achieve and how much effort they put into their performance in that particular situation or domain. Thus self-percepts provide a framework or structure against which information is judged: They determine how or whether individuals put into action the knowledge they have. (Self-efficacy should be distinguished from locus of control, which refers to individuals' beliefs that outcomes are a result either of their own actions or of chance.) When people have negative self-percepts about a situation, believing they are ineffective and do not have the ability to perform well, they become preoccupied with themselves as well as being emotionally aroused, two conditions that distract them from performing effectively. Beliefs about self-efficacy arise from the individual's history of achievement in a domain, from observation of what others are able to accomplish, from attempts of others to mold feelings of self-efficacy through persuasion, and from consideration of one's own physiological state during a task as a reflection of personal capabilities and limitations.

Self-efficacy theory has guided research in a variety of domains, including academic achievement, health-related behavior, parenting styles, children's self-concept, athletic performance, and clinical disorders. Recently, researchers interested in age related changes in memory functioning have used it in an attempt to understand performance deficits in the elderly, suggesting that concerns over a believed decline in memory ability will be reflected in choice of activities, effort expended, and persistence of actions at tasks requiring memory. Thus training designed to show the elderly how efficacious they can actually be in the domain of memory should lead to an increase in self-efficacy and in subsequent memory performance (e.g., Berry & Balcerak, 1989). The results of current research on maternal responsiveness and infant security, although guided by attachment theory, can also be fitted into a self-efficacy framework. Thus Bandura (1986, 1989) suggests that the social and cognitive competence observed in infants who

are classified as securely attached in the Infant Strange Situation is a result of their highly developed sense of self-efficacy. This sense of self-efficacy is fostered by responsive parents, who react to the communicative behavior of their babies and who provide enriched environments that allow the babies to see that their actions on that environment can be efficacious. In this way accelerated social and cognitive development is promoted.

Reciprocal determinism. Social cognitive theory acknowledges the interrelationship between the individual, the environment, and behavior. In his formalization of triadic reciprocal determinism, Bandura (1977b, 1986) argues that behavior, the environment, and cognition as well as other personal factors operate as interacting determinants that have a bidirectional influence on each other. Thus expectations, self-perceptions, goals, and physical structures direct behavior, with the results of that behavior having an impact on those cognitions and biological properties. Environmental events in the form of modeling, instruction, and social persuasion affect the person, and the person in turn evokes different reactions from the environment depending on his or her personality and physical features. Finally, behavior determines aspects of the environment to which the individual is exposed, and behavior is, in turn, modified by that environment.

The concept of reciprocal determinism handles well one of the central and intriguing phenomena of human behavior to which attachment theorists, among others, have currently addressed themselves: the relative lack of plasticity of human behavior and the fact that some people seem continually to seek out relationships that have similar negative outcomes for them. Bandura argues that people contribute to their own life course by selecting, influencing, and constructing their own circumstances:

> We are all acquainted with problem-prone individuals who, through their obnoxious conduct, predictably breed negative social climates wherever they go. Others are equally skilled at bringing out the best in those with whom they interact. (Bandura, 1977b, p. 197)

Competencies, self-efficacy beliefs, and self-regulatory capacities are acquired through experience, but they in turn determine the individual's experience in such a way that they are maintained.

Testing Hypotheses: The Research

Bandura's theoretical writings have continued to be supported by his reports of empirical research. The research has been of two sorts: experimental analogues of socialization situations (particularly modeling) and demonstrations of procedures for achieving therapeutic change, such as vicarious desensitization and training in self-efficacy. The experimental analogues of socialization were hailed at the time of their appearance as clever simulations of

complex social situations and relationships that enabled developmental psychologists to make major progress in their studies of processes involved in socialization. Thus they opened up new modes of investigation that freed researchers from reliance on interviews with their attendant limitations and enabled them to make causal inferences from data rather than having to guess at the direction of effect. The following are but a few examples of this work. Bandura, Ross, and Ross (1963) were able to take the complex and often nebulous concepts of three theories of identification – social power, status envy, and secondary reinforcement – and test them in a manageable way through manipulations of the characteristics and behavior of models to whom young children were exposed. A series of studies in which children viewed aggressive models showed with startling clarity how such exposure could lead to increases in the children's own aggression, rather than serving some cathartic function. They also demonstrated how knowledge could exist in the absence of performance, and that children could be fully cognizant of the nature and consequences of a given behavior without ever having engaged in it (see Bandura, 1973). Bandura and McDonald (1963) questioned the basic tenets of cognitive developmental theorizing concerning moral development by showing that, through a training procedure involving social reinforcement and modeling, the moral judgments of young children could be modified. Bandura and Schunk (1981) demonstrated how the enhancement of perceived self-efficacy could improve children's cognitive skill development and their intrinsic interest in academic subjects.

Mechanisms of Development

Bandura's analysis of development (e.g., Bandura, 1977a, 1986, 1989) is much more elaborated than was that of Sears and is a reflection of the refocusing on developmental issues that took place among North American psychologists in the 1960s. His position, however, stands in marked contrast to a traditional Piagetian one, being informed as well by a large body of recent research on children's changing information-processing capacities.

Bandura maintains that cognition involves knowledge and the skills for acting on that knowledge. Rather than conceptualizing the development of thinking in terms of discrete and uniform stages, he argues that it is best regarded as guided by specialized cognitive capacities that change over time as a function of maturation and experience. These capacities or skills involve a number of domains. One is attention. The ability to attend to relevant parts of the environment is essential for children to begin to see connections between or to acquire information about relations between actions and outcomes. But when they are young, children have attentional deficiencies – including difficulty in attending simultaneously to multiple cues and in maintaining attention for sufficiently long periods of time – that limit their proficiency. Children must also transform observed material to symbolic

form, first by using imaginal symbols and then, as language develops, verbal ones. Memory is another important cognitive skill, enabling information about observed and personally experienced events to be retained so that it can guide the formulation of rules for behavior. Memory improves over time with the acquisition of language and a knowledge base that allows new information to be related to what is already known and hence remembered better. The ability to monitor the match between ideas about relations of actions and outcomes and the actual effects of actions, as well as to correct mismatches, is yet another cognitive ability necessary for successful behavioral functioning. And, finally, children's reasoning skills must be refined so that they can make and apply decision rules governing behavior.

Piaget argues that cognitive conflict produced by discrepancies between existing mental schemata and perceived events motivates changes in thinking. The social cognitive approach finds the source of change in maturation, exploratory experiences, and, most important, the imparting of information by social agents in the form of guided instruction and modeling. Parents and other teachers, for example, help young infants to learn contingencies between their actions and outcomes by making connections salient. They teach them ways to improve their attention and memory skills. They increase their knowledge base so as to aid comprehension and retention. When imparting moral standards, they use physical sanctions initially because of their children's poor command of language, but switch to more cognitively sophisticated techniques as language improves. As the child's social reality expands and as the nature and potential seriousness of possible transgressions change with age, moral standards of a more complex and generalized nature are introduced. Parents both foster and respond, then, to their children's improved attentional skills, ability to process greater amounts of information, and increasing knowledge so as to promote greater sophistication in cognitive functioning over age. They also take changing social needs into consideration in their interactions.

Commentary and Evaluation

Bandura's contributions to a theoretical understanding of human development have been of major significance for the field. To begin with, he rescued the process of identification from the confusion of hypothesized roots in dependency and acquired reinforcement and motivation, directing the theoretical focus to a more fruitful basis in cognitive processes, including attentional and memorial factors. Bandura's empiricial contributions during the 1960s and 1970s provided ample evidence of the central role of observational learning in a diversity of areas, particularly aggression and self-regulation. The research also highlighted the variety of mechanisms mediating the acquisition of behavior through observational learning. It is doubtful that

anyone today would argue that modeling does not play a dominant role in socialization. The concept of self-efficacy, although developed largely in the context of understanding therapeutic change, has major potential for explaining how children's changing self-concepts can affect their social and cognitive behavior.

Bandura must also be credited with quickly moving the social learning orientation from its roots in stimulus–response theory to one within information-processing theories of memory, imagery, and problem solving. The antipathy to mentalistic constructs evident in many learning theory formulations is in no way evident in even early presentations of his position: Mental processes are not discussed at length by Bandura and Walters in 1963, but they begin to appear in published work soon thereafter (e.g., Bandura, 1965). Bandura's analysis of modeling draws strongly on concepts of information coding, information storage, and development of rule-governed behavior. His descriptions of how human beings select and transform information and how they generate rules to guide their own behavior was a major achievement in understanding social developmental processes. Bandura did not break new ground in his specific cognitive formulations that relate directly to current information-processing approaches, but he was a pioneer in his fundamental interest in relating thought to behavior.

Some Issues and Reactions

One question is why, in spite of being in the mainstream of North American cognitive psychology, social cognitive theory lost its position of preeminence in North American developmental psychology. This is not to say that Bandura's contributions went unheeded. Indeed, many of social cognitive theory's basic premises and mechanisms have simply become an accepted and thoroughly entrenched part of our beliefs about human social behavior. Yet, it is also true that the methodology favored by Bandura, as well as his less than central focus on development, was not in keeping with the changing zeitgeist of developmental psychology during the 1970s and 1980s.

Turning first to the (less important) matter of methodology, it was noted earlier that one of the exciting features of Bandura's work was his very clever use of laboratory analogues of real-life situations to test hypotheses, an approach influenced not only by that of learning researchers but also by the experimental work of Kurt Lewin. The ability to manipulate independent variables in controlled settings and to draw causal conclusions provided a solution for one of the great problems of the correlational approach of Sears, and it appeared to be another giant step forward in making the study of social development a truly scientific undertaking. The methodological soul-searching of the 1970s, however, detracted somewhat from Bandura's achievement in this regard, as a myriad of arguments were presented concerning the difficulties of the experimental approach. Experimental analogues

of reality lacked ecological validity (Bronfenbrenner, 1977), psychology had missed out on the important first stage of science that involves observation and identification of phenomena later to be explained (McCall, 1977), and so on. Along with these warnings came technological advances that facilitated the use of observational methodology as well as statistical developments that enabled at least the inference of causal relationships from correlational data. In all this flurry of discussion and changing focus, experimentation lost its place of favor, and social cognitive theory through association may have lost some of its luster as well.

Nonetheless, the use of experimental analogues of social situations is not integral in any way to assessment of the tenets of social cognitive theory. The theory can be tested using either experimental or correlational methodologies and does, in fact, guide many current correlational investigations. Bandura's preference for the experimental method, moreover, is a useful reminder that no amount of statistical sophistication can allow us to draw causal conclusions in the absence of experimental manipulation, and that greater use of this methodology in the many areas that lend themselves to such an approach could prove beneficial in augmenting our understanding of social developmental processes.

More important to an understanding of the changed role of social cognitive theory in developmental psychology was the fact that Bandura was less concerned with developmental issues than he was with other parts of his theory. As Piagetian approaches became more familiar to developmental psychologists during the late 1960s and early 1970s, social cognitive theory began to be criticized for its lack of attention to the importance of changes with age that might have an impact on behavior (e.g., Coates & Hartup, 1969). Although Bandura responded to the increasing emphasis on changing cognitive capacities in his theoretical writings, there was little accompanying research that specifically addressed developmental issues and that seemed specifically generated by social cognitive theory. For that reason, other approaches that concentrated more clearly on matters of age-related changes in development moved to the forefront of interest for many developmental psychologists. This is probably the main reason social learning theory lost its central position.

Current Status of the Theory and Issues for Further Exploration

Social cognitive theory has evolved over the years in a way that is responsive to new data. The fact that modifications have been accomplished with relative ease speaks to the strength of the initial formulations: There is as yet no evidence of distortion or convolution that might ultimately lead one to a recommendation of abandonment. Its position in the mainstream of current cognitive psychology suggests that it can continue to guide the

acquisition of new data as well as to accommodate research findings that have been generated by other theoretical approaches.

There are, of course, areas of social learning and social cognitive theory whose full potential has yet to be realized. Two are briefly mentioned. The first is obvious from the immediately preceding discussion: More attention needs to be paid to development. The second concerns the basic building blocks of social learning and social cognitive theory: reinforcement, punishment, reasoning, and modeling. Bandura concentrated his theoretical and empirical efforts on the latter; however, we still have much to learn about the first three techniques of behavior change.

A theory of development. Both Sears and Bandura set out to formulate a general theory of human behavior. In the course of this activity, their interests spanned the entire range of human psychological functioning. Thus their concern was not exclusively with developmental issues. This is particularly the case for Bandura, whose interest in clinical matters has always been at least as strong as his interest in child development. Although Sears was more clearly focused than Bandura on issues of personality and social development, his adherence to a theory that suggested that development could be viewed most easily as the acquisition of new behaviors caused him to pay relatively little attention to specific developmental issues. For Bandura, this has not been the case. What has been less emphasized in the empirical work, however, is the interaction between age and experience. The theoretical underpinning of such work has been provided by Bandura. But what we need now is a more elaborated demonstration of how cognitive skills in the domains of memory, attention, self-monitoring, and reasoning are modified through maturation and experience and how they then influence social behavior. We need to know how children at different ages go about the process of weighing and synthesizing information that leads to the kinds of cognitions emphasized by social cognitive theory. With such an elaboration, social cognitive theory may well hold greater promise than any other contemporary developmental theory for providing an integrated view of processes of social development.

Further analyses of socialization techniques and processes. The great contribution of social learning/social cognitive theory has been in aiding our understanding of how children are socialized to accept the standards and values of their society. Sears and his colleagues oriented psychologists to the importance of internalization, reinforcement, punishment, modeling, reasoning, and affectional relationships in their understanding of socialization. Bandura developed conceptions of modeling, dealt with the issue of affectional relationships particularly as they relate to modeling, and focused on mechanisms of internalization. However, in his belief in the primacy of modeling, he has been less concerned with reinforcement and punishment, which are, after all, central concepts of learning theory. Nor does reasoning receive the detailed attention it has been given by others.

It is notable that views about the relative effectiveness of punishment and reasoning in socialization have changed remarkably little since *Patterns of Child Rearing*. And yet there are a number of anomalies in the research and a number of unanswered questions that indicate the topic needs to be revisited. Is punishment always detrimental to the socialization process? Why are mothers who are flexible in their responses to children's misdeeds more effective as agents of socialization (Hoffman, 1970)? Why do children rate certain forms of reasoning as more acceptable than others depending on the domain of misdeed (Nucci, 1984)? Why are relationships between reasoning and internalization dependent on age of child, gender of parent, and socioeconomic class (Brody & Shaffer, 1982)? Does reasoning serve any other function than clarifying the contingency between behavior and outcome? Do different forms of punishment (e.g., withdrawal of love, physical punishment, withdrawal of privileges, and criticism) have different affective and cognitive impacts on children? Similarly, we still have much to learn about reinforcement. Reinforcement can be material in nature and presumably has a detrimental effect on the internalization of values. But it can also be psychological in its form, running the gamut from praise of a specific act, positive attributions about the physical or psychological characteristics of the actor, reflection of the pleasurable feelings of the object of an action, positive social comparison, or simple acknowledgement that an act has occurred. Are some of these more detrimental to internalization than others? How do they vary in their effects on behavior, and why? It is the answers to these sorts of questions that will be needed before we have a really complete understanding of how these basic and fundamental processes – ones that form the cornerstones of learning theory approaches – make their contribution to children's internalization of societal standards and values and, hence, to their social development.

Conclusion

In the hands of Robert Sears and Albert Bandura, social learning theory has progressed from the initial achievement of bringing the language and data of learning theory to bear on an understanding of complex human functioning to a sophisticated application of modern information-processing concepts. Clearly, the theory in its present form offers an extremely useful way of organizing existing data as well as providing a framework for future research. The theory's potential for developmental psychology has yet to be fully realized. However, both Sears and Bandura, in company with their colleagues, have given us a substantial lead along the way. Our debt to them is great.

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3

System and Lifeworld, and the Conditions of Learning in Late Modernity

Stephen Kemmis

The Functional Integration of Schooling to the Imperatives of Political-Legal and Economic Systems

In *The Theory of Communicative Action: volume two: Lifeworld and System: A Critique of Functionalist Reason* (1987a: pp. 371–373), Jürgen Habermas gives an example of how the imperatives of the political-legal system place demands on schooling that undermine the conditions necessary for education. He argues that the process of education depends upon creating and sustaining particular kinds of communicative relationships between people (for example, teachers and learners) if cultural reproduction, social integration and socialisation are to proceed in a way which enables them to secure the 'structural nuclei' of shared social life (culture, society, and personality). In recent times, he argues, these communicative relationships have been put at risk to the extent that they have been displaced or distorted by the function rationality, which characterises the operation of both political-legal and economic systems. If this argument is correct, some of our understandings of the nature and purposes of education and schooling [2] may need to be re-examined. For example, formal education is often justified in terms of individual enlightenment: it, in today's world, schooling operates principally to integrate individuals to

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political-legal and economic systems. In the interests of those systems, then justifications of schooling in terms of individual enlightenment begin to sound hollow and illusory.

Functional Integration of Schooling to Administrative Systems

The particular example of the functional integration of schooling to the political-legal or administrative system cited by Habermas concerns a threat to the educational relationships between teachers and learners, which emerged when schooling in the former Federal Republic of Germany was brought under the jurisdiction of state administrative law. He refers, in particular, to a study by G. Frankenberg (1978) of some of the pedagogical effects of the protection of pupils' and parents' rights through administrative law. In the early 1970s, schools had introduced appeal procedures by which students and parents could contest school decisions about the non-promotion of students from grade to grade, and the results of examinations and tests. According to the administrative law of the Federal Republic, however, when a state body established an internal appeal mechanism, the appeal mechanism itself became subject to the external and higher jurisdiction of state administrative law, thus opening a means by which decisions taken in school-level appeals could – and did – become the subject of appeal in the administrative courts.

Habermas uses the term *juridification* to refer to the extension of the scope of law in decision-making – a process of bringing more and more of social life under the administrative regulation of the state. Frankenberg's research suggested that the juridification of decision-making in schools had a number of untoward effects: it left teachers insecure, with the effect that some teachers 'over-utilised' and some 'under-utilised' the scope of pedagogical action. Some became extremely cautious and explicit in their pedagogical decision making (for example, in decisions about the promotion of students from grade to grade, or about the development of tests and examinations and use of the results of testing), in the hope that their pedagogical action would be safe against appeal; others apparently sought to avoid involvement in any decision-making processes which might make them vulnerable to appeal.

In *The Theory of Communicative Action*, Habermas argues that the possibility of education (and some others services like family and welfare services) depends on the existence of relationships between students and teachers in which *communicative action* is primary – that is, when learning is a form of *action oriented towards mutual understanding and unforced consensus*, guaranteed solely by each teacher and each student having the unfettered right, in relation to every utterance, to make their own yes/no answer to four questions, which can be raised in relation to any and every utterance:

(1) Is it comprehensible?
(2) Is it true (in the sense of accurate)?

3) Is it truthfully (or sincerely) stated? and
4) Is it right (in the sense of morality appropriate in these circumstances)?

Frankenberg's research suggested that juridification of schooling undermines these communicative requirements. Teachers became constrained in their pedagogical action in the sense that their pedagogical procedures were increasingly based on the requirements of communicative rationality within the classroom, in which participants *themselves* have the right to raise these validity claims *in relation to each other's utterances*, since teachers were obliged to conform with the procedural requirements of state administrative law (for example, they may have been required increasingly to construct examinations, which would be technically-defensible in terms of test theory, even if they were less appropriate as practical guides to what students were learning). Under such conditions, Habermas concludes, schooling is being conducted under a principle of sociation *contrary* to the principles of communicative rationality (mutual understanding and unforced consensus), which are at the heart of education, "converting them over, through the steering medium of the law, to a principle of sociation that is, for them, dysfunctional" (Habermas, 1987a, p. 373).

Functional Integration of Schooling to Economic Systems

Educational relationships between teachers and learners are also under threat from the functional integration of schooling to the *economic* system, as schooling becomes an increasingly extensive system of preparation for employment – not only at the entrance to working life, but also through its inner corridors as continuing education becomes a requirement for career development and change throughout the lifespan.

In this case, communicative rationality is distorted not through the integration of schooling to political-legal systems, but to economic systems. In this case, schooling is 'converted over' through the steering medium of money, to an equally dysfunctional principle of sociation; namely, a principle grounded in the operation of the economic system. Examples of this kind of dysfunction include: when access to, engagement in and success in schooling are dependent upon the financial resources of students or their families; and when the provision of educational services is steered principally by costing and funding considerations.

A telling example of how educational relationships can be distorted by costing and funding decisions was described by my former Deakin University colleague Jennifer Angwin, who studied a series of changes in adult basic education for migrants in Australia (Angwin, 1992). After about a decade of national funding for adult migrant education, in which adult migrant education teachers gradually began to form as a sub-profession within teaching

and began to organise increasingly effective professional development for themselves, they began to hit upon some powerful theoretical resources that helped them in their teaching of the very diverse groups of learners they encountered (some literate and some illiterate in their first languages; some voluntary migrants and others refugees; some employed, some unemployed; some relatively well-off, others in poverty; some from small and fragile new migrant communities, and others from large and well established migrant communities; and so on). Since many worked in adult education settings funded by Technical and Further Education authorities, the authorities believed that the 'best practice' identified by teachers could be codified in new curricula embodying these new theoretical insights. Technical and Further Education administrators thus set in train processes of curriculum development that would produce the appropriate curriculum resources (though it was hardly possible to produce standardised curricula to meet the great diversity of these learners' circumstances and needs). Once these curricula began to emerge from production, and following the economic rationalist principles of the times, which asserted that colleges should tender competitively to provide these courses, the authorities decided that it was no longer necessary to employ adult migrant education teachers on a continuing basis; instead, they could be employed on an 'as needed' basis for periods of 6 to 12 weeks at a time, when particular courses would be offered at particular sites. The consequences of these decisions for adult migrant education were dramatic:

- Formerly, community networks of teachers, students and former students had directed potential new students to relatively well-known teachers and courses in their area, and webs of relationships had grown in which adult migrant education catered to specific local community needs. Following the introduction of the standardised curricula, tendering for courses and short-term contracting of teachers, these local networks broke down. Once courses were not consistently offered at the same locations or by the same teachers, it was increasingly difficult for potential students to find classes to meet their circumstances and needs. Soon, local Commonwealth Employment Service (CES) offices became the only reliable point of referral to adult migrant education services, since CES staff generally knew what adult migrant education services would be offered in their area in the coming weeks. However, the CES was only a reliable service for people who were also claiming unemployment benefits.
- Formerly, the curriculum in adult migrant education classes was very closely attuned to the particular circumstances and needs of individual adult learners. Learners could stay on in a basic class, or move to an intermediate class, as they felt ready to do so. Once curricula and short

courses became standardised, the content and duration of the courses increasingly determined learning opportunities for students, and the articulation of learning from stage to stage began to break down, especially as courses closed at one location and opened at another, forcing learners to find their own way from course to course, and from one set of learning relationships to another.

- Formerly, the network of adult migrant education teachers had operated as a 'sub-profession', well-enough organised to be able to meet regularly, share experiences, arrange common professional development activities to meet emerging needs, and lobby for more secure employment conditions. Once the tendering process was established, teachers found it increasingly difficult to maintain these professional networks and professional development activities, and even to maintain secure employment. Most became educational piece-workers, constantly worried about securing the next short-term contract and frequently having to compete with colleagues for work.

In short, the rationalisation of adult migrant education according to economic principles (trusting to market forces to determine the demand, and the availability of courses and teachers at a competitive price in any particular location) swept aside the webs of relationships that had formerly characterised the field, shattering continuities in individual lives, in the commitment of local migrant communities to adult education and in the professional lives of adult migrant education teachers.

More generally, the functional integration of schooling to the economic system occurs not only at the level of preparing people for work, and assisting them in the development of relevant knowledge and skills in careers more likely than ever before to involve mobility from place to place and from occupation to occupation. In many social democracies, it has also involved a shift from state to private provision of education (often, though not always, under state regulation), so that the provision of education and training is increasingly regulated as if it were part of the economic subsystem. In some places, it has also involved increased provision of education and training in the workplace, with the content of teaching and learning being specifically customised to the needs of the enterprise, rather than the learner. This is not to say that private provision or on-the-job training are necessarily counter-educational or so irretrievably narrow as to have no wider value in people's lives; it is merely to note that education and training in and for the work-context is part of the functional integration of education and training to the wider economic system, down to the level of the individual enterprise.

The shift from state to private provision has been accompanied by another shift, connecting it to the functional integration of schooling to the political-legal

system. Where once mass education was principally achieved through state educational *provision* (state schools, colleges, universities, etc.), in contemporary social democracies it is increasingly achieved through state *regulation* of schooling, with education and training institutions being increasingly encouraged to be responsive to market forces, although still under the aegis of state law and policies regarding the conduct of education and training. While the kind of juridification described in Habermas's example may seem like a particular case, it is perhaps more ubiquitous than formerly acknowledged (especially as students bring legal actions against universities and colleges for alleged failure to provide the education and training services they contracted to provide). In addition, it may also be the case that education and training institutions become increasingly *bureaucratised* as they conduct their affairs in the guise of service providers offering learning 'products' to learners increasingly described as 'clients', 'customers' or 'consumers' of these 'products'.

These two tendencies – functional integration of schooling to the economic system, and to the political-legal systems of the state – are not restricted to the institution of schooling. The case of schooling is merely a particular example of a very general tendency characteristic of late modernity. In *The Theory of Communicative Action* (especially volume two) Habermas gives a number of other examples, especially in family and welfare services, to show how the functional rationality of systems has displaced or distorted the communicative rationality necessary to the symbolic reproduction of lifeworlds through cultural reproduction, social integration and socialisation.

Theoretical Resources

Habermas's *Theory of Communicative Action* (1984, 1987a) aims to recover and recast some conceptual choices made by earlier generations of social theorists, to construct a new view of social theory able to remedy the complementary defects of two currently competing forms of social theory: *systems theory* and *theories of social action*. The former give insight into the nature and functioning of social systems, but at a cost: they leave aside problems about the ways social life is experienced by people and groups. The latter – theories of social action – have focused on people's experience of their social world, but have not dealt adequately with social systems, tending to treat systems as if they were 'forces of nature' and, at worst, casting social actors as victims of the systems which constitute a very large part of the lived conditions of late modernity. The theory of communicative action aims to offer a 'stereoscopic' view able to encompass both system and lifeworld aspects of our lived social world, and to offer insights into the nature and dynamics of the tensions and interconnections between them.

The Theory of System and Lifeworld

In *The Theory of Communicative Action*, Habermas considers the strengths and weaknesses of systems theory and theories of social action. He criticises both and arrives, through a reconstruction of earlier social theories, at a 'two-level' social theory, which explores the tensions and interconnections between system and lifeworld as two faces of the social world of modernity.[3]

Seen from a *systems perspective*, modern society encompasses organisational and institutional structures (including roles and rules) and the functioning of these structures – in particular, their functioning as oriented towards the attainment of particular goals. Systems operate through *rational-purposive action* – that is, (instrumental, means-ends) action oriented towards success. They operate through definition of goals, the definition of criteria against which progress towards achieving the goals can be measured, the setting of targets for what will count as success (maximisation of outcomes in relation to goals), and the monitoring of progress towards goals to evaluate and improve system efficiency defined in terms of the ratio of inputs to outcomes achieved. Since it is circumscribed by system structures and processes, and oriented towards achieving outcomes defined in terms of system goals, its central concerns are with systems functioning; hence, it characteristically employs a form of reason which can be described as *functional rationality*.

Modern societies are characterised by advanced differentiation in a variety of dimensions, posing particular kinds of problems of social integration and system integration, with a variety of effects (including pathological effects) which the theory of communicative action aims to address. Habermas is particularly concerned with the nature, functioning, and interrelationships between *economic* and *political legal* systems in modern societies (particularly capitalism and the state which have been linked together in particular mutually-compensating ways in the modern welfare state).

Seen from a *lifeworld perspective*, modern society encompasses the dynamics by which culture, social order and individual identity are secured. Drawing on a key insight from American sociologist George Herbert Mead that "no individuation is possible without socialisation, and no socialisation is possible without individuation" (Habermas, 1992, p. 26). Habermas develops a more extensive conceptualisation of the social matrix of lifeworlds. Identifying three 'structural nuclei' of the lifeworld – culture, society, and person – which are 'made possible' by three enduring and interacting sets of processes – cultural reproduction, social integration and socialisation. He writes:

> Considered as a *resource* the lifeworld is divided in accord with the 'given' components of speech acts (that is, their propositional, illocutionary, and intentional components) into culture, society, and person. I call

culture the store of knowledge from which communicative action draw interpretations susceptible of consensus as they come to an understanding about something in the world. I call *society* (in the narrower sense of a component of the lifeworld) the legitimate orders from which those engaged in communicative action gather a solidarity based on belonging to groups, as they enter into personal relationships with one another. *Personality* serves as a term of art for acquired competences that render a subject capable of speech and action and hence able to participate in processes of mutual understanding in a given context and to maintain his own identity in the shifting contexts of interaction. This conceptual strategy breaks with the traditional conception – also held by the philosophy of the subject and praxis philosophy – that societies are composed of collectivities, and these in turn of individuals. Individuals and groups are 'members' of alifeworld only in a metaphorical sense.

The symbolic reproduction of the lifeworld does take place as a circular process. The structural nuclei of the lifeworld are 'made possible' by their correlative processes of reproduction, and these in turn are 'made possible' by contributions of communicative action. *Cultural reproduction* ensures that (in the semantic dimension) newly arising situations can be connected up with existing conditions in the world: it secures the continuity of tradition and a coherency of knowledge sufficient for the consensus needs of everyday practice. *Social integration* ensures that newly arising situations (in the dimension of social space) can be connected up with the existing conditions in the world; it takes care of the coordination of action by means of legitimately regulated interpersonal relationships and lends constancy to the identity of groups. Finally, the *socialisation* of members ensures that newly arising situations (in the dimension of historical time) can be connected up with existing world conditions; it secures the acquisition of generalised capacities for action for future generations and takes care of harmonizing individual life histories and collective life forms. Thus, interpretive schemata susceptible of consensus (or 'valid knowledge'), legitimately ordered interpersonal relationships (or 'solidarities'), and capacities for interaction (or 'personal identities') are renewed in these three processes of reproduction. (Habermas, 1987b, pp. 343–344)

These relationships are summarised by Habermas in Table 1.

Table 1: Contributions of reproduction processes to maintaining the structural components of the lifeworld (Habermas, 1987a, p. 142)

Structural components: Reproduction processes:	Culture	Society	Personality
Cultural reproduction	Interpretive schemes fit for consensus ("valid knowledge")	Legitimations Interpersonal relations	Socialisation patterns Educational goals
Socialisation	Interpretive accomplishments	Motivations for actions that conform to norms	Interactive capabilities ("personal identity")

Table II: Functions of action oriented towards mutual understanding (Habermas, 1987a, p. 44)

Structural components / Reproduction processes:	Culture	Society	Personality
Cultural reproduction	Transmission, critique, & question of cultural knowledge	Renewal of knowledge effective for legitimation	Reproduction of knowledge relevant to child-rearing, education
Social integration	Institutionalisation of a central stock of value orientations	Coordination of actions via intersubjectively recognised validity claims	Reproduction of patterns of social membership
Socialisation	Enculturation	Internalisation of values	Formation of identity

Habermas also relates the functions of communicative action – action oriented towards mutual understanding – directly to these structural models of the lifeworld and their correlative reproduction processes, as in Table II.

Table II summarises the direct roles played by communicative action in the three processes of symbolic reproduction. Communicative action is the process by which participants test for themselves the comprehensibility, truth (in the sense of accuracy), truthfulness (sincerity) and rightness (in the sense of moral appropriateness) of the substantive content of these processes as it applies in their own situations. Only when they give their own unforced assent will they regard substantive claims raised in these processes as personally binding upon them – or perhaps it would be better to say that, when a doubt arises about any such substantive claim, it will not be regarded as binding until it is underwritten by communicative action (that is, action oriented towards mutual understanding and unforced consensus).

Under the conditions of advanced differentiation characteristic of late modernity, whole realms of social life are coordinated in terms of purposive-rational action and functional reason, with the requirement for mutual understanding and consensus being more or less suspended. Under the imperatives of systems functioning, people simply 'get on with the job', as it were, without requiring a justification for what they are doing in terms of authentic personal assent. This deferment, displacement or distortion of the (validity) claims of mutual understanding and consensus is not cost-free. It puts the processes of symbolic reproduction under strain. If sufficiently severe, the strain becomes evident in various kinds of crises in the domains of culture, society and personality. Habermas summarises these kinds of crises in Table III.

These kinds of crises may be thought of as costs of systems rationalisation to be borne by cultures, societies and individuals. The question arises of whether the costs can be minimised and/or whether it is possible to reduce them by changing the way systems function *vis-à-vis* the lifeworld. Habermas addresses this question in *The Philosophical Discourse of Modernity* (pp. 336–367), offering the possibility that self-organised groups

Table III: Manifestations of crisis when reproduction processes are disturbed (pathologies) (Habermas, 1987a, p. 143)

Structural components: Disturbances in the domain of	*Culture*	*Society*	*Personality*	*Dimension of evaluation*
Cultural reproduction	Loss of meaning	Withdrawal of legitimation	Crisis in orientation and education	Rationality of knowledge
Social integration	Unsettling of collective identity	Anomie	Alienation	Solidarity of members
Socialisation	Rupture of tradition	Withdrawal of motivation	Psychopathologies	Personal responsibility

in a revitalised public sphere can sensitise systems to their untoward effects in ways which may reduce burdens on cultures, societies and individuals. He comes to this conclusion by way of an exploration of two key theses about the nature of modernity.

Two Theses

Habermas's theory of communicative action and, in particular, his clarification of the relationship between system and lifeworld, permits him to develop two key theses about the character of late modernity: theses concerning (a) the 'uncoupling' of system and lifeworld, and (b) the colonisation of the lifeworld by the imperatives of systems.[4]

'Uncoupling' of system and lifeworld. The thesis of the 'uncoupling' of system and lifeworld refers to the development of 'relative autonomy' in systems regulated by the distinctive steering media of money and administrative power. A principal line of argument in *The Theory of Communicative Action* is that modern societies are characterised by such an elaborate pattern of differentiation (for example, in contexts of production and the division of labour) that it is barely possible to secure collective social 'anchoring' in a shared culture, shared social order and shared social identity. The burden of maintaining such societies against fragmentation and dissolution has been transferred from individuals and small face-to-face social groups to social systems [5], which provide coordination. By the rise of modernity, (variously dated from Descartes, or the rise of the printing press, or the emergence of positivism [6]), the process of differentiation was already so advanced that political and economic systems were clearly differentiated from one another (though interacting), and each was already highly differentiated internally. The functional character of these systems was such that they could provide a matrix within which whole realms of social life could be coordinated and regulated, though not without contradiction, contestation and crises.

What is distinctive about late modernity, in Habermas's view, is that *steering media* characteristic of the economic and political-legal systems – money and administrative power, respectively – now do their work of coordination so smoothly that the systems have begun to operate 'relatively autonomously', that is, 'on their own terms'. Seen from its own perspective, the lexicon of the economic system renders individual people invisible, recasting them as 'consumers' who constitute 'markets' and provide the system with the 'human resources' to be taken into account among other factors of production. Similarly, seen from its perspective, the lexicon of the political-legal system renders individual people invisible and recasts them as 'citizens' of the state, 'constituents' of electorates, and 'clients' of bureaucracies – whose activities are to be administratively regulated by laws and policies.

The economic and political-legal systems could become 'relatively autonomous' only when (a) their functionality was so generally understood that it could be taken for granted and have popular assent as a legitimate mode of social order – that is, when it relieved individuals living and working in highly differentiated societies of the burden of justifying their actions (through communicative action) every time they acted in accordance with the functional demands of systems, and when (b) the systems themselves had developed *steering media* of sufficient power and stability to provide their own specialist 'discourses' capable of regulating exchange and interaction – the steering medium of *money* in the case of the economic system, and the steering medium of *administrative power* in the case of the political-legal system. Each system has a 'logic' of its own which abstracts and generalises features of immediate, concrete situations and orders them in terms of its particular functions (economic exchange in the case of money, and regulation of action through law, policy and bureaucracy in the case of administrative power). Once achieving this relative autonomy, the functional rationality of each expands over wider and wider domains: tendencies described by Habermas as *monetarisation* in the case of the economic system and *bureaucratisation* (or *juridification*) in the case of the political-legal system.

An effect of the 'relative autonomy' of the economic and political-legal systems is that, by functioning according to their own principles, they appear almost (but only almost) to be 'forces of nature' or 'objects' – like ecological niches to which individual social actors must adapt. (On the other hand, of course, participants are also well aware that this 'facticity' is not simply given – that systems are humanly-, socially- and historically-constructed, and that they can be reconstructed, though the task of reconstruction may be beyond the grasp of individuals or even local collectivities.)

The relatively autonomous functioning of systems in societies characterised by advanced differentiation involves an 'uncoupling' of system and Lebenswelt in the sense that systems appear to be 'objects' (reified) to the people who inhabit them, as if (but only as if) they functioned according to their own rules and procedures, steered by money or administrative power.

in a disinterested manner indifferent to the unique personalities and interests of the individuals inhabiting them, and thus, in a manner which appears to be indifferent to the dynamics of cultural reproduction, social integration and socialisation necessary for the development and reproduction of lifeworlds. (On the other hand, of course, these processes of symbolic reproduction are also necessary for the maintenance and continued functioning of systems which are themselves constituted through social practices in real time-space lifeworlds like workplaces and institutions.)

Colonisation of the lifeworld. Habermas's second thesis follows from the first. In societies characterised by advanced differentiation, and the relative autonomy of economic and political-legal systems, he argues, individuals and groups increasingly define themselves and their aspirations in systems terms – in particular, so that their 'privatised hopes for self-actualisation and self-determination are primarily located . . . in the roles of consumer and client' (Habermas, 1987, p. 356) in relation to the economic and political-legal systems, respectively. This is colonisation, in the sense that the imperatives of the economic and political-legal systems dislodge the internal communicative action, which underpins the formation and reproduction of lifeworlds, providing in its place an external framework of language, understandings, values and norm based on systems and their futures. Under such circumstances, the symbolic reproduction processes of the lifeworld (cultural reproduction, social integration and socialisation) become saturated with a discourse of roles, futures and functionality, reshaping individual and collective self-understandings, relationships, and practices. In some versions of systems theory (notably the systems theory of Niklas Luhmann criticised by Habermas [7]), it has even led to the characterisation of the person as no more than a system in interaction with other systems, including other individuals and other kinds and levels of social, material and ecological systems. This is to say that from the perspective of systems theory, the very idea of the person has been assimilated 'without remainder' into a self-referential systems logic.

The effect of the colonisation of the lifeworld by the imperatives of systems is that individuals and groups in late modernity increasingly identify themselves and their aspirations in systems terms. The theory of communicative action aims to offer a stereoscopic vision which allows the effects of uncoupling and colonisation to come into perspective. In doing so, it allows us to:

> become conscious of *the difference between steering problems and problems of mutual understanding*. We can see the difference between systemic disequilibria and lifeworld pathologies, between disturbances of material reproduction and deficiencies in symbolic reproduction of the lifeworld. We come to recognise the distinctions between the deficits that inflexible structures of the lifeworld can cause in the maintenance of the systems of employment and domination (via the withdrawal of

> motivation or legitimation), on the one hand, and manifestations of a colonisation of the lifeworld by the imperatives of functional systems that externalise their costs on the other. Such phenomena demonstrate once more that the achievements of steering and those of mutual understanding are resources that cannot be freely substituted for one another. Money and power can neither buy nor compel solidarity and meaning. In brief, the result of the process of disillusionment is a new state of consciousness in which the social-welfare-state project becomes reflexive to a certain extent and aims at taming not just the capitalist economy but the state itself. (Habermas, 1987b, p. 363)

From this conclusion, Habermas proceeds to examine the possibilities for revitalising a public political sphere which has side-lined mutual understanding in favour of system self-regulation through the steering media of money and power, and which is now paying a high price in terms of the withdrawal of motivation and legitimacy from those systems – as a result of "the intolerable imperatives of the occupational system [and] the penetrating side effects of the administrative provision for life" (1987b, p. 364). In short, the economic and political-legal systems have become insensitive to the imperatives of mutual understanding on which solidarity and the legitimacy of social orders depends. He suggests that a possible way forward is through the formation of autonomous, self-organised public spheres capable of asserting themselves with "a prudent combination of power and intelligent self-restraint" against the systemically integrating media of money and power:

> I call those public spheres autonomous which are neither bred nor kept by a political system for purposes of creating legitimation. Centres of concentrated communication that arise spontaneously out of microdomains of everyday practice can develop into autonomous public spheres and consolidate as self-supporting higher-level intersubjectives only to the degree that the lifeworld potential for self-organisation and for the self-organised means of communication are utilised. Forms of self-organisation strengthen the collective capacity for action. Grassroots organisations, however, may not cross the threshold to the formal organisation of independent systems. Otherwise they will pay for the indisputable gain in complexity by having organisational goals detached from the orientations and attitudes of their members and dependent instead upon imperatives of maintaining and expanding organisational power. The lack of symmetry between capacities for self-reflection and for self-organisation that we have ascribed to modern societies as a whole is repeated on the level of the self-organisation of processes of opinion and will formation.
>
> This need not be an obstacle, if one considers that the indirect influence of functionally differentiated subsystems on the individual mechanisms of self-steering means something altogether different from the goal oriented influence of society upon itself. Their self-referential closedness renders the functional systems of politics and economics immune against

> attempts at intervention in the sense of *direct* interventions. Yet this same characterisitic also renders systems sensitive to stimuli aimed at increasing their capacity for self-reflection, that is, to the reactions of the environment to their own activities.[8] Self-organised public spheres must develop the prudent combination of power and intelligent self-restraint that is needed to sensitise the self-steering mechanisms of the state and the economy to the goal-oriented outcomes of radical democratic will-formation. In place of the model of society influencing itself, we have the model of boundary-conflicts – which are held in check by the lifeworld – between the lifeworld and two systems that are superior to it in complexity and can be influenced by it only indirectly, but on whose performances it at the same time depends. (Habermas, 1987b, pp. 364–365)

It might be argued that grassroots movements and self-organised groups conducting participatory and collaborative action research in system settings (for example, in education, social welfare and community development) are examples of such 'autonomous public spheres' at the local level. It is certainly the case that, where they are successful in bringing about changes in institutional practices, it is generally through indirect rather than direct means, by sensitising systems to previously unnoticed effects [9] – especially when projects draw attention to circumstances under which participants withdraw motivation or legitimacy from system operations.

The theory of system and lifeworld provides a theoretical discourse clarifying a significant shift in the social conditions of late modernity. It allows us to articulate problems which have emerged in late modernity as social systems have become more extensive, and as problems of integrating different kinds of social organisations and systems have emerged. It provides a framework from which to view changes in schooling – for example, the functional integration of schooling with political-legal and economic systems.

The theory of communicative action also provides theoretical resources which help to clarify other issues enmeshed in the functional integration of schooling to political-legal and economic systems. Earlier, I referred to the conventional justification of schooling in terms of individual enlightenment, indicating that this view of its nature and purpose sounds hollow or illusory in the light of the phenomena of functional integration. The theory of communicative action also includes resources which may be helpful for articulating and addressing this issue.

Habermas's Critique of the Philosophy of the Subject

In *The Philosophical Discourse of Modernity* (1987b), Habermas takes the argument of *The Theory of Communicative Action* (1984, 1987a) from another tack, confronting a number of the social theoretic and philosophical positions on various frontiers of the modernity/postmodernity debates. He sets out to

show that, despite their disagreements, many prominent theoretical and philosophical positions in the twentieth century, including systems theory and theories of social action, share a fundamental agreement: they are grounded in a 'philosophy of the subject'. Greatly simplified (at the risk of doing violence to the ideas of both Habermas and his adversaries), this is to say that much social theorising has been based on the assumption that truth is the kind of thing that can be comprehended by individual cognitive subjects (hence, 'the philosophy of the subject'), whether in the form of subjective perceptions or perspectives, or in the form of 'objective' scientific accounts of reality which can be 'read off' by scientists and others (that is, in individual minds). The philosophical critiques of subjectivism and objectivism have left both of these positions untenable.

Against these two, Habermas counterposes the theory of communicative action, according to which people encounter no 'truths', but under certain conditions, demonstrate their rationality in that kind of critical moment when they stop to explore the extent to which they comprehend one another, and whether they understand one another in the sense that they will give unforced assent to the propositions that what each is saying is (a) true (in the sense of 'accurate'), (b) right or appropriate under the circumstances, and (c) sincerely or 'truthfully' stated. These 'validity claims' may always be raised in any communicative situation; most of the time, however, they are simply assumed by interlocutors. Indeed (Habermas argues), they are presupposed as a basis for any communication. They are especially important whenever people interrupt their *purposive-rational* action (action oriented towards achieving particular outcomes; or 'getting on with the job', we might say) to go into the mode of *communicative action*, in which their sole aim is to reach mutual understanding and unforced consensus about what to do in the practical circumstances in which they find themselves.

On Habermas's view, this is as near as we ever come to 'the Truth' – or, more properly, it is to conclude that the old notion of Truth (based on the philosophy of the subject) is now untenable, so that, to the extent that we can speak of the category of 'truth' at all, we can only do so by reference to communicative contexts in which we share a commitment to reaching mutual understanding and unforced consensus. The work of contemporary social theory, including critical theory and critical social science [10], is no more (and no less) than a shared search for mutual understanding and unforced consensus about the social (cultural, socio-political and cognitive) circumstances in which we find ourselves.

The recasting of social theory in *The Theory of Communicative Action* and the recasting of the modernity/postmodernity debates in *The Philosophical Discourse of Modernity* have a practical aim: to attempt to escape some of the apparent blind alleys into which both have been led. In social theory, the aim is to escape two equally unacceptable alternatives: either (a) that the social world is to be understood as nothing but an indeterminate set of subsystems

which can be evaluated only in terms of the (purposive-rational) criteria of systems functionality and utility from the perspective of systems, or (b) that the social world can only be understood in terms of an indeterminate number of incommensurable standpoints of individuals whose perspectives (and interests) are conditioned by their own social-historical locations and backgrounds – with the consequence that no perspective, and no action, can be rationally justified. The latter position implies that there can no longer be any appeal to the force of better argument, leading to the extremely uncomfortable conclusion that power is the only 'argument' (that is, in the end, that only power secures assent). So uncomfortable is this conclusion – and so great an affront to the aspirations of Enlightenment philosophy – that Habermas took on the task of recovering whatever could be salvaged from the debate that might yet provide a rational grounding for rationality itself.

In *The Philosophical Discourse of Modernity*, Habermas sets out a position which seems to escape from the blind alleys of objectivism and subjectivism (or relativism), both of which depend (in the one case, unknowingly, and in the other, knowingly) on a 'philosophy of the subject', which ultimately condemns both on the charge of solipsism. Against these strong but brittle alternatives, Habermas argues for a position which sustains rationality, though in a necessarily muted form: a fallibilism which makes no greater claim for rationality than that it is evident in what we do in communicative action aimed at mutual understanding and unforced consensus. This position cannot ascend to the heights to which scientific objectivism aspired, from which it could establish universal truths (replacing the eye of God with the eyes of humankind), but neither does it descend to the depths of an empty universalism which takes the view that 'everything said is said from a personal, socially-located standpoint'. It still offers the prospect that intersubjective agreement about practical matters can be reached, and that it can be grounded in rational argument even though its claims may extend no further than a community of interlocutors. However, this also allows a universalism of sorts: the 'universal pragmatics' of argument itself, in which, when claims are called into question, each of us is compelled to give a yes/no answer as to the (universal) validity of an utterance in terms of its (comprehensibility,) truth, rightness and sincerity.

This argument for a *communicative* view of rationality (expressed in communicative action), as distinct from *functional* rationality (expressed, for example, in the functional terms in which the success-oriented operations of systems are described) offers a way to recast the problem of understanding education in late modern times, once it begins to seem untenable to describe it as justified in terms of individual enlightenment. Instead of understanding education as directed towards the individual enlightenment of learners (a view dependent upon 'the philosophy of the subject'), it becomes possible to understand education – and even schooling – as creating conditions

under which communicative rationality can be experienced, expressed and exercised in communicative action by learners and teachers. This part of the theory of communicative action thus offers a way to cast problems about the conditions of learning from the point of *view* of the learner, without relying upon the discredited 'philosophy of the subject'. This will be important when we return to the question 'What remains of Enlightenment?' below.

The Learning Conditions of Late Modernity

It is easy to imagine that, once upon a time, the family and community, the organisations and groupings of civil society, and the apparatus of the state, were sufficiently unified as structures to act as powerful integrative forces, not only in the formation of personally-binding ethical frameworks, but also in the formation of individual capabilities and identities more generally. It is easy to imagine, therefore, that these social structures formed relatively-secure niches in which people learned, giving a relatively stable sense and significance to what people learned and how they learned it. This is the rose-coloured past – which some seem to believe came to an end as recently as the 1950s – against which the plurality, fluidity, 'chronic revision', uncertainty and risk [11] of the present seem so threatening (though a privileged proportion of us may also find it exhilarating).

The pluralised, fluid, uncertain and risky character of contemporary social structures, in both the private and the public spheres, stands in stark contrast to that imagined past. The family, club, workplace, church and state – and the school – of the imagined past seem to have been places where knowledge was grounded in social practices, which were grounded (in their turn) in stable social structures. In that enchanted place, knowledge stood above mere opinion or appearance, perhaps in the form of doctrines or scientific certainties, and learning was a process of induction or initiation into the luminous forms of words which crystallised and threw light on the forms of life which characterised the society.

I do not think that this way of seeing the past can throw much light on the problems and challenges of our more pluralised, fluid, uncertain and risky present. A wholesome Disney-style image of 'traditional society' disguises and levels the uneven progress of a history of struggles to achieve, and then to cope with the consequences of, modernity:

- first, struggles to escape the rigid strictures of premodern life (in which knowledge rested on dogma, and most people lived under conditions of material, social and cultural domination); followed by,
- secondly, struggles to achieve forms of cultural, social and individual enlightenment in which the good might flourish, and in which people might progress towards better conditions of life here on earth; followed by,

- thirdly, struggles to cope with the contradictory consequences of an ambivalent modernity in which, for example, the tension between liberalism and democracy is working itself out on a global scale, privileging some individuals, groups, nations and regions, while others remain in conditions of appalling poverty and suffering.

Four Figures

What follows is a schematic summary of what seem to me to be some of the major changes in our views of learning in the period leading to and from modernity – a set of sweeping generalisations together with images which may capture a sense of how conditions for learning have changed over the last millennium. The images are no more than figures of thought, but they may be generative for thinking about learning today and in the immediate future. My generalisations are these:

- in the *premodern* period, learning was viewed in terms of *cycles*,[12]
- in the *modern* period, it was viewed in terms of *spirals*;
- in the *late modern* period, it is viewed either: in (late modern) terms of *reflexivity* and *recursion*, or in (postmodern) terms of *situationally-located narratives* and their *deconstruction*.

Table IV presents a cryptic synopsis of what I mean by these generalisations. It is necessarily crude and schematic, but the attempt will be justified if it serves to situate changing views of learning in relation to broad epochs.

It would be mistaken to believe that any one of these kinds of learning is pre-eminent. Though arising in its own times, under particular cultural and social-political conditions, each continues to have a place today. It would be mistaken, for example, to believe that mastery learning is *passé*: it obviously has a place in any repertoire of learnings needed for contemporary life. Similarly, discovery and inquiry learning remain necessary for the development of knowledge, seeing 'deeper into' and 'beyond' current states of knowledge (both for individuals and whole societies). So, too, for critique which has been valorised in various contemporary educational writings (on 'critical pedagogy', and the 'socially-critical school' [13], for instance), but which can only take its place as thought about thought itself alongside other forms of knowledge and learning. So, too, I would argue, the narrative view (which I have described in terms of 'fragmentary narratives' and 'deconstruction' which asserts that knowledge can no longer be grounded in grand narratives of universal history or the meta-narratives of (progress through) science and philosophy, and can thus make no claims beyond its own boundaries in the lives and perspectives of particular people and groups, only has force when it makes claims for the local against the global, the particular

Table IV: Four perspectives on learning

	View of knowledge	*View of social structure*	*View of social practice*	*View of social media*	*View of learning*
Pre-modern (figure of thought: the cycle)	Fixed (God-) given	Fixed, stable	Based in fixed occupations, forms of life; producing known products	Fixed forms of language, forms of work, forms of (sovereign) power	Induction into pre-determined forms, mastery as the repetition of these forms
Modern (figure of thought: the spiral)	Evolving, going 'deeper into' or 'beyond' surface appearances	Evolving, emancipation and progress through enlightenment	Evolving in differentiating forms of life, specialisms, producing new material and symbolic products	Evolving in new (scientific and other) specialist discourses, forms of work, more democratic forms of organisation and uses of power	Existing forms of knowledge as springboards for development; 'going beyond the information given'; discovery and inquiry learning
Late modern (figure of thought: recursion, the fractal)	Reflexively constructed in relation to cultural, social-political and material conditions	Reflexively constructed in relation to individual and group self interests (e.g. class, gender, race); interconnected systems and lifeworld structures in tension	Reflexively structured under conditions of advanced differentiation, producing new material and symbolic products and fashioning new needs and demand for them	Reflexive construction of language (discourses), work and power, each conditioned in relation to the others – especially pre-established patterns of power and group self-interests	Critique of existing knowledge as a basis for constructing new ways of seeing, doing, being; communicative action as a fragile basis for securing collective self-consciousness and organisation
Postmodern (figure of thought: the narrative fragment)	Reflexively constructed in relation to cultural, social-political, material and socio-biological standpoints and identities	Reflexively constructed in relation to individual and group self interests (e.g. class, gender, race) and identity politics; radically diversifying pluralities, locally and globally	Reflexively structured under conditions of cultural and cognitive diversity; producing new material and symbolic products and fashioning new needs and demand for them	Reflexive deconstruction of discourses, work and power, each seen as conditioned in relation to the others – and to be liberated from pre-established patterns of power and group self-interests	Production of fragmentary narratives justified in relation to aesthetic-expressive criteria of identity-groups rather than universal theoretical-scientific or moral-legal criteria

against the universal, and the expressive-aesthetic against the moral-legal and the theoretical-scientific.

Thus, in my view, each of these figures of thought, as an image of learning and learning processes, has a place. One reason to describe these figures, though claiming precedence for none of them, is that the siren calls of many evangelists of the new, globalised, communications and information technologies would have us believe that we have entered an entirely new era of learning – an era in which old expectations, aspirations and hopes for learning must be proclaimed dead, and from whose ashes spring new global expectations, aspirations and hopes for learning, which will produce new kinds of individuals, new societies and new cultures.

As I have already indicated, I believe that these expectations contain, at best, only a half-truth; a more detailed history of the conditions of learning might show that there is a more complex pattern of gains and losses to be accounted for, not only on the side of individual learning and the individual's freedom to learn, but also on the side of the cultural, economic, and social-political structures which feed – and feed off – the content and conditions of learning.

Drawing on the crude typification of perspectives of learning outlined in Table IV, it may be possible to characterise four different orientations to learning:

- a *premodern orientation* based on the notion of *repetition* – the figure of the *cycle*;
- a *modern orientation*, based on notions of *progress, development, expansion and extension* – the figure of the *spiral*;
- a *late modern orientation*, based on notions of *problematisation and critique* – the figure of *recursion*;
- a *postmodern orientation*, based on notions of the *situational-location of narratives* which claim no transcendent justification – the figure of *deconstruction*.

These four orientations co-exist alongside one another in our times, often jostling uneasily with one another in terms of competing ways of understanding the social world, competing ways of representing the social world in our curricula, and in competing expectations about what learners will learn about the nature of the social world. Some of these features are summarised in Table V.

These different kinds of orientations compete in contemporary curricula. From the perspective of the learner, sometimes they are contrasted in clear and explicit ways, and sometimes only implicitly – to the point of confusion. In any case, one cannot conclude that contemporary curricula include only late modern and postmodern orientations. On the contrary, these orientations appear more or less on the margins of contemporary curricula, as supplements to strongly premodern and modern orientations.

Table V: Four orientations to learning

	View of the nature of the social world (culture, society, subjectivity)	Mode of representation of the social world in curricula	Data/talk/text about what learners will learn about the social world
Premodern orientation Key notion: *reproduction* Key figure: *the cycle*	Established patterns to be reproduced without change	Foundationalist, essentialist: the world as a copy (or linguistic encoding) of the world	Enculturation
Key notions: *development, expansion, extension* Key figure: *the spiral*	Can progressively be developed and improved	Together with a scientific attitude to the moral-legal and aesthetic-expressive domains	
Late modern orientation Key notions: *deconstruction, critique* Key figure: *Prometheus*	Socially constructed patterns with unforeseen consequences needing reconstruction through critique	Critical perspectives on (critical distance from) existing patterns of language/discourses, social practices, forms of social organisation	Emancipation
Postmodern orientation Key notions: *fragmentary narratives* Key figure: *Scheherazade*	Diversity of voices in the world in socially located standpoints	Narrative, aesthetic-expressive	Celebration and production of difference

The question therefore arises of how learners orientate *themselves* to these representations of the social world, whether their general response is to be the *subjects of enculturation* to existing forms, *enlightened subjects* with a role to play in developing and improving them, *emancipated agents* of social change, or *celebrators and producers of social diversity*. In different ways, and at different times, of course, teachers and curricula, if not learners themselves, are likely to expect all four of these kinds of responses.

No doubt, particular orientations are built into different curricula, and some orientations are more prevalent than others in different stages and forms of schooling: for example, premodern orientations seem likely to be prevalent in the early years of schooling and perhaps in some fundamentalist forms of church schooling. It may also be the case that different arenas of social life are treated differently in schooling. One wonders, for instance, whether these days the economy is generally treated in curricula in accordance with a rather premodern orientation, as if it were a realm of necessity to which students must adapt themselves, both in terms of their taking their place in the occupational system, and in terms of their self-understandings as producers and consumers. On the other hand, perhaps late modern and postmodern orientations also appear in contemporary references to the economic potential of the new communications and information technologies. Similarly, one wonders whether some new forms of civics education emerging in response to legitimation crises of the state do not also have more than a hint of the premodern about them, as if to reinstate the status of the state over and against the individual.

These general considerations suggest the speculative hypothesis that the variation in these orientations to learning, being differently embodied in different educational programme and settings, will emerge in a wide range of empirical conditions for learning actually experienced by particular learners, in turn producing widely-variant and contested orientations to the social world. It is, of course, a matter for further research. From the perspective of the learner, the learning conditions of late modernity offer a variety of competing orientations to learning and to the social world, frequently in confused and confusing combinations. This variation is unlikely to be simply random, however; it is likely to be systematic, varying not only with geography and nationality, but also with class, gender and other social attributes. This is to assert that the *learning conditions* of late modernity are not reflexively freed, as are the late modernist and postmodernist *perspectives* (as theoretical stances, or points of view), from the social conditions of premodernity and modernity; on the contrary, the curricula and social practices of contemporary schooling – more generally, the learning conditions of late or postmodernity – continue to produce and reproduce social conditions characteristic of premodernity and modernity, alongside late modern and postmodern attitudes to them.

This is part of the late modern or postmodern *condition* – a central feature of which is that each individual is simultaneously a product of the social world (whether as a product of social-historical processes or as the bearer of multiple subjectivities rooted in socially-located standpoints), and an observer who stands at a (critical or ironic) distance from the social world.

In our time, the reflexive distancing of the learner from the social world proceeds apace, given the unprecedented diversity of the contents, forms and processes of schooling encountered or endured by learners. Not surprisingly, when individual learners are pushed beyond their personal thresholds of tolerance for reflexivity, this reflexive distancing invites the gestures of refusal (alienation, withdrawal of motivation, withdrawal of legitimacy) described by Habermas in his discussion of disturbances in the symbolic reproduction of lifeworlds (see Table III above).

This crude attempt to put changes in conditions of learning in a historical context may help as we turn our attention towards the problems and challenges we face in our times. In what follows, I will make a general point about the diversification of learning, then return briefly to the theory of communicative action as a resource with which to understand some of the problems and challenges presented by this new globalised view of knowledge and learning.

Massification of Production and Individualisation of Consumption of Learning Resources and Opportunities

The pluralised, technologised, globalised present does create different kinds of conditions for learning than those of the past. To return to an earlier image, it includes more numerous and more various kinds of niches for

learning than those of former times – both as a consequence and a cause of the steadily advancing differentiation of late modern societies. For example, over recent decades, there has been a marked multiplication of the sites and opportunities for formal, informal and non-formal learning; increasing diversification and specialisation in the content and processes of learning; and increased emphasis on the value and utility of learning throughout the lifespan.

Together with these trends, there has been a corresponding decrease in the degree to which any one site, or content or process of learning can any longer be regarded as canonical, in the way that once the teachings of the church, or the national school or state university, might once have been regarded as canonical – offering the privileged few a privileged view of 'the way things really are'. Learning has become more accessible in modern democratic nation-states, but it has also become more massified and, at the same time, more pluralised (both in terms of 'orderly' differentiation of specialist knowledge and in terms of 'disorderly' local and individual interests[14]). In formal schooling, and in the 'infotainment' industry of mass culture, there has been a massification and centralisation of production of learning resources and opportunities (though centralisation may be limited to the regulation rather than the provision of educational production), together with a diffusion and individualisation of consumption (the utilisation of learning resources and opportunities).

Some count the diversification of learning resources and opportunities as a net gain. Some enthusiasts for the Internet, for example, suggest that we are witnessing a radical democratisation of knowledge, which will shatter existing ways of learning along with existing structures of institutional and social legitimation of knowledge. Given a small computer, a modem and access to the Internet, it appears that all of human knowledge is accessible to anyone, anywhere. Even this small caveat cannot be taken for granted, however, not everyone has been or will be 'given' a small computer, a modem or access to the rapidly evolving and changing Internet. Nor do people have uniform opportunity in time to access, let alone work on, the fruits of their searches and interventions in cyberspace. I do not mean to demean its importance as a new resource for learning; merely to suggest that it is a new medium in which old problems of the unequal social distribution of opportunities arise. This is one sense in which the new information and communication technologies recall old problems of how access to, opportunities for and success in learning is socially-, culturally- and politically-structured.

The new opportunities for learning offered by the new information and communications technologies exhibit the same tendencies towards functional integration of lifeworlds to the economic and political systems as earlier kinds of organised learning (for example, through mass schooling). The integration of Internet access to the economic system is readily apparent – in terms of costs of access, costs of production of material on Internet sites, and the increasing use of the Internet for buying and selling products including entertainment, infotainment and education – all part of what some describe as the

loss of the relative autonomy of the cultural sphere (Jameson, 1991, p. 48) characteristic of postmodernity. The Internet, too, is increasingly showing signs of integration to political-legal systems (despite the radical and revolutionary zeal of those who believe it to be an untameable space), for example, as intellectual property law begins its tentative forays into cyberspace, and as prohibitions against pornography begin to regulate access to, and the content of, web sites.

Leaving aside the specifics of the Internet as an example of the changes in learning conditions created by the new information and communications technologies, there has also been a proliferation of learning resources, opportunities and conditions as learning has been privatised – as has happened in recent years in Australia, for example. In Australia, there has been a proliferation of educational agencies, not limited to schools, which produce and sell education and educational resources, and conduct education and training either or both under tender to government and as private providers. In some areas, these are more or less unregulated (except, perhaps, in terms of more general consumer law), although there is still regulation in the form of accreditation and monitoring of agencies offering courses leading to key educational qualifications (degrees, diplomas or certificates equivalent to those given by high schools as a basis for matriculation to university or higher studies).

The general point is that education, like other activities, is increasingly being functionally integrated to the imperatives of the economy and the occupational system, and to the political-legal and administrative systems, under the influence of the steering media of money and administrative power. Justifications for education and learning are increasingly given in economic-occupational terms, though also in terms of state policies regarding citizenship (for example, in a revival of 'civics education') and, with increasing insistence, national economic policy (for example, education as a commodity, as an export, and as a basis for improving national performance in international trade). Examples of these tendencies were given at the beginning of this article. I would now like to look 'back' towards system and lifeworld from the perspective of the individual; that is, from the perspective of learning conditions in relation to system and lifeworld. From this penultimate point, I will conclude with a few remarks about the possibilities available in late modernity for self-organisation, self-realisation, self-determination, and self-reflection among the individual and collective 'subjects' who have been at the heart of the modernist tradition since the Enlightenment.

System and Lifeworld and the Self-understandings of Learners in Late Modernity

In most parts of the modern world, schooling is inescapable. In a number of places, the number of years of compulsory schooling has increased; in some places, there have also been increases in the age at which school leavers

qualify for work or for social benefits and allowances. Expectations that young people will spend longer at school have brought with them an extension of adolescent dependence and deferred the economic independence, which is the hallmark of achieved adulthood. There has also been an increase in the amount of post-compulsory education undertaken by young people and adults. More people complete post-school studies in colleges and universities. Further studies and continuing professional education are mandatory in an increasing number of fields and occupations. In addition to these extensions of formal schooling, formal (accredited) learning is also increasingly offered in workplace settings.

Educational authorities are increasingly concerned to clarify 'pathways' for study [15], and to facilitate the 'vertical' articulation of courses and qualifications from the school years into post-compulsory education and training, and to assist with 'horizontal' articulation between previously-distinct courses of further and higher education (for example, between vocational education and training offered by technical colleges and higher education in universities). National (and international) education systems expand to encompass a diverse range of state and private provision of education and training.

It is a commonplace to note that this elaboration of the 'pathways' of formal schooling is principally justified on economic grounds – both in terms of increased mobility (and earning power) of learners and in terms of the requirements of economies for more skilled labour (and labour with more specialised and advanced skills) – notwithstanding high levels of unemployment and under-employment. Access to qualifications becomes more critical in the formation, classification and selection of (potential) employees across wide tracts of the occupational system.

The content of formal education and training are adapted to the specialised needs of enterprises and occupations (though debates continue – perhaps less energetically than in former times – about the appropriate balance between general education and specialised education adapted to specific niches in the occupational system and the economy). Similarly, processes of education and training are increasingly adapted to the diverse needs and circumstances of learners, encompassing increased access to part-time study, various forms of distance education, and education and training in the workplace.

Seen from the perspective of the learner, these developments make learning more accessible, and often more relevant to current needs and interests. On the other hand, they may also be experienced as a kind of colonisation, even domestication.

Much of the time in schooling, learning is experienced by learners in functional terms. On the one side, there is the functionality of being able to achieve success in one's own terms (for example, developing a skill, or achieving social mobility through changed occupational horizons). This is characteristic of the functional reason of systems described by Habermas in

terms of purposive-rational action, that is, oriented towards success or outcomes. On the other side, there is the functionality of achieving educational outcomes in terms of the educational objectives of particular courses – purposive-rational action within the schooling system, defined measured and monitored by the system. This latter sense of functionality exerts a powerful 'domesticating' effect, as has been noted in many histories [16] and critiques of schooling (including discussions of 'the hidden curriculum', discussions of the cultural and cognitive effects of examinations [17], and discussions of the significance of schooling in the reproduction of workers capable of participating in alienated labour). For example, in this context, one might recall the critique of schooling offered by Herbert Gintis 25 years ago:

> Mass public education has not evolved in its present bureaucratic, hierarchical, and authoritarian form because of the organisational prerequisites of imparting cognitive skills. Such skills may in fact be more efficiently developed in democratic, non-repressive atmospheres. Rather, the social relations of education produce and reinforce those values, attitudes and affective capacities which allow individuals to move smoothly into an alienated and class-stratified society. That is, schooling reproduces the social relations of the larger society from generation to generation. (pp. 56–57)

Furthermore:

> How affective traits that are rewarded in schools come to correspond to the needs of alienated production is revealed by direct inspection of the social relations of the classroom. First, students are rewarded in terms of grades for exhibiting the personality characteristics of good workers in bureaucratic work roles – proper subordinacy in relation to authority and the primacy of cognitive as opposed to affective and creative modes of social response – above and beyond any actual effect they may have on cognitive achievement. Second, the hierarchical structure of schooling itself mirrors the social relations of industrial production; students cede control over their learning activities to teachers in the classroom. Just as workers are alienated from both the *process* and the *product* of their work activities, and must be motivated by the external reward of pay and hierarchical status, so the student learns to operate effectively through the external reward of grades and promotion, effectively alienated from the process of education (learning) and its product (knowledge). Just as the work process is stratified, and workers on different levels in the hierarchy of authority and status are required to display substantively distinct patterns of values, aspirations, personality traits, and modes of 'social presentation' (dress, manner of speech, personal identification; and loyalties to a particular social stratum), so the school system stratifies, tracks, and structures social interaction according to criteria of social class and relative scholastic success. The most effectively indoctrinated students are the most valuable to the economic enterprise or state bureaucracy, and also the most successfully integrated into a particular stratum within the hierarchical educational process. (pp. 59–61)

Gintis's critique may stand in need of revision in the light of changes in the nature and conditions of production in the last two decades, but it still – eloquently – makes the point that, from the perspective of the learner, there is an almost irresistible pressure towards an understanding of learning, and a self-understanding of oneself as a learner, in terms of functional reason. Thirty years ago, researchers explored this issue in terms of the *extrinsic* goals, motivations and rewards for learning understood as *performance*, to be contrasted with the *intrinsic* goals, motivations and rewards said to be characteristic of *understanding* – and, indeed, of education itself. Using Habermas's theory of system and lifeworld, we might now recast this distinction.

The distinction between extrinsic and intrinsic goals and motivations for learning opposes the system and the individual in a way similar to the theories of social action criticised by Habermas (as casting systems as 'forces of nature' and the individual as 'victim'). Instead, we may look at the question more 'stereoscopically' as a contrast between one mode of being in which the learner is engaged in social practices of functional reasoning conditioned by the dynamics of systems, while also (and sometimes contradictorily) being engaged in the social practices of communicative reasoning characteristic of the lifeworld setting in which the learning takes place (for example, the classroom, or the workplace).

On this analysis, learners experience tensions between different ways of understanding the setting (especially the school setting), and different ways of understanding themselves within it. These are summarised in Table VI.

Table VI Views of the learning setting, and of oneself as a learner, characteristic of system and lifeworld

	View of the social setting	View of myself as a learner
System perspective	Schooling as (a) a setting for achieving success in terms of individual goals, and (b) a setting in which the individual is linked to the goals and practices of the schooling system as part of the broader processes of reproduction of economic and political-legal systems (labour and the occupational system, citizenship and the administrative system)	Learners as (a) oriented towards success and achievement, and (b) as components (or component subsystems) of the schooling system ('not another brick in the wall', in the Pink Floyd song put it)
Lifeworld perspective	Schooling as (a) a setting for developing interactive capabilities (personal identity), and (b) a setting for symbolic reproduction of lifeworlds via personal participation in cultural reproduction (developing interpretive schemes fit for (current) valid knowledge) and social integration (developing legitimately ordered interpersonal relations)	Learners as (a) oriented towards mutual understanding and consensus, and (b) ends-in-themselves, persons able to give or deny authentic assent to validity claims

The apparently-overriding imperatives of schooling as system do seem to cast the learner as an object for reproduction of the economic and political-legal systems – the experience Anthony Giddens (1991, p. 28) aptly describes in the phrase 'riding the Juggernaut of modernity'. To accept this stark vision, however, is to lean towards the view of the system as a 'force of nature' and the learner as 'victim', and to overlook the integrative capacity of the lifeworld and the agency of the learner as a person who can give and withhold assent in communicative action (although this agency might sometimes be expressed in ultimate gestures of refusal, withdrawal of motivation and withdrawal of legitimation).

Cultural reproduction, social integration and socialisation are (one might say) the renewable 'natural resources' of sociality, always available to participants in every lifeworld, and *especially in educational settings*, despite the colonising effects of economic and administrative reproduction.

The more schooling is pressed to 'perform' in terms of economic and administrative goals, and the more learners are pressed to perform in terms of system-determined objectives and processes – that is, the more system functioning is harnessed to the steering media of money and administrative power – the more difficult it becomes for teachers and learners to find the time and resources necessary to 'interrupt' the functional rationality of schooling in order to engage in communicative action oriented towards mutual understanding and consensus. As Habermas remarks in relation to the juridification of education, this is to put education under the imperatives of a principle of sociation contrary to its own requirements. Though this tendency is real and has its dangers, we should not fail to notice that teachers and students continue to find and to *make* a place for communicative action, not only in supporting individuals in the task of developing their own understandings, but also through communicative relationships in which students and teachers engage to strive for mutual understanding and consensus with one another.

It would be a mistake to romanticise the insight that communicative action is alive and well in schools and classrooms today, as if this were a sufficient weapon to save education from the barbarians. Everywhere, the content of communicative action is increasingly saturated with the substantive content of systems functionality (the language of purposive rational goals, orientation to outcomes and success, etc.). Everywhere, the processes of education are increasingly conducted under conditions in which systems criteria (efficiency in achieving performance targets, for example) are more intrusive. These are real dangers, and it is a practical matter of some urgency for teachers and students to decide how the threat or potential threat might best be addressed.

Clearly, a pedagogical response to this threat requires the maintenance of forms of teaching and learning which make time and space for communicative action. Among these are strategies and approaches which embody the modern, late modern and postmodern orientations to learning described

earlier – approaches aiming at enlightenment, critique, and play with the narratives of difference. (Not, of course, should one exclude the continuing requirement for the premodern orientation to mastery.) The point is that these different orientations must occur in some blended relationship with one another, probably in different proportions at different levels of education. To the extent that a curriculum becomes entirely driven by the premodern orientation to mastery and performance, it is likely to be communicatively arid, and open to the charge of being 'mere' training or indoctrination. The new communications and information technologies are sometimes criticised on these grounds, but it is also clear they offer unprecedented opportunities for exploration, and even for critique and play with the narratives of difference.

What seems to me to be at stake here is an abiding concern about the extent to which schooling is 'converted over' to the colonising imperatives of economic and administrative systems in the social construction of educational settings themselves – the degree to which collectivities of learners at the local level have the capacity for individual and collective *self-determination* and *self-realisation* in the lifeworld settings of schooling and society, to create space for *their own* communicative action, oriented towards *their own* mutual understanding and consensus. It is an enduring question of the politics of schooling and the politics of curriculum, which can still aptly be sloganised in the phrases 'schooling (or curriculum) for what?' and 'schooling (or curriculum) for whom?' As an opening gambit in the long task of raising and answering such questions, I will return to the question of individual and collective capacities for self reflection and self-organisation in late modernity.

What Remains of Enlightenment?

The elaboration of economic and political-legal systems in late modernity has been accompanied by the simultaneous elaboration and integration of schooling, both as part of the general advanced differentiation characteristic of late modern society and as a system-integrative tendency – functional integration of lifeworlds (including the lifeworld settings of schooling) to these broader systems. This has been accompanied by diversification in the settings, contents and processes of learning, and by a massification of the production of resources and settings for learning, together with diffusion and individualisation of the 'consumption' of learning. In this, learners are increasingly cast as 'external to', 'objects of' and 'subject to' systems of schooling, pushed into understanding themselves as at a critical or ironic distance from these systems (and the other systems with which schooling is functionally integrated).

Contemporary learning conditions encompass competing and sometimes contradictory social orientations to learning characteristic of premodernity, modernity, and late or postmodernity. These include (respectively) orientations

to mastery (on the model of enculturation), development and extension of knowledge and the learner (on the model of enlightenment), and critical reflection and critique (on the model of emancipation) and the production of fragmentary narratives (on the model of production and celebration of difference).

There is a strong tendency today, evident in popular culture and experience, to see the social world from the perspective of the single individual – atomistic individualism. On the one hand, I have attempted to show that much of contemporary experience in schooling, as elsewhere, encourages people – learners and teachers among them – to see themselves in these terms: as the biological 'self' to which society and system are 'other'. On the other hand, I have also sought to show that this self-understanding is illusory: selves are always constructed socially, and single individuals experiencing schooling always 'read off' their identity in terms of socially and historically constructed language and discourses, social practices of interaction and social settings. The theory of system and lifeworld articulates ways in which the individual experiences the tensions and interconnections between these two aspects of social life.

Throughout this article, I have attempted to resist the tendency to yield to a subjective perspective [18] (to which much psychological theorising is prone) in which the individual appears as an isolated monad, a lone eye apprehending and making sense of the world as a private and personal activity of cognition. In this, I have attempted to remain faithful to George Herbert Mead's dictum that there can be no individuation without socialisation and no socialisation without individuation.

In a complex argument occupying much of Lecture XII 'The Normative Content of Modernity' in *The Philosophical Discourse of Modernity*, Habermas outlines some of the achievements of the theory of communicative action in dealing with problems which seem insuperable when the we jettison philosophy of the subject. In particular, he considers ways in which key issues of modernity must now be recast. If the individual subject has disappeared, he argues, so also has *the ideal of a society or the state capable of acting as a self-regulating macrosubject* [19] – and along with this goes the idea of revolutionary praxis aimed at overcoming the internal divisions of a society divided against itself (for example, along class lines). Society cannot be construed as a totality (perhaps in the idea of the state); it is not a concrete unity, but instead a fragile network of lifeworlds – an indefinite set of highly differentiated and localised lifeworlds loosely connected through the intersubjective understanding of participants. The Enlightenment hope that self-reflection and critique could provide a basis for self-determination for individuals, and that a corresponding collective self-reflection on the part of social totalities could provide the basis for collective (perhaps revolutionary) self-regulation (a self-steering society or state) has turned out to be yet another illusion of the philosophy of the subject. If the totalised view of

enlightenment and emancipation grounded in the image of society as a self-regulating whole (for example, as realised in the modern state) has collapsed, what can the theory of communicative action offer by way of advice or amelioration? There is a suspicion, he says, that the theory offers only idealised abstractions (p. 49). Later, referring to the possibility of addressing crises at the boundaries between system and lifeworld, he writes:

> With this question we touch upon the other moment – the possibility of mastering crises in grand format, for which praxis philosophy once offered the means of revolutionary praxis. If society as a whole is no longer thought of as a higher-level subject that knows itself, determines itself, and realises itself, there are no paths of relation-to-self upon which the revolutionaries could enter in order to work with, for, and on the crippled macrosubject. Without a self-relating macrosubject, anything like a self-reflective knowledge on the part of the social totality is just as *inconceivable* as society's having an influence upon itself. As soon as the higher-level intersubjectivity of public processes of opinion and consensus formation takes the place of the higher level subject of society as a whole, relationships-to-self of this kind lose their meaning. It is questionable whether under these changed premises it still makes an sense to speak of a 'society exercising influence upon itself'. (p. 357)

The modern state emerged on the promise of a social totality "able to exercise influence upon itself in just this way", but, as Habermas shows, it has turned out to be a species of subsystem (the political-legal subsystem), rather than a macrosubject capable of self-reflection and self-steering. The modern welfare state has not proved capable of arbitrating between the requirements of the economic system, on the one hand, and the life circumstances of dependent workers and citizens on the other. The state has not achieved self-reflection, self-regulation and self-steering as a unitary political sphere. In Habermas's view, it is illusory any longer to hope that the political-legal system could operate in this way, despite the traditions in democratic theory that seem to promise that such a state might be possible.

The theory of communicative action does offer a way of recasting this problem – something more than 'an idealised abstraction'. Just as the image of truth apprehended by the individual as a cognitive subject, promised by the philosophy of the subject, has been swept away in favour of intersubjective understanding through communicative action, so too, Habermas argues, the image of self-regulation available through the societal macrosubject (the state) can be swept away in favour of a notion of a loose, open public sphere in which collective self-reflection and self-organisation takes place around particular local or general themes and crises, for example, through the medium of grassroots movements [20], whose discursive will-formation occurs through debate in various kinds of forums (the media, newsletters, etc.) on a basis not unlike the public meeting. Such media – and not the parliamentary and bureaucratic machinery of the state – provide

concrete forms in which collective self-reflection and communicative action aimed at mutual understanding and consensus (and political action) emerge, though always at the risk of functional integration to the economic system (as part of the media industry, for example) or the political-legal system (as political parties, organisations dependent on achieving success, etc.).

These remarks may seem to be at some distance from the kinds of considerations of previous sections of this article in which the nature of modernity and learning conditions in late modernity were in the foreground. I have made this diversion in order to return to the question of 'enlightenment' as the key orientation to learning of modernity – an orientation still central in late or postmodernity (though frequently accompanied by 'empowerment' as an ideal in late modern times). Habermas's remarks about the end of the philosophy of the subject make it clear that one can no longer speak of individual enlightenment in anything other than a metaphorical sense. Equally, it only makes sense to speak of the social project of the Enlightenment in the same metaphorical sense: the modern welfare state has not engendered the self-reflective self-steering macrosubject envisaged by traditional democratic theory.

What remains of 'enlightenment' then, is only the self-reflection of people committed to achieving mutual understanding and consensus, at the level of the group or collectivity, and the possibility of loose, open and often transitory public spheres (for example, in grassroots movements or, I would add, in groups collaborating in participatory action research projects aimed at exploring crises at the boundaries of system and lifeworld).

To jettison the older models of individual and collective enlightenment, and to be obliged to recast them in the terms offered by the theory of communicative action may prove fruitful as we think about schooling. On the one hand, it means we must give up some of the discourses and practices of education which valorised individual enlightenment and the *progressive* ideal of education for democracy (predicated upon the notion of the societal macro-subject in which citizens, through the machinery of the state could achieve collective self-reflection, self-determination and self-realisation). On the other hand, it suggests that we may also have to learn to do without some of the *radical* possibilities promised by critical pedagogy (with its notions of 'empowerment' based on praxis philosophy), which are similarly predicated on ideals of the self-reflective, self-determining and self-realising individual, and an even more radically self-reflective, self-determining and self-realising societal macrosubject. Instead, we are left with groups of individuals striving for mutual understanding and consensus, and a public sphere of practical debate in which local communicative action spills across the boundaries of highly differentiated lifeworlds in activities aimed at achieving mutual understanding and consensus on wider fronts, often in relation to crises at the boundaries of system and lifeworld which different participants may experience in roughly similar ways (as widely dispersed

groups experience common consequences of expanding, colonising and globalised systems, which have become relatively autonomous under the steering media of money and administrative power).

Schooling, in formal, informal and non-formal settings, still occupies a special place in relation to these matters. Despite pressures towards functional integration to the economic and political legal systems, schooling is still an 'enchanted' space, in the sense that it is a space where authentic learning and knowledge are still highly valued. The school should be, one would think, a place *par excellence* for communicative action aimed at mutual understanding and consensus. It is a place where the arts of communicative action can be – and are – learned, exercised and developed.

The school is an enchanted space for communicative action in a second sense: it is also a face-to-face setting in which boundary crises of system and lifeworld arise, and in which boundary crises of system and lifeworld in communities, and in society at large, are identified and studied.

Against the grain of functional integration to the economy and the state, schooling creates forums for learning, exercising and developing the skills appropriate for participation in the kinds of "autonomous public spheres" envisaged by Habermas in *The Philosophical Discourse of Modernity*:

> . . . neither bred nor kept by a political system for purposes of legitimation. Centres of concentrated communication that arise spontaneously out of microdomains of everyday practice can develop into autonomous public spheres and consolidate as higher-level subjectivities only to the degree that the lifeworld potential for self-organisation and for the self-organised use of the means of communication are utilised. Forms of self-organisation strengthen the collective capacity for action . . . (Habermas, 1987b, p. 364)

Perhaps this provides a new image to sustain advocacies for critical pedagogy and socially-critical schooling. If so, it may turn out that the renewable 'natural resources' of the lifeworld and its symbolic reproduction processes (cultural reproduction, social integration and socialisation) grounded in communicative action aimed at mutual understanding and consensus, will prove also to provide a description of the most indispensable learning conditions of late modernity. We would do well to examine the nature of contemporary schooling to see where and how these processes and practices currently arise, how they are nurtured and sustained, how current practices of schooling threaten to defer, displace or distort them, and how they might be secured in the name of intersubjective and collective development.

Notes

1. This article is based on a paper prepared for the Sixth International conference on Experiential Learning, 2–5 July 1998, University of Tampere, Tampere, Finland.

[2] 'Schooling' is used here to refer not only to what goes on in schools in the compulsory years of education, but also to institutionalised post-compulsory education and training throughout the lifespan.

[3] Some readers may find it helpful to use the distinction between *social integration* and *system integration* as a stepping stone towards the distinction between system and lifeworld (see, for example, Giddens, 1979, pp. 76–85). Social integration is the integration of individuals in generally face-to-face relationships in groups, in which each forms personal affiliations and a sense of solidarity with other unique individuals who are members of the group, develops shared intersubjective understandings, and establishes a personal identity as a unique member of the group. Systems integration, by contrast, is the integration of an individual into a social system in terms of relationships based on roles and functions, involving reciprocity between people not as unique individuals, but as incumbents of roles (that is, as members of a class defined by a role). The processes of social integration and system integration generally occur hand-in-hand when people enter a new (system-defined) workplace or institution (for example, a school), so that, on the one hand, they form friendships in the workplace with a sense of affiliation and solidarity with other unique individuals there, and, on the other, they begin to function according to the roles (for example, teacher or student) which define the social system of the workplace or institution.

[4] System and lifeworld are not seperate realms of social existence in which the expansion of the one (system) threatens to obliterate the other (lifeworld), so that we are in danger of becoming social automatons whose lives are merely realisations of the functional requirements of systems. The Habermasian theses of the uncoupling of system and lifeworld, and the colonisation of the lifeworld by systems perspectives and values, are based on no such bifurcation. On the contrary, system and lifeworld aspects of sociality continue to coexist in interconnection, creating mutual, constitutive conditions for one another, though admittedly with some rather one-sided (functionally-integrative) effects as we live through the consequences of late modernity. System and lifeworld need to be understood as dialectically-related aspects of social formation in late modernity, not as two separate entities at odds with one another.

[5] For convenience, I refer throughout this article to 'systems' when, more properly I should refer to 'sub-systems', whether at the general level (for example, economic sub-systems and political-legal sub-systems) or at the more particular level (for example, when referring to enterprises as sub-systems within the broader economic sub-system, or to individual institutions like schools or courts as sub-systems within broader politico-legal sub-systems). As Habermas and his adversaries in systems theory (notably Niklas Luhmann) point out, it is not possible to point to whole 'systems', there are only interacting sub-systems, even 'up' to the level of the global economy or global politics, and 'down' to the level of individual people (who are treated in systems theory as sub-systems, as if they could be so described without losing the philosophical status that has traditionally attached to the category of persons). And it should be pointed out that all of these systems (or sub-systems) are open systems.

[6] See Stephen Toulmin's (1990) *Cosmopolis* for a discussion of various views of when 'modernity' began – and whether it has yet ended. Toulmin's preference is to date modernity from the publication of Descartes's *Discourse on Method* (1627).

[7] See for example, Habermas, 1987b, pp. 353–355, 368–385.

[8] For example, reactions in the market and in industrial relations in the economic sphere, and reactions among disgruntled constituents and dissatisfied clients of bureaucracies in the political-legal sphere.

9] This may also involve a paradox, however, since sensitising systems to such effects may also bring them into the sphere of system self-regulation. In studying the Australian Transition Education Program in 1981-1983, for example, I concluded that when 'grassroots' learnings of teachers and schools became available to programme policy-makers, the policy makers frequently developed new policies which had the effect of stifling, if not precluding, further grassroots action and learning (see Kemmis et al, 1983b, pp. 10–11).

10] It should not be thought that a critical perspective offers a transcendent standpoint from which 'progress' is still visible through clouds of uncertainty, despite setbacks encountered by the Enlightenment project as it has confronted its own contradictory consequences. 'Critical theory' offers no panacea. To the extent that it is distinctive, it is as an evolving tradition of social analysis which continues to explore themes concerning the relationship between social and material conditions, and the extent to which people may be able to emancipate themselves from injustices of domination and oppression currently encoded, DNA-like, in social structures and practices. Such power as critical theory or critical social science is able to muster is to be found in arresting insights which sometimes disturb the smooth unfolding of apparently inexorable ideologies, including the ideology of progress, sometimes finding voice and purpose in a politics of resistance, which galvanises shared refusal of taken for-granted ways of doing and being. It offers no positive alternative ideology or programme, only the insistent reminder that people have constructed their social world, and that, through collective action, they may yet be able to construct it differently.

11] See Giddens (1991) *Modernity and Self Identity* for an account of modernity in these terms.

12] The transition between the premodern and the modern is at the heart of Umberto Eco's (1984) novel *The Name of the Rose*, in which the librarian, Brother Jorge of Burgos, poisons those who seek to interpret (to go beyond?) the Scriptures and thus, in his view, to efface the word of God. In Jorge's view, the proper attitude is simply to apprehend it through incantation (repetition). By contrast, the monk-detective Brother William of Baskerville (is it Francis Bacon?), speaks for the emerging empirical science, arguing that to go beyond appearances is to attain a deeper appreciation of (the laws governing) the universe as God's creation.

13] Including my own advocacy of the socially-critical school, see Kemmis et al (1983a).

14] In both senses of the term: 'interests', that is, in terms of what people find it interesting to learn and in terms of their self-interests.

15] David Hamilton, responding to an earlier version of this article, points out that there may be an association between 'pathways' and the modern curriculum idea (for example, in US railroad notions of 'tracking'). He also notes the gendered conceptualisation and construction of such 'pathways'.

16] See, for example, David Hamilton's (1989) *Towards a Theory of Schooling*, especially Chapter 4, 'Adam Smith and the Moral Economy of the Classroom System'.

17] For example, Michel Foucault's account of the examination in *Discipline and Punish*, pp. 184–192. His principal claims are that (1) "The examination transformed the economy of visibility into the exercise of power", (2) "The examination also introduces individuality into the field of documentation", and (3) "The examination, surrounded by all its documentary techniques, makes each individual a 'case'".

18] In the sense of the philosophy of the subject criticised by Habermas.

19] Habermas takes the argument about the illusion of the self-regulating, self-transforming social macro-subject much further in his (1996) *Between Facts and Norms*, especially in Chapter 8, 'Civil Society and the Political Public Sphere'. He constructs an alternative view of the public sphere as grounded in self-constituting communicative networks. The notion of constitutive space developed in Between

Facts and Norms is powerfully suggestive of new ways to think about education in the context of late modern schooling.

[20] The social pathologies of late modernity cannot adequately be understood, let alone resolved, from the one-sided perspective of the local as against the global, or of 'grassroots' movements as against the functional imperatives of the state or of transnational enterprises – and even less by the far Right advocacy for or on behalf of 'the individual', which it regards as having been betrayed by nation-states and transnational capital. Like system and lifeworld, local and global, grassroots movements and the state, the individual and the social also need to be understood in terms of their dialectical relationships of mutual constitution, and should not be treated as reified entities, each threatening the other with obliteration.

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Human Agency and the Curriculum

Hanan A. Alexander

Introduction

Philosophers since Plato have held that education in the fullest sense entails initiation into communities in pursuit of worthwhile knowledge (Plato, 1987). This means, as Richard Peters (1965) put it, that education involves two conditions, one concerning knowledge and the other desirability. Regardless of how one conceives the nature of knowledge however addressing the question of what is *worth* knowing requires a conception of what it means for something to be worthwhile (Spencer, 1945; Bode, 1927). Such a conception is found in the response to Socrates' question, 'How should one live?', which requires a stance concerning what it means to live a good life (Murdoch, 1970; Williams, 1985). Yet, recent curriculum thought has tended to deny or undermine one or another aspect of the key assumption upon which a meaningful account of desirability depends – that people are the agents of their own beliefs, desires and actions. This renders a significant encounter between the curriculum and substantive ethics highly problematic.[1]

In this article I examine how four seminal curriculum theories relate to human agency, those of Tyler, Schwab, Eisner and the critical pedagogues. Although they do not exhaust the rich variety of alternatives within the curriculum field, these theories provide a glimpse of how curriculum studies at large has grappled with Socrates' question. They have exerted considerable influence on major traditions of curriculum thought, are illustrative

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of the prevailing assumptions among a number of leading orientations and address a breadth of behavioral, cognitive, emotional and political aspects of human experience with which the curriculum ought to be concerned.[2] Before turning to these curriculum orientations, however, I should say more about the connection between ethics, human agency and the curriculum.

Ethics and Human Agency

Crucial to any ethical stance is the assumption that human beings possess agency. This means that they have the freedom within reasonable limits to choose their beliefs, desires and actions, the intelligence to distinguish between better and worse according to some conception of these notions, and the capacity to make mistakes in what they believe, feel and do.[3] Elsewhere I have called these the conditions of moral or ethical discourse: freedom, moral intelligence, and fallibility (Alexander 2001: 44–8).[4] It is pointless for people to consider what sort of life they should live if their beliefs and behaviors are determined by history or society or chemistry or the gods, if they cannot understand the difference between worthwhile or worthless according to some account of these terms, or if they are destined to be either good or bad by providence or their very nature. To deny agency is to rob life of meaning and purpose; it is to view human existence as amoral, governed by arbitrary and mechanical natural forces, by fates beyond human comprehension, or by nothing at all (Alexander, 2004b; Frankena, 1973: 72–6).

These conditions can be clarified by reference to three concepts that emerge in the thought of Charles Taylor (1964), self-determination, self-expression and strong evaluation. Free will is related to self-determination. Taylor followed Kant in believing that personal autonomy is a 'transcendental condition' of ethics, an assumption we must make for any conception of normative discourse to make sense. Ethics is concerned with persuading a person to discipline her will to act or arrange her life in a certain way. If it is not in fact within a person's sphere of influence to direct her will, because it is controlled by some other agent such as society or history or chemistry or the gods, if she is not in this sense autonomous, then it is futile to endeavor to persuade her to desire this rather than that or to behave in this way rather than that, since she is not the agent in charge of her desires or behavior.

Moral intelligence is connected to what Taylor calls self-expression. He follows Hegel in recognizing that for a person to be able to exercise autonomy she must be able to ground her choices in some sort of reasoning or understanding; otherwise her choices would not actually be hers, but rather a product of caprice. This requires 'horizons of significance' or 'transcendental ideals' embedded in moral traditions sufficiently 'thick' to sustain meaningful moral choice, not mere reflections of arbitrary taste, personal whim

.r momentary feeling, to which competing conceptions of the good give expression, even if we cannot agree on their content (Taylor 1991; Walzer, 1994: xi; Alexander, 2001: 145–50; Smith, 2002: 65–66).[5]

For self expression to be meaningful, moreover, we must suppose that people have the capacity to engage in a particular kind of self-evaluation. This is connected to what I have called fallibility, or the capacity to err. Unlike animals that possess only first order desires concerning such needs as food, procreation and survival, humans also possess second order desires – desires about desires – in which they evaluate their primary preferences (Frankfurt, 1971). It is useful to distinguish between two sorts of second order desires. I can choose, in the first instance, between two flavors of ice cream, say. Taylor calls this 'weak evaluation', because the decisive factor in choosing the flavor over another is how I feel at that moment. Today I feel like vanilla, but tomorrow, I might prefer chocolate. I can also choose, however, between risking my life to save a friend in battle or running away to save myself. The crucial factor in this instance is not how I feel at a given moment, but how I assess the worth of a particular feeling. I might consider the desire to save a friend courageous or generous, for example, and the motivation to run cowardly or selfish. Or, I might think it foolish to risk my life for another and eminently sensible to look out for myself first. It is this sort of assessment, which Taylor calls 'strong evaluation', that we must express in making autonomous ethical decisions if they are be meaningful in other than a weak sense. Humans require strong values upon which to base ethical judgments, but they do not always live up to those values. However, they are capable of recognizing when they do not through a process of self-examination that includes strong evaluation of their own desires and behaviors (Taylor, 1985: 15–44).

Whatever else it presupposes, then, to the extent that it is concerned with worthwhile knowledge curriculum thought must assume that teachers and students possess agency, that they are capable of self-determination, self-expression and strong evaluation. In what follows I argue that Tyler runs afoul of self-determination, Schwab of self-expression, Eisner of strong evaluation and critical pedagogy of all three.[6] This has led me to the conclusion that the role of ethics in curriculum discourse needs to be reconsidered. In the final section of this article I make some preliminary suggestions as to what this might entail.

The Tyler Rationale

Ralph Tyler (1949) is often associated with the technological movement in curriculum thought. He responded to the so-called 'scientific curriculum making' of Franklin Bobbitt and W.W. Charters, according to which the curriculum should prepare students for adult life (Bobbitt, 1924). The tasks to

be mastered to that end are to be determined by means of a statistical survey of daily adult behaviors (Charters, 1923). Unfortunately, this assumes that current adult behaviors are those that ought to be taught to children, which as Boyde Bode pointed out, is not always the case (Bode, 1927). Additionally, it assumes that we can conclude from the way things are how they ought to be, and as David Hume (1953) long ago pointed out, this is logically problematic. This problem is commonly associated with what G.E. Moore (1993) called the 'naturalistic fallacy', although Moore's formulation differed in significant ways from Hume's (Moore 1993).[7]

Tyler addressed this among other concerns by suggesting that three sources be consulted to determine curriculum objectives, the learners themselves, the social environment and the subject matter. By comparing an assessment of what students know in a given field to what the society and subject matter require them to learn, we can establish the proper objectives in each discipline. Since there are likely to be many more objectives than can be attained, the results of this process should be sifted through two screens, the philosophy of the school and the psychology of learning. The first establishes the normative priorities of the school and the latter the appropriate developmental stages at which each priority should be addressed.

To establish the objectives of a language or mathematics curriculum, for instance, we should first assess what the students already know and compare this to what the social environment and subject matter require. French or American schools will demand different levels of language proficiency at home than they do abroad, and a math program in a science magnet will have different expectations from that of an arts centered school. Wherever the environment, the subject matter will require much more than can be accomplished in any given academic year. So the school philosophy should be consulted to establish priorities and educational psychology to determine developmental appropriateness. The school philosophy can help to allocate resources such as instructional time, money for textbooks, language laboratories and other instructional aids. Educational psychology will assist in deciding what students of a given age can be expected to achieve.

Once the objectives have been determined, Tyler then asked the curriculum planner to consider the experiences that might ensure that they are achieved, the ways in which those experiences should be organized, and how they ought to be evaluated. Tyler was among the first curriculum theorists to conceive the curriculum process in terms of student learning and social conditions rather than subject matter alone. He held that objectives should be stated in terms of measurable student outcomes, that a variety of experiences in addition to frontal instruction can assist students in achieving those objectives, that student interest is an important guide in choosing among the available experiential alternatives, that experiences should be organized to emphasize conceptual connection among disciplines, and that the curriculum planning process is not complete until student achievement

has been assessed. Despite these contributions, however, he did not succeed in overcoming the normative difficulties that plagued his predecessors.

In a well-known critique, curriculum historian Hebert Kliebard (1975) pointed out that to assess students' knowledge or the demands of any given subject matter we must first know what subjects are to be taught. However, this is the whole point of curriculum development, to determine what those subjects ought to be. In other words, according to Kliebard's critique, to determine what subjects should be taught we must already know what they are. The sources of objectives may help to refine the desired behaviors the curriculum should seek to attain, but at the end of the day the real work of curriculum development comes down to the normative philosophy of the school, which is predetermined by the adult society. Yet, Tyler offers no guidance as to how to evaluate competing claims among normative philosophies of education. Similar to his predecessors Bobbitt and Charters, he uncritically assumes that the way things are is the way they ought to be.

However, Tyler's difficulties with the normative side of the curriculum run deeper than this. Kliebard also questioned the morality of manipulating educational environments to achieve predetermined behavioral objectives.[3] Does not the very idea of stating curriculum aims in terms of predetermined measurable objectives presume that the outcomes of learning can be controlled by the educational experiences in which the learner is required to participate? Where is the will, or desire, or interest of students in this scheme? To be sure, Tyler calls upon the curriculum planner to measure the interests of students in assessing the needs of the learners, and even asks that student interest be taken into account when planners select educational experiences for learners. Yet in the final analysis, the interests of society – expressed in the philosophical screen and translated into experiences designed to ensure outcomes – will always trump student desires. It would appear that interest is to be consulted in Tyler's curriculum primarily for the purpose of packaging predetermined social objectives to make them appealing to students, rather than to actively engage their genuine aspirations and concerns.

Tyler might respond, of course, that aspirations are socially determined, and that one purpose of the curriculum is to shape student desires according to social needs, or at least to provide a basis upon which autonomous decisions might later be founded. Communities of all sorts – political, cultural, religious, linguistic or ethnic – have legitimate interests in inculcating their particular concerns in their children (see Counts, 1978). But this response misses the key point: Kliebard questioned not only the adequacy of Tyler's approach to competing social needs and rival educational philosophies, but also the morality of his assumption that learning should be defined primarily in terms of experiences designed to produce predetermined outcomes. Tyler did not consider whether students might at any time embrace those outcomes, either when they are asked to achieve them, or later on when, according to some views, people are better prepared by virtue of accumulated learning or

maturity to make such assessments. Nor did he suggest that the task of the curriculum is to form student desires by persuading them to appreciate or encouraging them to choose certain ends over others. Rather, the only way for students to embrace desired outcomes according to the Tyler rationale would be through experiences that are prearranged to produce those outcomes whether or not a student might at some point be so convinced or inclined. Yet, the very idea that social or any other sort of interests are *morally* legitimate only makes sense when we recognize that people, including students, are agents endowed with the capacity for self-determination. We flatten the ethical significance of social or other concerns, therefore, to the extent that we ignore, suppress or subvert this essential human capacity.

A second defense of Tyler's position might claim that this critique conflates two different sorts of actions or policies: (1) those that undermine the autonomous actions of particular people under certain circumstances, thus impeding their capacity for moral judgment; and (2) those that implicitly deny a presupposition of moral agency, such as autonomy, even though the people subject to those policies might nevertheless remain moral agents. Kliebard's critique pertains to the first sort of actions or policies, it might be argued, whereas the thesis of this article, that contemporary curriculum theory is conceptually ill-equipped to assess the worth of the learning that it prescribes, relates to the second. However, this distinction does not appear to withstand criticism. A curriculum theory prescribes policies concerning what to teach children in school and how to teach it to them. To say that an approach to curriculum implicitly denies this or that supposition of agency (or anything else for that matter), can mean nothing other than that it directs school personnel to relate to students in particular ways. To conceive of curriculum in ways that undermine the autonomy of this or that student, therefore, is just what it means to deny, implicitly or otherwise, that self-determination is a condition of moral agency necessary to make sense of judgments about the value of the learning a curriculum prescribes.

By attempting to sideline the will of students, Tyler undermines a key assumption of human agency necessary for normative discourse to have meaning. There is a deep tension within a curriculum that offers an account of what is most worth knowing, which is what the Tyler rationale proposed to do, but that flattens the self-determination of students: for the very idea of something being worthwhile requires the assumption that within reasonable limits students are agents of their own desires, beliefs and actions.

Schwab and the Structure of the Disciplines

An especially influential approach to the academic curriculum during the past half century was launched in the 1960s as 'the structure of the disciplines' movement. Joseph Schwab (1982), Tyler's colleague at the University of Chicago, was a towering figure in this tradition.

Schwab and his structuralist colleagues responded to the rapid growth of knowledge by arguing that the curriculum could no longer provide students with a comprehensive knowledge of any given subject-matter, since scientific discovery is moving so rapidly that what is believed to be true today may turn out to be false tomorrow. Instead of focusing solely on the *substance* of a discipline, its basic concepts and findings, the curriculum should also teach the *syntax* of a discipline, its methods of discovery and justification. Such an inquiry based curriculum would teach students not only the matter of a discipline, as Richard Peters (1965) called it, but more importantly its epistemological form, the tools of investigation and critical assessment used by scholars to discover new knowledge (Schwab, 1982, also Hirst and Peters, 1970; Hirst, 1974). For this reason, the structuralist approach to curriculum has sometimes been associated with what came to be known as the 'discovery method' (Shulman and Keisler, 1968).

How are we to devise such a curriculum? Schwab had a unique and ingenious answer. Following Aristotle's distinction between theoretical knowledge (*Sophia*) and practical wisdom (*Phronesis*), he held that curriculum is a practical not a theoretical discipline (Aristotle, 2001). Its aim is not to discover laws of nature, society, behavior or education, but to translate those discoveries into practical strategies for teaching the structure of disciplines. The products of curriculum development are alternative lesson plans that anticipate instructional challenges in teaching a particular subject matter, not experiences designed to meet objectives measurable by the tools of social or behavioral science.

Arriving at such plans is a complex process because the disciplines to be taught, and the research that provides guidance for how to teach them, are not static doctrines to be memorized and applied, but dynamic disciplines rich with scholarly discussion and debate. The challenge is to create an ongoing conversation between those working to discover new disciplinary and pedagogic knowledge and those endeavoring to teach students in school. This process, which Schwab called 'curriculum deliberation', engages representatives of the essential ingredients of curriculum in dynamic discussions about how best to translate theory into practice. He called these ingredients 'commonplaces' – teaching, students, subject matter and milieu. Since there is no one right way to teach a discipline, the creation of practical pedagogic wisdom requires the 'arts of eclectic', an integrated application of the most compelling and relevant theories from both the subject matter itself as the study of how best to teach it (Schwab, 1982: 322–83). Lee Shulman (1986) was later to call this sort of practical wisdom 'pedagogic-content knowledge', the unique understanding that is accumulated in the teaching of an academic discipline.

Unlike Tyler and the curriculum technologists, Schwab and his structuralist colleagues were not ambivalent about normative discourse in curriculum thought; but they were ambiguous. A normative educational philosophy

is implied in the communal requirements of what Schwab called milieu. However, Schwab is unclear about whether normative philosophy should provide the conceptual and ethical frame that guides curriculum deliberation. If so, how is it to be determined given Schwab's complex, plural and evolving conception of theory? If normative visions of education are to be considered as one of a number of types of theories to be taken into account during the process of deliberation, how can it be said that the curriculum subscribes to a normative vision?

This ambiguity is related to an epistemological problem with curriculum structuralism that raises questions about the second condition of human agency – moral intelligence and self-expression. Schwab was among the pioneers of what later became known as post-empiricist and post-positivist philosophy of knowledge that argued that scientific theories are more tentative and partial than was previously supposed (Bernstein, 1983; Phillips and Burbules, 2000). Since the findings of inquiry are underdetermined by data according to this view, theoretical expectations and conceptual frameworks play a significant role in the formulation of explanations. These frameworks are organized into disciplines or forms of knowledge each with its own assumptions, concepts and methods of inquiry. This leads to a strong form of cognitive relativism, which holds that truth is a function of conceptual framework.

Although it does not follow logically from his epistemological position, Schwab appears to treat moral traditions like structures of knowledge. Since all moral positions are underdetermined by reasoning, and no argument exists that can sustain the superiority of one over another, normative positions must be evaluated within the context of the conceptual frameworks within which they are formulated, and a variety of competing (even contradictory) positions should be considered in making curriculum decisions. Ironically, and I believe unintentionally, this sort of relativism, both cognitive and moral, undermines the very critical spirit that structuralists such as Schwab sought to promote, because it implies that it is senseless or unreasonable to criticize one framework on the basis of the assumptions of another. According to this view, the only sort of criticism permitted must come from within a conceptual scheme, and if a particular tradition or discipline cares little for logical consistency, even internal criticism may be ruled out (Alexander, 1989).

Schwab (1982: 228) admitted that 'the charge of relativism can be fairly laid against' his viewpoint. Yet he embraced this sort of relativism in response to the dogmatism of scientific positivism, which held that truth and goodness could be only defined in terms of a very narrow empiricism. His intention was to create an eclectic basis for educational practice in which a rich variety of normative as well as empirical traditions, from Plato and Aristotle to Freud and Skinner, could play equally challenging roles in making curriculum decisions. As he put the point, 'if scientific knowledge can be

sought in many ways, it is not because science is a game, a systematic delusion, or the pursuit of metaphors of mnemonics. Rather . . . it is because nature is so rich in matters to be learned and scientists so apt in finding ways to learn them' (Schwab, 1982: 228).

In throwing out arbitrary and overly simplistic empirical standards, however, Schwab may have gone too far by blurring important epistemological distinctions between truth and falsehood. And in adopting a parallel stance toward moral traditions, Schwab may have embraced an overly eclectic attitude toward normative visions of education that weakens our capacity to identify value differences between better and worse. This threatens the possibility of moral intelligence and self-expression. If every moral tradition is as good as every other, it becomes impossible in principle to distinguish between good and bad or right and wrong according to any theory. Of course, one might respond *a la* MacIntyre (1981, 1988) that certain goods are internal to discipline based practices and that the comparative worth of various moral ideals and traditions can only be judged from the perspective of the various moral ideals and traditions available to us. However, MacIntyre assumes with Aristotle that rival moral traditions struggle to grasp a common *telos* or ultimate good unarticulated in Schwab's writings, even if they may never reach agreement as to its most adequate formulation. For self-expression to be morally meaningful, it must reflect more than mere personal or conceptual or collective preference. This is not to say that there is only one moral tradition that can provide a normative frame for curriculum deliberations, but rather that any putative conception of the good must appeal to horizons of significance that transcend the indeterminate circumstance in which we find ourselves, even if we may not be able to agree as to their nature or content.[9]

Eisner's Esthetic Humanism

If Tyler's technological curriculum focuses on producing desired behaviors and Schwab's academic structuralism focuses on cognitive processes, the humanistic curriculum turns our attention to emotional dimensions of education. One important theorist in this tradition is Elliot Eisner, who is known for his systematic exploration of art as a root metaphor for the processes of teaching and educating (Eisner, 2001).

To conceive education as an art requires an esthetic theory. For this Eisner turned to Suzanne Langer's analysis of art as the symbolic expression of feeling. Langer (1957) grounded art in two important distinctions, between discursive and non-discursive expression, and between logical and dynamic form. Discursive expression is abstract, conceptual and theoretical. We use it to communicate about our world in daily and academic life, from shopping lists and travel directions to scholarly discoveries and scientific

theories. Non-discursive expression, on the other hand, is concrete, particular and experiential. We use it to communicate about dimensions of experience where words and concepts fail us, for instance, in expressing intense emotions such as love or anger. This sort of expression often relies on religious rituals, artistic symbols or metaphoric language to create immediate, virtual or vicarious experience.

Logical form, according to Langer, is rigorous, structured, and fixed. It is concerned with the precise measurements and conceptual contours of reality. For instance, two lampshades that share precisely the same profile but for size can be said to have the same logical form. Dynamic form, on the other hand, speaks to the shape of experiences that are fleeting and in flux. A dry riverbed, for example, can be said to capture the dynamic form of flowing water at the moment the water ceased flowing. The description of an automobile accident by a police officer, to take another example, will strive to express the logical form of the events in discursive language: when the accident happened, the direction of each car before they collided, where they ended up immediately afterwards, and so on. But the stories told by the drivers to their families and friends will be filled with emotion. They will seek to capture the emotional shape of the accident through expressive language that involves the listener in a vicarious experience of it.

The academic curriculum prefers discursive expression of logical form. It aims to convey concepts, methods of inquiry and truths in the precise theoretical language associated with scholarship. The fine arts, on the other hand, aim to capture the dynamic form of human feeling in non-discursive expression such as symbols and metaphors (Goodman, 1978). To take seriously the image of teaching and education as fine arts, then, we must understand how they use non-discursive expression to capture and communicate the shape of human feeling. Eisner offers such an understanding by rethinking curriculum content and evaluation, rather than in a new approach to its design and construction.

Eisner conceives curriculum subject matter in terms of what he calls 'forms of representation'. In contrast to the structure of a discipline that emphasizes its mode of inquiry, the notion of a form of representation stresses a mode of expression. 'People don't paint what they see', Eisner is fond of musing; 'they see what they can paint'. The shape of consciousness is determined by the ways we represent experience, not by how we study it. Art and science are both forms in which we represent what we experience. Excluding forms of representation such as the fine arts from the curriculum, as so often occurs in state schools, denies students the opportunity to appreciate the sort of experience that they capture, indeed to enjoy those experiences altogether. In terms of the Hegelian formulation borrowed from Charles Taylor above, limiting the forms of representation in the curriculum restricts the capacity of students to acquire new and unimagined traditions and media within which to exercise self-expression. The optimum curriculum

will expose students to as many forms of representation as time and other resources permit (Eisner, 1996; Heubner, 1999: 23–5).

If the curriculum initiates students into a collection of artistic forms, the evaluation of curriculum entails appreciating and critiquing the ways in which those forms have been represented. To view teaching and education as fine arts requires that assessment be conceived as artistic connoisseurship and criticism. Connoisseurship refers to the refined taste for a particular art form that is acquired through extensive personal experience as either a creator or student of that art. It involves the capacity for judging quality, for assessing the artistic merit of a particular work of art. Educational connoisseurship, then, is a form of understanding what goes on in classrooms based on personal experience. Educational criticism, on the other hand, is a form of representing that knowledge. It involves commenting on pedagogic activities in rich, metaphoric terms in order to transform how we perceive and do our educational work (Eisner, 1997).

This conception of curriculum and evaluation expands our thinking about the tasks of education by placing the affective domain and subjective experience at its core. It recognizes that the curriculum needs to influence feeling and creative self-expression as well as thinking, to foster love of learning, mold commitment and dedication, and shape the student's deepest appreciation of what it means to be devoted to people and ideals. Following Plato, Schwab called this the education of 'eros' (Schwab, 1982: 105–32; Garrison, 1997). It is not enough to teach about friendship and fellowship, we must engage students with comrades; it is not enough to discuss love of community, or tradition, or beauty, or God, we must involve students in symbolic activities that facilitates these sorts of emotions; and it is not enough to deliberate about those who are different, we must engage students actively and creatively with the Other.

Nevertheless, although Eisner is acutely sensitive to the impact of what we choose not to teach (see Eisner 2001: 97–107). He offers little guidance concerning how to make those choices. If every form of representation is as suitable for inclusion in the curriculum as any other, how are we to distinguish between those that are more or less worthwhile? Under these circumstances, it is difficult to assess whether or to what degree particular curriculum alternatives are more or less desirable. This undermines the third assumption of moral agency mentioned above, fallibility or the possibility of being wrong (Alexander, 1989). The very self-expression Eisner seeks to promote would appear to require what Taylor calls strong values that enable the assessment of the quality of an experience (Taylor, 1991). Yet, Eisner shies away from such strong evaluation when he fails to offer an account of how to distinguish the relative worth of forms of representation that compete for time and resources in the curriculum. In short, Eisner's esthetic approach to self-expression appears to rely on too 'weak' or 'thin' or 'merely' personal an account of the values needed to make curriculum decisions and assess classroom experience (Walzer, 1994).

This point is driven home it seems to me by Eisner's tendency to posit a personal conception of connoisseurship as the primary source for assessing the merit of education experiences. This weakens the meaning of the term merit. It is not enough for educational criticism to re-educate our perception of educational events according to the connoisseurship of an experienced educator alone. For this sort of personal assessment to be meaningful, it must carry weight because the connoisseur has acquired an appreciation for a standard of excellence; and for such standards to have meaning they must appeal to strong values that transcend self and society (Phenix, 1971; Alexander, 1986). Yet it is the very possibility of this kind of strong evaluation that Eisner appears to avoid in stressing the role of personal understanding in the assessment of school programs.

One might respond, of course, that standards of merit are implicit within the forms of representation themselves. If the connoisseur is to base her assessment of an educational program on a merely personal interpretation of these contextualized standards, however, the attendant conception of merit remains weak since assessment will be grounded primarily on individual taste. We might suppose, on the other hand, that standards of excellence are agreed upon by recognized practitioners of various activities or discourses. Unfortunately, this could too easily lead to a self-refuting form of relativism, which assumes, for example, that programs can only be assessed according to standards internal to a particular viewpoint or tradition. But this would imply that one would have to accept the presuppositions of a particular form of representation in order to criticize it. Moreover, if a tradition rejects the very idea of a standard of merit, it would be difficult to sort out what educational criticism or assessment in this context could possibly mean. To engage in what Taylor calls strong evaluation requires that connoisseurs assess the quality of, not merely express, their own personal or collective preferences, and for this to be possible the standards of merit that they employ need to emanate from beyond the narrow confines of self or community or form of expression. However, Eisner's tendency to situate the source of aesthetic authority within either individual connoisseurs or communities of practitioners appears to preclude such a transcendent point of view.

Critical Pedagogy and the Radical Curriculum

Eisner wrote of the three curricula that all schools teach: the explicit curriculum that is announced in brochures, course syllabi and textbooks; the implicit curriculum, which is embedded in classroom norms and student–teacher relations; and the null curriculum, which refers to what we do not teach (Eisner, 2001). Practitioners and policy-makers often ignore the latter two curricula. For radical curriculum theorists such as Michael Apple (1979), however, the implicit and null curricula are not merely ignored;

they are hidden by those in power. Grounded in neo-Marxist critical theory, this approach to curriculum seeks to expose unspoken assumptions of schooling in order to reveal how education is used by dominant classes and cultures to reproduce the power relations embedded in the status quo (Apple, 1979, 1995).

Neo-Marxist critical theorists hold that beneath the surface of social life lies conflict between the powerful and the powerless (Horkheimer and Adorno, 1972). Those who have power based on wealth, lineage or majority-rule use culture to impose an ideology on others that sustains their power. This ideology – expressed in language, media, religion, knowledge, morality and education – obscures the fact of oppression from those who are enslaved to the degree that some even prefer subjugation to liberation. Marx called this 'false consciousness' (Marx and Engels, 1947). Epistemological ideas such as truth and knowledge and moral ideas such as right and wrong have no 'objective' basis outside of the power interests they serve. At the end of the day, all beliefs and behaviors are ideological save those dedicated to liberating the oppressed (Watt, 1994: 1–26). The task of critical pedagogy, an educational orientation influenced by critical theory, is to expose the hidden tools of oppression utilized by those in power so that students can embrace more authentic ideologies that reflect their own cultural, social, and political interests (McLaren, 1989; Gur-Zeev, 2003).

Neo-Marxist analysis assumes that all education is ideological. The question is not whether but which ideology to inculcate (Counts, 1978)? It might appear that this is entirely consistent with my call for a return to substantive ethics in curriculum thought,[9] but this is not so, because radical curriculum theory uses the term 'ideology' in what I have called an amoral (or non-ethical) rather than a moral (or ethical) sense. Moral ideologies embrace the conditions of human agency. They are not moral in the sense that they embrace a particular substantive ethic, although the conditions of moral agency are by no means value free, but in that they accept the transcendental conditions that make it possible to have meaningful ethical discourse. Amoral ideologies on the other hand, deny these conditions. They assume that beliefs and behaviors are not chosen but determined by family, or socio-economic class or culture (Alexander, 2005).[11]

By advocating that children ought to be liberated from hegemonic culture to serve ideological interests they may not necessarily embrace, radical curriculum theory employs the term 'ideology' in an amoral sense; and since all truths and values that do not reflect the necessity of liberating the oppressed are relative to class, or culture or gender, there is no way to assess whether the interests of a particular child, however they might be interpreted, are in fact being served by this new ideology of liberation (Watt, 1994: 1–26). This undermines all three assumptions of human agency. The child does not make choices that give expression to her own strong values, either now or upon reaching maturity. Values are not chosen at all, but determined

by ideology, culture and class. It is assumed, therefore, that the child will express the values of her culture or social class and embrace liberation as defined by others, whether or not she would choose such a form of liberty for herself. Positions of this kind do not engage substantive ethics; they render such an engagement deeply problematic (Alexander, 2001: 94–107).

Consider one representative illustration. At the end of *Education and Power*, Michael Apple (1995) writes with critical appreciation of political economists and cultural reproduction theorists in education:

> Thus, a particular kind of discipline has been required here, one that is critical of overly reductionist and economist categories that have proven in the long run to be damaging to the Marxist tradition, and one which – at the same time – interrogates the school with an interest in uncovering the roots of domination and exploitation that undoubtedly exist. This . . . involves criticizing a tradition and using it at the same time . . . While it is important to realize that schools do reproduce gender relations and the social relations of reproduction, 'behind their backs,' they also reproduce historically specific forms of resistance . . . (Finn, Grant and Johnson, 1978: 34)
>
> Based on this, I have suggested strategies and action on a variety of *fronts*: within schools and universities involving curriculum, democratizing technical knowledge, using and politicizing the lived culture of students and teachers, etc.; and outside the school involving both educational practices in progressive labor unions, political and feminist groups, and so on, and in political action to build a mass socialist and democratic movement in the United States. (Apple, 1995: 150–1)

The ideological agenda of this perspective is clear; and my point is not that this agenda makes no contribution to curriculum thought and practice. Rather it over reaches because of an ambivalence concerning free choice. Apple suggests strategies to uncover the roots of 'exploitation' and 'domination' as critical pedagogy sees it, presumably to liberate students so that they can make choices based on the radical insights they have gained. But what of a young woman who finds fulfillment in a particular religious orientation that Apple might consider oppressive of women, or a young man who would prefer to remain loyal to his family or community, even though this may require submitting to the authority of parents or tradition? Surely these young people should be offered opportunities to move on if they so choose. By exposing hidden structures and forces that would deny or subvert such opportunities, critical thought in education makes a significant contribution. But with equal surety, these youngsters should be allowed to decline opportunities to look elsewhere without disrespect if this is their preference, and here it seems to me is where the trouble begins (see Ellsworth, 1989).

Radical curriculum theory too often appears to embrace what Isaiah Berlin (1998: 194) called liberty in the 'positive sense', which addresses the question 'What, or who, is the source of control or interference that can

determine someone to do, or be, this rather than that?' Berlin argues that what gives plausibility to this sort of reasoning is that:

> (W)e recognize that it is possible, and at times justifiable, to coerce men in the name of some goal (let us say justice or public health) which they would, if they were sufficiently enlightened, themselves pursue, but do not, because they are blind or ignorant or corrupt. This renders it easy for me to conceive of myself as coercing others for their sake, in their, not my, interest. I am then claiming that I know what they truly need better than they know themselves . . . . Once I take this view, I am in a position to ignore the actual wishes of men or societies, to bully, oppress, torture them in the name, and on behalf, of their 'real' selves, in the secure knowledge that whatever is the true goal of man (happiness, performance of duty, wisdom, a just society, self fulfillment) must be identical with his freedom – the free choice of his 'true,' albeit often submerged and inarticulate self. (Berlin, 1998: 204–5)

The tendency to decide what is best for someone whether or not he or she would agree is often more subtle in the views expressed by Apple and his colleagues than in the left and right leaning orthodoxies to which Berlin was referring when he wrote these words; indeed Apple himself as cited above criticizes some of these very orthodoxies. Nevertheless, these tendencies can be found for example in the ways radicals sometimes use the term 'progressive' to suggest that those who do not embrace their views are 'backward' or 'regressive'; or the designation 'democratic' to hint that those who do not endorse Apple's mass socialist movement are less or un-democratic; or the expression 'resistance' to intimate that those in favor of reproducing some of the social relations opposed by radicals are sympathetic to oppression.[12] The problem, of course, is not in the use of these terms per se – other movements have described themselves as 'progressive,' or 'democratic' or dedicated to 'resistance' – but rather in the exclusiveness (almost intolerance) with which these terms are too often appropriated, in ways that cast aspersions on the views or actions of those who might use them differently, or who are not comfortable with a neo-Marxist style of argumentation, or who believe that their interests lie elsewhere, implying that those uses or discomforts or interests are morally suspect or expressions of a false or inauthentic self because they do not sense the need to 'resist' 'domination' or 'exploitation' as conceived in critical, or post-structural, or post-colonial, or some other radical theory.[13]

My point is not that radical curriculum theory is illiberal because it fails to embrace autonomy, but rather that in diminishing the significance of human agency, it tends to undermine the *moral* bite of the claim that one group or another has suffered oppression, because it undercuts the conditions necessary for ethical concepts to be meaningful altogether. Instead, its antidote – 'liberation' or 'positive liberty' – runs the risk of replacing one

form of subjugation with another. In an amoral universe, power not ethics is the primary court of appeals; and force of one kind or another too often appears to be the only recourse to resolve differences or redress perceived injustice (Alexander, 2003).[14]

Human Agency in the Curriculum

To speak of ethics in the curriculum does not require an alternative account of instructional content, design or evaluation, which might well be derived from an eclectic application of these and other curriculum orientations, taking into account some of the difficulties I have mentioned. Rather, to engage ethics in the curriculum requires a conception of what it means for an educational program to be better or worse, and this can be articulated only within the context of a conception of the good. Although there is no single ethical vision that all curricula are bound to promote, they must embrace the formal criteria without which the very idea of an ethical stance is meaningless in other than a weak sense, that people have the capacity for agency. However, this capacity is not an innate ability that will develop on its own. Indeed, the awareness and facility for agency can be just as easily ignored or suppressed as fostered, so it is a fundamental task of every curriculum to promote an awareness of the capacity for agency among those it proposes to influence. Let us conclude then by considering how each of the conditions of agency, (1) free will or self-determination, (2) moral intelligence or self-expression, and (3) fallibility or self-evaluation, might be incorporated into the curriculum.

Free Will

To foster free will and self-determination, the primary concern of any curriculum must be the ultimate independence of children, their ability upon reaching maturity to understand within reasonable limits the options they face and the consequences of choosing one direction over another, and their ability to make intelligent choices based on this understanding. Whatever value educators may attribute to this or that subject matter or pedagogy, cultivating the moral potential of the child as a human agent is always of greater importance, since without an awareness of our capacity for agency the very idea of something being important makes no sense (cf. Dewey 1909). We teach subject matter not to liberate students from forms of oppression that they may or may not agree to perceive as such, but to give them greater cognitive and affective control over their own lives (Dewey, 1938; Scheffler, 1973; Peters, 1966).

To live meaningfully in and contribute productively to a liberal democracy requires the ability to assess not only the strength of an argument, but also the quality (according to some conception) of a piece of art or literature, the significance of an historical or a sociological development, or the contribution of a scientific or technological innovation as well as the capacity to understand or reproduce them (McPeck, 1990). Education for self-determination implies fostering a critical stance toward subject matter, not only in the sense of the ability to employ and assess reasons (Siegel, 1988; Paul, 1994; Norris, 1992; Ennis, 1996), but also – and perhaps more importantly – in terms of the capacity to appraise quality or significance, to evaluate not only the amount of happiness one may achieve by making one choice rather than another, or the strength of the reasoning that favors that choice, but also the relative worth of the satisfaction that may be realized from making it.

Moral Intelligence

However, qualitative judgments of this kind only make sense within the context of ethical orientations that enable one to say that this is more important than that. And to make such judgments possible, a tradition must meet at least two conditions: (1) to serve as a basis for a person's self-determined choices – what Taylor (1989) calls a 'source of the self' – a moral tradition must be an expression of ones' identity, integral to how one conceives who one aspires to be needs. And (2) to achieve this level of ownership and investment, a tradition needs to be sufficiently robust and emotionally compelling to inspire affiliation and identification.

1) Martin Buber's distinction between objective and subjective learning can help to clarify what it means for a tradition to become part of one's identity. Buber, it should be recalled, distinguished between two moments in relationships. One can relate to another as a subject to an object – what Buber called I–It relations – in which the subject uses the object to achieve some instrumental end; or one can also relate to another as a subject to another subject – what he called I–Thou relations – in which at least for a few precious moments, to use Buber's beautiful language, 'the other fills the firmament'. There is a receiving of the other into oneself, a mystical union of sorts in which it becomes difficult to distinguish between one's own feelings and those of the other. The other, in this sense, becomes part of me, and I become part of the other (Buber, 1970).

   Buber applied this analysis to relations between students and subject matter. One can relate to learning as a subject to an object, in which case the knowledge acquired is employed to achieve some instrumental

end, such as professional development, technological innovation or even the advancement of knowledge. This attitude clearly plays an important role in the curriculum, and is indicative of much if not most of the learning that takes place in schools. However, one can also relate to subject matter as one subject to another, in which case the knowledge acquired becomes part of my very being, integrated into my conception of who I choose to become (Rosenzweig, 1955). For an ethical orientation to be a sufficiently integral expression of one's self to serve as a source for self-determined choice, it must be transformed from this sort of objective into subjective learning (cf. Dewey, 1938). From this it does not follow that ethical sources are merely 'subjective' in the weak sense that they only reflect one's personal taste or feelings at a particular moment. They are subjective rather in a strong sense, in that they connect one's inner life with horizons of significance that transcend the self, so that the demands of community or tradition or nature or God become part and parcel of who one chooses to be.

(2) Michael Walzer's (1994) distinction between 'thick' and 'thin' morality can be useful in clarifying the sort of traditions that are the most likely candidates for promoting this sort of self-expression. We can distinguish, Walzer (1994: xi) argues, between two different interrelated kinds of moral argument, 'a way of talking among ourselves, here at home, about the thickness of our own history and culture . . . and a way of talking to people abroad, across different cultures, about a thinner life we have in common . . . . (T)here are the makings of a thin and universalistic morality inside every thick and particular morality.' The conditions of human agency adumbrated here are clearly part of that thin universalistic ethic that many cultures and moral traditions share in common. And a curriculum concerned with engaging worthwhile knowledge will of necessity initiate students into some notion of common humanity or civil society since, as I have been arguing, competing conceptions of the good must embrace and promote at least the assumptions of human freedom, intelligence and fallibility in order to count as ethical orientations (Alexander, 2001: 92–3).

However, for this thin universalistic ethic to be sufficiently meaningful to serve as a source for self-determined choices, it must be embodied in the practices of a local community that displays the features of what Walzer (1994: 21) calls moral maximalism: 'It will be idiomatic in its language, particularist in its cultural references, and circumstantial in two senses of that word: historically dependent and factually detailed. Its principles and procedures will have been worked out over a long period of time through complex social interactions.' This is so for at least two reasons. First, this is how social and other goods present themselves in our lives. The process as a whole', Walzer continues, 'is surely misrepresented when it is described . . . as if it had been guided

by a single, comprehensive, and universal principle. All such principles are abstractions and simplifications that, when analyzed, reveal their idiomatic, particularist, and circumstantial character' (cf. Oakeshott, 1962). Second, in order to undergo the transformation from objective to subjective learning, an ethic needs to be sufficiently emotionally compelling to engage a student's moral imagination. One is moved to live in this way for love of country, or culture, or family, or tradition, or reason, or God or something else that has the capacity to ignite a commitment sufficiently passionate to serve as the guidepost of one's life. Robust and detailed cultural narratives, symbols and artifacts that reflect the complexities and perplexities of real life are better able to inspire this level of commitment than high-level abstractions.[15]

Fallibility

Finally, to assume that students are fallible and to promote strong evaluation means among other things that the moral understanding necessary to acquire or construct worthwhile knowledge is not innate but learned, that it is not in a person's very nature to grasp the wisdom of an ethical tradition, or to behave well or poorly. Students might just as readily misunderstand as understand that tradition, or choose poorly as wisely. Whether or not they do so is a contingent matter, which implies that if they in fact comprehend the tradition's conception of what counts as worthwhile, or learn to desire or appreciate something of particular value, or choose to follow a virtuous course of action, they are to be credited with a meritorious intellectual, emotional or practical accomplishment. And if they fail to achieve this understanding or appreciation, or to exercise this choice, they are in some measure responsible for the failure.

This is not to say that there are no factors beyond the student's control. All students are disadvantaged in some way or another, and some are obviously more advantaged than others, economically, intellectually, emotionally, artistically and physically. Surely curriculum theory and educational policy should consider whether, when and how to address these imbalances.[16] However, in so far as we are unwilling to hold students accountable for any portion of their learning, or to see them as responsible in some way when they miss the mark, they will face grave difficulty in acquiring or constructing or doing whatever a tradition deems appropriate with the knowledge that it considers to be worthwhile. An equally, if not more, important curricular and educational task, therefore, is to cultivate within students this sense of responsibility and accountability. This requires that students be encouraged to experience the exhilaration of genuine accomplishment when they succeed and to examine their own beliefs, desires and actions when they have not achieved all that they had hoped. What might I have done differently?

Where have I missed the mark? The strong evaluation required of future life choices begins with an assessment of the quality of personal investment a student has made in the learning process.[17]

Although this may sometimes mean that students will need to face uncomfortable aspects of their own personalities, and this can result in fear or stress, the upside is that they will come to recognize that they have the capacity to change course, to make a difference. What they do, feel, and think does in fact matter; and their inherent worth is to be discovered not in the feeling that they will get it right no matter what, but rather in the realization that they matter even when they get it wrong, indeed because they have the capacity to get it wrong, since were this not the case, it would literally make no sense to speak of anything mattering at all. Students can thus learn to accept themselves as imperfect but nonetheless worthwhile beings, even as they strive to improve where they can. The recognition that I am inherently worthwhile even though I make mistakes, coupled with the awareness that I have the capacity to contribute to a better tomorrow for myself and others is a source of profound joy.[18]

A meaningful account of curriculum must begin with what can count as desirable, with what it means for knowledge on any account to be considered worthwhile, with the conditions of human agency: attempts to conceive the curriculum in terms of establishing, realizing and evaluating behavioral objectives, or the structure of disciplines or knowledge or rationality, or forms of esthetic representation and evaluation, or the liberation of the oppressed have tended to undermine one or more of these conditions. To engage worthwhile knowledge requires that the curriculum not only presuppose these conditions as human capabilities, but also that it actively promote them. This requires that students learn to make independent choices grounded in assessments not only of the reasoning entailed but also the relative worth of various human activities, that these choices express their personal identification with thick ethical traditions within which strong evaluation makes sense. It also requires students to recognize that in the context of those traditions they have the capacity to err in what they think, feel and do, but that they can also change course and make a difference. This is a source of fear and trepidation, but also of great joy. Cultivating this sort of existential joy is, to my mind, the highest aspiration of any curriculum.

Notes

1. This may be one reason why every few years someone declares the curriculum field moribund or in crisis (Schwab, 1982: 287-321; Heubner, 1999).
2. There is of course no one right way to conceptualize the curriculum field. John McNeil (McNeil, 1984: 1-81) has divided the field into four traditions that more or less correspond to the examples I have chosen to examine here. He calls them the technological curriculum, academic rationalism, the humanistic curriculum, and

social reconstructionism. Elliot Eisner has divided conceptions of curriculum into similar categories in conflicting *Conceptions of Curriculum* (Eisner and Vallance, 1974) and in the first edition of *The Educational Imagination* (1979). In the third edition of *The Educational Imagination*, Eisner adopted the term 'curriculum ideologies' in place of 'conceptions of curriculum' (Eisner, 2001). I will discuss the role of ideology in curriculum thought in the section dealing with critical pedagogy below

3 The point here is not, of course, that all beliefs, desires or actions of human agents are entirely volitional. Clearly we embrace many beliefs, experience numerous desires and engage in behavior without due consideration or exercise of will. Nor, as Frankfort (1971, 6) points out, are human beings 'alone in having desires and motives, or in making choices'. The point rather is that human agents have the capacity to subject their beliefs, desires and actions to particular sorts of evaluative judgment, and to choose whether or not to believe, desire, or enact them based on those judgments.

4 I use the term fallible in a broader sense than that commonly associated with the work of Karl Popper (1995). It includes the possibility of moral as well as cognitive mistakes.

5 Hegel (1953) referred to this kind of transcendental ideal as absolute. Kant (1997) called them regulative principles. They articulate the ends toward which pure and practical reason strive. This guarantees the possibility of truth, since advocates of different intellectual or moral traditions may disagree, but are assumed nonetheless to aspire to common ends. Regulative principles also motivate inquiry, since without the possibility of achieving a desirable end, there would be no reason to inquire altogether. Both Hegel and Kant have been criticized for understanding these ideals as dogmatic and unchanging, whereas a more compelling reading would see them as dynamic concepts, suggesting infinite growth, evolution, or fermentation (Phenix 1971; Alexander, 2001: 112).

6 Some portions of these sections are based on Alexander (2004a). That article was written for a specialized audience, however, and did not contain the philosophical framework drawn from Taylor, Buber and Walzer around which this article is organized.

7 Not all ethical theorists, of course, would accept Hume's logical critique of Moore's argument that goodness is not identical with any natural quality (Prior, 1949). Pragmatic, critical and post-modern theorists would all argue that facts and values are both socially determined, and so intimately intertwined with one another. Yet, despite these important admonitions to conceive the relations between Is and Ought as less dichotomous than Hume or Moore may have allowed,' many critics of this distinction nevertheless admit that a moral or political *telos* or, end-in-view, or horizon of significance can be distinguished from our efforts to describe the world in which we live or about which we theorize; see Bernstein (1983).

8 It could be argued that this assumes with the behaviorists that notions such as freedom and dignity are unscientific, ineffective and meaningless. According to behaviorism, human behavior is to be engineered, not educated, through a process that sidesteps the will altogether by determining outcomes in advance and controlling the environment in order to achieve them, whether or not students would choose these outcomes given the opportunity (see Skinner, 1971).

9 See my discussion of the difference between moral and amoral ideologies in the curriculum in connection with critical pedagogy below.

10 This appears to be the view taken by O'Neil (1981) in his *Educational Ideologies*, by Goodlad (1979) in his discussion of ideology in *Curriculum Inquiry* and by Eisner (2001: 47–86) in the third edition of *The Educational Imagination*.

11 Some philosophers have found it useful to make a rather rigid distinction between the terms 'morals' and 'ethics', reserving the former for the concern in modern philosophy since Kant with deontological or duty-related questions and the latter for the

pre-modern and post-MacIntyre (1981) interest in virtues and values. While I agree with this point in principle, in everyday speech, especially among educators, the terms ethics and morality are used more or less interchangeably, and attempts to insist upon more restrictive uses of the terms lead more often to confusion than to increased clarity.

12. Some authors go so far as to refer to all 'normalizing' education as a form of violence, blurring substantial and important distinctions between the bullying tactics used by repressive rulers and what parents or teachers in particular traditions might do to encourage our traditionally oriented students to remain within the fold (Gur-Ze'ev, 2003: 1–24).
13. One might respond of course that intolerance of this kind is found among all ideological positions, certainly within many of the religious traditions our young traditionalists might choose to embrace. But the whole point here is that we can distinguish between ideological traditions, religious and otherwise, that embrace agency and those that undermine it. Radical curriculum theorists tend to undermine it. For a classic view of political education rooted in rational moral traditions rather than narrow political ideologies, see Oakeshott (1962).
14. To be sure, I do embrace a substantive ethical position, which I call liberal communitarianism (see Alexander, 2004b). This view undoubtedly influences my criticism not only of the radical curriculum, but also of the traditions represented by Tyler, Schwab and Eisner upon which I have commented above. However, Apple and other critical pedagogues can not fault me for this, since they hold that all views, mine as well as theirs, are influenced if not determined by ideological, cultural or class interests, and if my comments are but a mere reflection of my own arbitrary ideological orientation, their positions too must be counted as arbitrary and indefensible on other than narrow ideological grounds. My point, in all events, is not that the radical curriculum does not embrace my own brand of liberalism, but rather that without a conception of agency its critique of oppression falters as a *moral* critique and the liberation it promises turns out to be a gateway to new forms of subjugation. For a very balanced presentation of additional related issues see Burbules and Berk (1999).
15. Elsewhere I have described two aspects of this expressive dimension of the curriculum. Miriam Ben Peretz and I have called one of these 'pedagogy of the sacred.' This refers to one of the ways in which we initiate students into the values and virtues we cherish most. Often our most fundamental desires are so embedded in our emotional and cultural beings, that it is difficult to be articulate about what makes them important to us. So we turn to non-discursive forms to express our feelings such as rituals, metaphors, stories, and symbols. Songs such as national anthems or public ceremonies such as sports rallies can sometimes serve these functions (Alexander and Ben Peretz, 2001). I have called a second aspect of this expression dimension 'pedagogy of difference', which suggests that we teach students to celebrate the ways in which they are different while respecting the differences of others (Alexander, 2005).
16. Although justice dictates making every effort to equalize inequalities that are consequences of social conditions such as vast inequity in the distribution of wealth, some inequalities cannot be balanced, such as native intelligences, proclivities, or talents of one kind or another. No matter what we do, not every student will be a great scientist, athlete or musician.
17. This conception of strong evaluation in the curriculum bears some resemblance to what Richard Paul has called critical thinking in the strong sense, see Paul (1990) and Paul and Elder (2000).
18. The joy that emerges from the admission of one's fallibility suggests that, with Aristotle, this is a eudaimonian not a perfectionist or utilitarian ethic; it recognizes the fragility of the human condition on the one hand and the satisfaction of learning

from our mistakes on the other (Strobel and Carr, 1999: 12–16). To recognize and learn from error we must accept and grow from criticism, which is impossible in a perfect world or utopian society and which does not require calculating degrees of happiness, either on the part of the individual or as a social aggregate.

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5

Michel Foucault on Education: A Preliminary Theoretical Overview

Roger Deacon

Introduction

Michel Foucault's work is already well-known in the field of education. His detailed studies of madness, punishment, sexuality, and the human sciences have provided educational theorists with a whole new array of concepts (like discipline, and problematization), analytical techniques (such as archaeology and genealogy) and arguments (as pertaining to the intimate embrace of knowledge and power, and ways in which human subjects relate ethically to themselves and others). What is not yet well-known is that Foucault's oeuvre as a whole incorporates within itself and offers for wider consumption a number of key educational themes. For purposes of clarity, these themes can be reduced to three, dealing with what might be called the past, present, and future of schooling, or, its development, its functions, and its prospects.

These three themes can be described more accurately and specifically using some of Foucault's own terminology:

a) An historical or 'technico-political' account of the rise of the school, from its negatively oriented seventeenth century origins to its more positively conceived nineteenth century entrenchment and expansion;
b) an explication of the everyday mechanics of schooling as a disciplinary technology or 'moral orthopedics'; and

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c) the implications for contemporary educational institutions and practices of a model of education as a 'block of capacity–communication–power'.

The identification of these three themes, as part of a wider process of extracting and examining all references to the field of education across Foucault's entire oeuvre of books, articles and interviews, is the product of an ongoing research project.[1] The two primary aims in this research project were as follows:

1. To excavate, explain and understand the implications of Foucault's work for education in the abstract and in general, and for curriculum development and pedagogical practice in particular; and
2. to shed critical and substantive light on, and offer additional or alternative policy directions for, current debates about the relevance, utility and effects of the outcomes-orientated, globally aligned education policy research and practices in South Africa.

Foucault's concepts, methods and arguments invite us to look as much before as behind and beyond both pragmatic policy formulations and abstract theoretical critiques, in order to investigate the everyday functioning and effects of relations of power, forms of knowledge and ways of relating ethically to oneself and others. Yet, despite a vast scholarship on the work of Foucault, the field of education has been relatively under-represented in terms of full-length studies as envisaged by this research project. Only a few anthologies and a handful of books (Baker & Heyning, 2004; Ball, 1990; Blades, 1997; Marshall, 1996; Meadmore, Burnett & O'Brien, 1999; Olssen, 1999; Popkewitz & Brennan, 1998; Symes & Meadmore, 1999; Tamboukou, 2003; for an overview, see Peters, 2004) have directly examined Foucault's relevance for education; and to date no text has marshalled together in one place all of Foucault's references to the field, let alone attempted to apply or develop such insights in a sustained manner. Whilst there are many references to education and the school throughout Foucault's work, he never devoted a specific study to the field as he did for madness, health, knowledge, crime, sexuality, or identity. The best-known of his discussions of education occurs in Part III of Discipline and Punish (Foucault, 1986), but his analysis here is intermingled with parallel discussions of the military, monastic, economic, juridical, medical, and of course penal manifestations of disciplinary techniques. Only in two texts – the first an interview with John Simon at the University of Buffalo (Foucault, 1971), and the second a general discussion with high-school pupils under the auspices of the journal Actuel (Foucault, 1977) – does Foucault focus primarily and almost exclusively on education. Both of these texts date originally from 1971, shortly after Foucault, having briefly headed the Department of Philosophy at the newly established University of Vincennes, had been appointed to a Chair at the *Collège*

de France. More broadly, Foucault's interest in education can be dated from his involvement in the 'May events' instigated by students and joined by workers in Paris, 1968, to the publication of his substantial research into punishment and sexuality in 1975 and 1976, respectively (Foucault, 1986; Foucault, 1981). Aside from these texts, educational issues also figure prominently in some of Foucault's lectures at the Pontifical Catholic University of Rio de Janeiro in 1973 (Foucault, 2000), and in an interview given on French radio in 1975 (Foucault, 1996).

The three Foucauldian themes of the 'technico-political' history of the school, the everyday mechanics of schooling as 'moral orthopedics', and the modelling of education as a 'block of capacity–communication–power', are the subject matter of this article. Drawing on these findings, subsequent research will: utilize Foucault's concept of 'problematization'[2] to examine how the experience which we call education has been produced through historical forms of constraint and their analytical corollaries, discourses of teaching and learning; contextualize the origins, development, and institutionalization of the pedagogical impulse inherent in western political rationalities, from ancient times to the present (for an initial outline, see Deacon, 2002); investigate the impact of disciplinary technologies at the level of educational discourse in South Africa, from Fundamental Pedagogics through Freirean and critical pedagogy and People's Education to the constructivism and pragmatism of current policy research; and analyse the effects and implications of outcomes-based education in South Africa, with particular reference to pedagogical techniques of knowledge construction, pupil and parental participation, and hermeneutic assistance in facilitating self-mastery and the acquisition of globally relevant skills, ethics, and good citizenship.

A 'Technico-Political' History of the School[3]

A Foucauldian account of the successive historical metamorphoses of the school incorporates but also goes beyond conventional liberal, Weberian, Marxist, and revisionist approaches (see, for example, Archer, 1979; Cubberley, 1948; Green, 1990; Hunter, 1994). Conventional explanations of the rise of mass schooling in terms of the interests of capitalists, the needs of national states, the struggles of workers, the arguments of educational reformers or the general progress of society pay insufficient attention to the relatively marginal, mundane, contingent, and discontinuous disciplinary technologies spreading throughout early modern societies, and ignore how these both made possible, and came to be utilized and colonized by, larger, more global mechanisms.

In the early modern world, it was not yet a foregone conclusion that the school would become the chief socializing mechanism intermediate between the family and the world of work. The school was not the only institution that

offered education; it was in direct pedagogical competition with institutions peddling in apprenticeships, salvation, rehabilitation, cure, moral instruction, and the arts of war; and its functions were for a long time largely restrictive and negative, containing social problems rather than promoting social development. Only once schools had begun to demonstrate their peculiar mastery of disciplinary techniques for managing people, under pressures emanating as much from below and from the peripheries as from above and the centre, did systematic instruction and its instrument, the school, appear as more than merely one amongst many competing strategies.

Drawing directly on Foucault's work, one can identify five distinct trends or stages in the early modern history of discipline, from the Great Confinement (1600–1750) to the middle of the nineteenth century: a progression through various phases of confinement; a transition from degrees of exclusion to degrees of inclusion; a shift from group-centredness to individual-centredness; a change from harsh and relatively inflexible to mild and ostensibly gentler practices; and, perhaps most importantly, a shift from negative to positive conceptions and practices of discipline. Each of these trends displays different correlations between tendencies towards individualization and totalization; each differently utilizes time, divides space, establishes institutions, produces knowledge, and regulates subjects; all amalgamate human capacities, relations of communication and relations of power; all seek to fundamentally alter those who are confined; and all have lateral effects, extending beyond themselves.

In seventeenth-century Europe, the old transcendental certainties no longer convinced, even while the new rationalisms were still received sceptically. Simple, brute confinement was the default solution applied to most of society's various perceived ills, from moral decrepitude through social vagabondage to political disquiet; but enclosure in itself was insufficient. The evolving Protestant work ethic abhorred both upper class 'wastefulness' and lower class 'idleness', and demanded that all contribute to prosperity for all. Alongside confinement, soon also associated with the rehabilitative activity of honest toil, schools functioned chiefly to contain disorder and neutralize dangers, and were justified in terms of their presumed capacity to prevent ignorance, idleness, and insubordination. (See, apart from Foucault's own texts mentioned above, Bushnell, 1996; Jones & Williamson, 1979; Stone, 1964.)

The realization that confinement on its own could not adequately address the difficulties faced by the early modern authorities in managing socio-economic change on so unprecedented a scale was a driving force in the shift towards more positive forms of discipline. The waning authority of the mainstream churches, the declining guild system and the cumbersome nature of the houses of correction rendered these institutions increasingly inadequate; whilst the existing educational institutions were perceived as poorly regulated, arbitrarily managed, abusive, ineffective, generating resistance,

depriving parents of income, exacerbating labour shortages and producing delinquents. Their lack of regulation was associated with a lack of 'humanity' or, from a Foucauldian point of view, with a poor economy of coercion. Tellingly, it was not the shortcomings in their methods of instruction, textbooks, or curricula that counted for much; it was the practice of corporal punishment.

This perennially criticized and yet centuries-old aspect of schooling loomed remarkably large in contemporary criticisms of educational practice (for merely one amongst many examples, see Montaigne, 1958:71–73). The apparently progressive belief that free men are both more productive and more malleable than slaves rubbed shoulders with the conservative view that existing social hierarchies would be upset were a commoner teacher to beat a noble pupil. Foucault suggests that the concern was less about inhumanity or violence *per se* and more about the kind or degree of violence that might best mould particular individuals; and it was to the pedagogical models of the Jesuits and Pietism that critics turned in search of alternatives: the normalizing subtleties of objectifying classification, perpetual comparison, and humiliating exclusion.

The effects of confinement itself – stricter surveillance, accumulated knowledge, and tighter partitioning – had made possible, but did not ensure, greater social control; these effects had also rendered more visible and problematic the rather unwieldy functions of existing schooling. It was proliferating material disciplinary techniques, generated among both marginal groups and those in or rising to positions of dominance, that made simple enclosure much more effective. Some of these marginal groups (especially dissenting religious communities, like the Jesuits in France, Pietists in Austria, and Quakers, Methodists, and Catholics in England) used extra-state disciplinary mechanisms as weapons of self-defence, whilst others used state mechanisms (like the *lettre de cachet*) to regulate themselves and others. Numerous private academies, organizations, and associations sought a degree of moral distance between themselves and the centralizing state (see Archer, 1979; Feld, 1977; Koselleck, 1988; Melton, 1988; Watanabe-O'Kelly, 1992; Yates, 1947). In addition, certain state apparatuses, like the police, concerned with the minutest details of the entire social body, facilitated the generalization of disciplinary techniques.

Only once dissenting groups had become more established and accepted and hence less susceptible to state intervention, did their techniques of moral self-control combine with the state's own efforts at maintaining order to impose moral training directly on the rest of society. The ensuing flood of national educational legislation from the mid-eighteenth century onwards (for which see, in particular, Bowen, 2003) was thus much more an after-effect of disciplinary technologies than their cause. Increasingly, discipline comes to be directed primarily at individuals and only secondarily at groups, and seeks not merely to confine but above all to correct, involving what

Foucault called 'an inclusion through exclusion': in the case of schools, individuals are only 'excluded' from the rest of society in order to better embroil them in or 'attach' them to relations of power and knowledge. Consequently, a new and more positive disciplinary emphasis gained in influence, with the aim of primary education becoming the development of children's minds and bodies and the improvement of moral attitudes and behaviour. It is also at this time that educational discourse first begins to pay attention to the implicit, possibly innate, assuredly calculable future potential of the young; no longer so externally orientated and reactive, relations of power now sought to subject individuals by proactively intervening in their future behaviour.

This Foucauldian account of the rise of the early modern school offers several avenues for future research. On the one hand, Foucault's work alerts us to the fact that state control, though important, does not always takes the same form but varies according to mechanisms inherent in the particular institutions which it encounters. On the other hand, schooling, and education more generally, is not reducible either to these mechanisms or to 'discipline' in the abstract; discipline is just one mode through which western political rationalities have constituted themselves. Rather, the specificity, multiplicity, differences, and reversibility of the functioning and effects of educational systems must be taken into account and accounted for. Lastly, from a rationalized twenty-first century perspective, the overlaps and interconnections between early modern pedagogical, spiritual, military, and penal techniques appear strangely, even uncomfortably, intimate. In this regard, worthy of further investigation are, first, Foucault's brief and often overlooked comment that, whether or not the prison or the Panopticon became the model for disciplinary institutions, it was a school, the 'pedagogical machine' of the *École Militaire*, which may have provided the inspiration for the Panopticon (Foucault, 1986:173; Bentham, 1995:87); and, second, the links between early modern prisons, armies and religious orders such as the Rasphuis of Amsterdam, the militant Society of Jesus, and the pious professional army of Maurice of Nassau (Spierenberg, 1991:127–34; Feld, 1977:172*ff*).

Schooling as 'Moral Orthopedics'[4]

The centuries-long shift from negative to positive features of discipline was of primary importance in the establishment of schooling as a society-wide disciplinary technology. It went hand in hand with the development of new educational procedures and relays through which individual and collective subjects could be managed, their contexts regulated, their capacities augmented, and their effects channelled, including,

- the development of new teaching methodologies;
- the application of new forms of micro-discipline;

- the apportionment of time;
- the management of sexuality;
- the manipulation of bodies;
- the spread of lateral controls; and
- the production and extraction of knowledge and the reappraisal of curricula and learning.

The combination of an expanding school population and the enhanced training of increasing numbers of teachers made possible a kind of 'moral orthopedics' which over time slanted away from external vengeance and towards internal amendment. Though cumbersome, these initial disciplinary tendencies also contributed to the creation of a specialized time of schooling and the reconceptualization of childhood; to a proliferation of new, especially sexual, anxieties about children, and the reorganization of adult–child relationships; and to the rise of the idea of education as a science.

Schooling in itself had been a disciplinary response to the need to manage growing populations; within the progressively discriminating space of the schoolroom the productive regulation of large numbers of pupils also required new methodologies. First the monitorial method, already tried and tested at medieval universities, gradually supplanted the traditional one-on-one teacher–pupil relationship; this approach, in which a small number of older or more advanced pupils were individually tutored by teachers and then tutored the other pupils, signalled a shift in pedagogical relations of power by supplementing confinement with the moral and disciplinary 'relays' of increasing numbers of trained teachers, support staff and pupil assistants. Later, the monitorial method was superseded by the 'simultaneous method' (attributed, but not exclusive to, Jean-Baptiste de la Salle: see De la Salle, 1935) of direct group instruction by a single teacher.

Accompanying these new instructional methods was a 'micro-disciplinarization' of schooling. Foucault referred to 'a judicial power within the school', in the sense that the more or less simple transfer of knowledge from one person to another cannot be disentangled from those authoritative processes which seek to instill discipline into the moral fibres of its inmates and thus differentiate between them, their nature, potentialities, levels, and values. Punishment in schools began to shift away from the public, the spectacular and the physically violent, to the personal, the mundane and the psychologically compelling, from 'threats or blows' to 'a cold and neglectful countenance', in the words of John Locke (in **Baskin**, 1966:348; echoed by De la Salle in Foucault, 1986:178), from external retribution to internal reform. The body, once made to be tortured, became something to be trained and corrected, from the gymnastics of handwriting to regimens of personal cleanliness: a new moral orthopedics that was intended to fashion the future more than punish the past.

The school refined and modified the disciplinary time it inherited from the monasteries, enhancing its value and its usefulness by adding it up and capitalizing it, dividing duration into successive or parallel segments, and serializing these from the simple to the complex. Like other disciplinary institutions, the early modern school attempted to exercise control over and responsibility for nearly all of its inmates' time, a principle rendered concrete by subsequent concerted interventions in pre-, post- and home-schooling, vocational training, Sunday schools, extra-mural activities and managed recreation, and taken to its logical conclusion in today's concept of lifelong learning. However, time, even before it can be used productively, or made available for various tasks, needs to be understood in a particular way, to exist in a particular format, and to be invested in or possessed by particular people; it follows that disciplinary time also made the specialized time of schooling possible in the first place. In the context of an expanding population, declining infant mortality, increased longevity, differentiation of domestic space, and a sharper demarcation between the public and the private, childhood became a problem of survival to adulthood, not merely at birth.

The new conception of childhood was first framed negatively, in terms of protecting the innocent child from the various dangers that might beset it, such as disease, ignorance, immorality, or adult sexuality. Increasingly, however, it was also felt necessary to positively strengthen children by developing their physiques, character, and reason (Ariès, 1962). In the midst of these new anxieties about children, Foucault espied what he called a 'pedagogization of children's sex': at home, parents, siblings, tutors, and servants, and at school, teachers and fellow pupils, constituted in relation to the child potential sources of danger, contagion, perversion and bad influence. Childhood sexuality was thus the premise around which great battles were fought in the schools, and also the pretext for the reciprocal surveillance of, and the reorganization of the relations between, parents, priests, police, pedagogues, and physicians (Foucault, 1981:110; 104). It consequently became more pressing, and more justifiable, to separate children from adults, younger children from older children and middle class from lower class children, and for certain categories of children to be 'rescued' from 'inappropriate' institutions like workhouses, poorhouses, prisons, and guilds. Schools began to develop, first, functionally differentiated spaces, and later, separate classrooms; and pupils were distributed spatially and serially, not only according to progress, age, or level of achievement but also character, cleanliness, even morality. Schools' putative control of all aspects of existence extended well beyond the formal school gates, fostering a whole margin of lateral controls which permitted the indirect supervision of parents and families and, ultimately, society as a whole (Foucault, 1986:211).

Schooling taught not only punctuation, but also punctuality, and not only reading, but also hygiene; it taught that learning should not only entail gratification but also require chastisement. Schools also exercised what Foucault

called 'epistemological power' – a power to extract a knowledge of individuals from individuals – which functioned in two ways. On the one hand, pupils' or teachers' personal understandings of and functional adaptations to school mechanisms could be recorded, accumulated, and used to subject individuals in new ways; on the other hand, epistemological power generates a kind of clinical knowledge, which underpins current discourses from educational psychology through teacher appraisal to whole school evaluation, and out of which emerged the idea of education as a science. Despite these scientific pretensions, the actual content of educational knowledge only slowly divested itself of its classical, scholastic and overtly religious orientations, and struggled to establish itself against local and popular knowledge. The influence of the scientific revolution – an emphasis on the direct practical manipulation and study of objects – only belatedly came to secure its place in the curriculum, first alongside, but ever after increasingly at the expense of, grammar and God.

The moral orthopedics of schooling offers fertile grounds for further investigation. Leaving aside any advantages that the *bourgeoisie* or the state may have recognized in the school, or the needs of the capitalist economy for its services, the real, material, technical, and effective foundations of compulsory, universal, state-run education systems can be discerned in the process of the 'disciplinarization' of the early modern school. Foucault's work should make us more inquisitive about the twentieth century shift towards more child-centred and participatory pedagogies, not least given the finding that pedagogical methods are not simply imposed but are formed out of individuals' own adaptations to school functions. There are also signs that the family, which according to Foucault was unseated a few centuries ago from its position as model for the government of a state and, by implication, a school, is today regaining some of its erstwhile importance, in the form of direct parental and community involvement in financing and governing public schools, and in the phenomenon of home-schooling. Finally, it is worth bearing in mind the degree to which modernity's vision of a progressive accumulation of scientific knowledge, the grouping and partitioning of curricula, the evolutionary differentiation and classification of learning cycles and phases, and the separation of ages and standards, so central to modern systems of education, are products of historically contingent disciplinary procedures.

Education as 'Capacity–Communication–Power'[5]

Over a comparatively short period of time, modern schooling has brought countless individuals and diverse populations to accept and tolerate steadily increasing degrees of subjection. Aside from the more historical and methodological aspects discussed in the preceding two sections, Foucault's work also offers nuanced understandings of the manifestations, functioning

and effects of contemporary educational institutions and practices. Such institutions, where relations of power and knowledge come to support and link up with each other in more or less constant ways, form what Foucault called 'blocks of capacity–communication–power'. These 'regulated and concerted systems' fuse together the human capacity to manipulate words, things and people, adjusting abilities and inculcating behaviour via 'regulated communications' and 'power processes', and in the process structuring how teaching and learning take place. What distinguishes educational institutions from prisons, armies, and hospitals is that the former emphasize 'communication' above 'capacity' and 'power' (Foucault, 1982:218–219).

Universities, like schools, are multifaceted amalgamations of economic, political, judicial and epistemological relations of power, which still reflect the exclusionary and inclusionary binaries of their origins: university campuses are relatively artificial enclaves where students are expected to absorb socially desirable modes of behaviour and forms of knowledge before being recuperated into society. Foucault predicted that universities will become increasingly important politically, because they multiply and reinforce the power-effects of an expanding stratum of intellectuals and, not least, as a result of new global demands for active, multi-skilled and self-regulated citizens.

At the heart of the practice of teaching, Foucault argued, is a defined and regulated relation of surveillance which acts to improve its efficiency. This essential element of hierarchical observation is neither reducible to mere domination, nor does it nullify dispensed knowledge, skills, and values. Power relations are seldom one-sided, even at their most extreme, but in most instances reciprocal; those who exercise power in the school are caught up in and subjected by its functions just as much as those over whom power is exercised. In fact, in many everyday educational situations, it is the teacher, performing under the critical gaze of others, over whom power is exercised. What particularly intrigued Foucault, even though he did not develop this insight, was the problem of knowing how, in the typical pedagogical relationship, to avoid the effects of domination (Foucault, 1987:129). Whilst domination can be avoided or minimized by counteracting practices of power and by practices of liberty, relations of power (which Foucault clearly distinguished from domination), are inextricably intertwined with pedagogical effects of guilt, obligation and verification, and assumptions about degrees of ignorance, dependence on others, legitimate compulsion, and achievement.

Foucault sheds more light on pedagogical power relationships by contrasting the two most prominent forms of instruction: the lecture and the seminar (Foucault, 1971:199–200). He argues that the lecture, that apparently non-reciprocal and unequal power relationship, is more honest and less devious than the seminar about the relationships of power which inevitably invest each of them. A lecture which is tentative about its truth-claims and which exposes itself to criticism might neutralize power relations

by rendering them more visible; whereas the ostensible freedom and reciprocity of the seminar may disguise power relations to the extent that students uncritically absorb what is only the informed opinion of the teacher. On this basis Foucault felt that seminars, whilst necessary, might be better suited for training in methods than for the development of free and critical thinking. It follows that one-on one tutorials, group research programmes and group work are at least as likely to manipulate students as a traditional 'chalk and talk' method. Tutorial politics depend inordinately heavily on personal qualities, amicable interaction, and firm commitments, and are not well-suited for the average learner; group work, though less elitist, may enhance inter-peer politics at the risk of promoting unequal participation and domination by a few. Though Foucault himself was undoubtedly a little naive in believing that in his lectures at the Collège de France (where students only attend what they want when they want), he managed to avoid exercising power over his audience, concrete empirical investigation would seem to be required to determine the actual and comparative power-effects of lecturing to large groups and holding small interactive seminars. (One empirical study (Gore, 1998) has identified and documented several techniques of power – surveillance, normalization, exclusion, classification, distribution, individualization, totalization, and regulation – across four different pedagogical sites, and concluded that these techniques, premised on inequalities of one sort or another, are relatively continuous and present in all sites, apparently regardless of content, level, methodology, or (progressive or conservative) orientation.)

Three facets of Foucault's remarks on contemporary educational practices will be worth following up. The first has to do with the nature and effects of power and domination in education. The current emphasis on developing skills, knowledge, and attitudes (roughly corresponding to the 'capacity' and 'communication' aspects of Foucault's model) should not be permitted to obscure or inhibit analysis of the workings of numerous and diverse power relations which, specific to educational institutions, cannot be wished away or blamed solely on external forces. The twentieth-century shift from traditional didactic or teacher-centred to more co-operative or child-centred instructional formats has not dissolved or tamed power relations but merely reformulated them. Also, in this regard, it is worth investigating, for its pedagogical implications, the long theoretical tradition which can be traced back to the Stoics and which asserts that it is precisely those who do not care for themselves, who are undisciplined and swayed by appetite or interest, who are most likely to abuse power. Second, what Foucault had to say about 'the events' of May 1968 in France might be fruitfully applied to South Africa in 1976 or 1985:

> the individuals who were subjected to the educational system, to the most constraining forms of conservatism and repetition, fought a revolutionary battle (Foucault, 1977:223).

Third, Foucault's work provides support for a concept complementary to that of lifelong learning: lifelong teaching. If we wish to think differently about, or bring about changes in, these pedagogical institutions, theories, and practices which have made us what we are, the concept of lifelong teaching proposes a potentially transgressive, perpetual process of self-transformation, which, through exemplary practices, may in turn impact upon wider social transformation. Perhaps all three of these areas for further investigation – power relations, care for the self, and lifelong teaching – could be examined under Seneca's precept: "men learn as they teach" (Seneca, 1969:43; also in Foucault, 1997:215).

Conclusion

Michel Foucault's oeuvre is a vast resource not only for social and political theorists but for educators too. It deserves to be mined and exploited more thoroughly, in a manner not unlike the way Foucault approached Nietzsche's work:

> The only valid tribute to thought such as Nietzsche's is precisely to use it, to deform it, to make it groan and protest (Foucault, 1980:53–54).

The research project to which this preliminary theoretical overview refers is an attempt to develop the implications of Foucault's work for education in all its facets. From a Foucauldian perspective, it seeks to show, not what education is but, how it operates in concrete and historical frameworks, in the sense of the actual processes, techniques, and effects which come into play when some individuals teach, or are taught by, others. What kinds of power relations govern the process, what bodies of knowledge are called into being, which different institutions are involved, what forms do the interactions take, and what effects do they have? Questions such as these, as well as the initial findings of this project, will help in addressing more concrete future applications of Foucault's work to education.

Notes

1. The first two-year phase of this research project, 2003/2004, was supported by the National Research Foundation (NRF).
2. 'Problematization' refers to ways in which specific historical practices give rise to or condition the emergence of objects of analysis, themselves an amalgam of experiences (such as teaching or learning), discourses (such as educational psychology), practices (such as teacher training) and institutions (such as schools), and also to ways in which genealogy transforms a 'given' into a question and in so doing requires the rethinking of power relations, forms of knowledge and moral action. See also Deacon, 2000.

3. This section draws upon a more detailed investigation, in press: Deacon, 2006.
4. The section outlines and develops the research findings in Deacon, 2005a.
5. The section draws upon Deacon, 2005b.

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6

Carl Rogers (1902–1987)

Fred Zimring

Carl Rogers was one of the most prominent American psychologists of his generation. He had an uncommon view of human nature, which led him to originate a unique psychotherapy and gave him a different view of education.

His career was something of a contradiction. As a person and as a psychologist he was widely admired. In several surveys of American psychologists, he was named as one of the most influential. His therapeutic method, however, generated much controversy. His method reflected his view of human nature. This view is that there is, in the person, an ability to actualize the self, which, if freed, will result in the person solving his or her own problems. The therapist was not to be an expert who understood the problem and decided how it should be solved. Rather, the therapist should free the client's power to solve personal problems. This position about therapy was controversial because it was contrary to the usual professional assumption that the client needs an expert to solve his or her problems.

This same view of human nature shaped his writings about education. Here he asserted that the student has interests and enthusiasms, and the task of the teacher was to free and to aid these interests and enthusiasms.

It may help in understanding the cast of Rogers' thinking to know that he was born into a family with many Midwestern farm values. Some of these values had to do with the pioneering attitudes towards independence. These values may have led to his belief that people will act in ways that benefit themselves, if they are freed from having to learn the way the society dictates.

Source: *Prospects: The Quarterly Review of Comparative Education*, XXIV(3–4) (1994): 411–422.

The farm experiences taught Rogers about the inevitability and strength of growth in nature. Intellectually, he emerged from a background that culminated in the experiential ideas of John Dewey and in the liberal Protestant theological beliefs of Paul Tillich and others, which were concerned with the internal dimensions of religious experience.

His lifelong interest in nature and growth led to his choosing agriculture as his undergraduate major at the University of Wisconsin. After several years in college, he decided that his future lay in religious work. In 1924, he went to the Union Theological Seminary where, after two years, he came to feel that he could not work in a field where he was required to believe in a specific religious doctrine.

He then went to the Teachers College, Columbia University, where he was strongly influenced by William H. Kilpatrick's courses in the philosophy of education and where he came into contact with John Dewey's emphasis on experience as the basis for learning. Rogers became a clinical psychologist, specializing in child guidance, and then spent twelve years at the Rochester Child Guidance Clinic. At the start of his work at Rochester, he was immersed in providing psychological services in the traditional manner. Near the end of his time there he began to question the current authoritative methods of diagnosing the problem and guiding the patient. Instead, he began to see that his clients had a better knowledge than himself about what was important and they could be relied on to determine what direction to take after receiving therapy.

In 1940, Rogers moved to Ohio State University. He began to realize that he had developed a distinctive point of view about psychotherapy which he presented in *Counseling and psychotherapy* (1942). From the very beginning at Ohio State University he made his teaching more experiential, requiring the students in his courses to determine the direction of the course and its content.

He moved to the University of Chicago in 1945 where his growing awareness of his viewpoint as a distinctive type of therapy resulted, in 1951, in the publication of *Client-centred therapy*. In a chapter on 'Student-centred teaching', he discussed the evolution of his thinking about teaching as paralleling the change in his thought about psychotherapy. Part of this evolution was from being 'non-directive' to emphasizing the importance of attitudes rather than techniques. His first principle in this chapter was: 'we cannot teach another person directly; we can only facilitate his learning'. He saw the leader as setting the mood, clarifying the purposes for the members of the class and serving as a flexible resource for them.

The Central Conditions

In 'The necessary and sufficient conditions of therapeutic personality change' (1957) Rogers made a major statement of his ideas about psychotherapy. Later he extended these ideas to education. Of the six conditions described,

three are central. One was that 'the therapist be congruent or integrated in the relationship'. This therapist congruency, also termed therapist genuineness or transparency, refers to the therapist's awareness of the way he/she experiences the relationship and his/her attitude to the client. This condition also refers to the therapist's willingness to communicate about this experience if it stands in the way of the two other central conditions.

Another of these central conditions was that 'the therapist experiences an unconditional positive regard for the client'. Rogers said: 'to the extent that the therapist finds himself as experiencing a warm acceptance of each aspect of the client's experience, as being part of that client, he is experiencing unconditional positive regard.'

The last central condition was that 'the therapist experiences an empathic understanding of the client's internal frame of reference and endeavours to communicate this experience to the client.' Rogers says: 'To sense the client's private world as if it was your own, but without losing the "as if" quality – this is empathy, and this seems essential to therapy.'

It should be emphasized that these conditions were thought to be sufficient as well as necessary. What was not necessary should be noted. Nothing other than the above conditions was seen as important. The therapist does not have to understand the client's personality or problems, nor guide the client to solving the problem. It is enough if the therapist is genuine and unconditionally accepting, while empathetically understanding the client.

Writing in 1959 in 'Significant learning in therapy and in education', he stated a set of conditions in education that paralleled those that he had stated for psychotherapy. These were that significant learning can occur only to the degree that the student is working on problems that are real to him; that significant learning can be facilitated only to the degree that the teacher is genuine and congruent. In addition, 'the teacher who can warmly accept, who can provide unconditional positive regard, and can empathize with the feelings of fear, anticipation and discouragement which are involved in meeting new materials, will have done a great deal toward setting the conditions for learning.'

After a dozen years at Chicago, Rogers went to the University of Wisconsin and, in 1963, on leaving that university, he also left academia. Until his death in 1987 he was a member of independent institutes, first the Western Sciences Behavioural Institute and then the Center for the Studies of the Person. It was in this period that his writings, especially his 1969 book *Freedom to learn*, began to reflect his broad interests in education.

In this book, revised and republished as *Freedom to learn for the 80s* (1983), he emphasized the process of seeking knowledge. He said that, because of the continually changing atmosphere in which we live, we are:

> faced with an entirely new situation in education where the goal of education, if we are to survive, is the facilitation of change and learning. The only man who is educated is the man who has learned how to adapt and

> change; the man who has realized that no knowledge is secure, that only the process of seeking knowledge gives a basis for security. Changingness, reliance on process rather than upon static knowledge, is the only thing that makes any sense as a goal for education in the modern world (p. 104).

Rogers described his goals in these words:

> I see the facilitation of learning as the aim of education, the way in which we develop the learning man, the way in which we can learn to live as individuals in the process. I see the facilitation of learning as the function which may hold constructive, tentative, changing, process answers to some of the deepest perplexities which beset man today (p. 105).

As to how to achieve this goal, Rogers explains:

> We know . . . that the initiation of such learning rests not upon the teaching skills of the leader, not upon his scholarly knowledge of the field, not upon his curricular planning, not upon his use of audio-visual aids, not upon the programmed learning he utilizes, not upon his lectures and presentations, not upon an abundance of books, although each of these might at one time or another be utilized as an important resource. No, the facilitation of significant learning rests upon certain attitudinal qualities which exist in the personal relationship between the facilitator and the learner (p. 105–06).

The first of these attitudinal qualities which facilitate learning (and these are the three core conditions mentioned above as they apply to education) is 'realness' in the facilitator of learning. About this quality Rogers states:

> Perhaps the most basic of these essential attitudes is realness or genuineness. When the facilitator is a real person being what he is, entering into a relationship with the learner without presenting a front or facade, he is much more likely to be effective. This means that the feelings which he is experiencing are available to him, available to his awareness, that he is able to live these feelings, be them, and able to communicate them if appropriate. It means that he comes into a direct personal encounter with the learner, meeting him on a person-to-person basis. It means that he is being himself, not denying himself.
>
> Seen from this point of view it is suggested that the teacher can be a real person in his relationship with his students. He can be enthusiastic, he can be bored, he can be interested in students, he can be angry, he can be sensitive and sympathetic. Because he accepts these feelings as his own, he has no need to impose them on his students. He can like or dislike a student product without implying that it is objectively good or bad or that the student is good or bad. He is simply expressing a feeling for the product, a feeling that exists within himself. Thus, he is a person to his students, not a faceless embodiment of a curricular requirement, nor a sterile tube through which knowledge is passed from one generation to another (p. 106).

The second group of these attitudes has qualities of prizing, acceptance and trust. About these Rogers comments:

> There is another attitude which stands out in those who are successful in facilitating learning. I have observed this attitude. I have experienced it. Yet it is hard to know what term to put to it, so I will use several. I think of it as prizing the learner, prizing his feelings, his opinions, his person. It is a caring for the learner, but a non-possessive caring. It is an acceptance of this other individual as a separate person, having worth in his own right. It is a basic trust a belief that this other person is somehow fundamentally trustworthy. Whether we call it prizing, acceptance, trust or some other term, it shows up in a variety of observable ways. The facilitator who has a considerable degree of this attitude can be fully accepting of the fear and hesitation of the student as he approaches a new problem as well as acceptant of the pupil's satisfaction in achievement. Such a teacher can accept the student's occasional apathy, his erratic desires to explore the by-roads of knowledge, as well as his disciplined efforts to achieve major goals. He can accept personal feelings which both disturb and promote learning – rivalry with a sibling, hatred of authority, concern about personal adequacy. What we are describing is a prizing of the learner as an imperfect human being with many feelings, many potentials. The facilitator's prizing or acceptance of the learner is an operational expression of his essential confidence and trust in the capacity of the human organism (p. 109).

As to the third attitudinal quality, Rogers observes:

> A further element which establishes a climate for self-initiated, experiential learning is empathic understanding. When the teacher has the ability to understand the student's reaction from the inside, has a sensitive awareness of the way the process of education and learning seems to the student, then again the likelihood of significant learning is increased.
>
> This kind of understanding is sharply different from the usual evaluative understanding which follows the pattern of 'I understand what is wrong with you'. When there is a sensitive empathy, however, the reaction in the learner follows something of this pattern, 'at last someone understands how it feels and seems to be me without wanting to analyze me or judge me. Now I can blossom and grow and learn.'
>
> This attitude of standing in the other's shoes, of viewing the world through the student's eyes, is almost unheard of in the classroom. One could listen to thousands of ordinary classroom interactions without coming across one instance of clearly communicated, sensitively accurate, empathic understanding. But it has a tremendously releasing effect when it occurs (p. 111–12).

Rogers recognized that these attitudes are difficult to achieve. He goes on:

> it is natural that we do not always have the attitudes I have been describing. Some teachers raise the question, 'But what if I am not feeling

> empathic, do not, at this moment, prize or accept or like my students. What then?' My response is that realness is the most important of the attitudes mentioned. It is not accidental that this attitude was described first. So if one has little understanding of the student's inner world, and a dislike for his students or their behaviour, it is almost certainly more constructive to be real than to be pseudo-empathic, or to put on a facade of caring.
>
> But this is not nearly as simple as it sounds. To be genuine, or honest, or congruent, or real, means to be this way about oneself. I cannot be real about another, because I do not know what is real for him. I can only tell if I wish to be truly honest what is going on in me (p. 113).

As an example, Rogers mentions an incident in which a teacher reacted to the 'mess' of a sixth grade artwork class. She told her class: 'I find it maddening to live with this mess! I'm neat and orderly and it is driving me to distraction.' Discussing this incident Rogers said:

> suppose her feelings had come out differently, in the disguised way which is much more common in classrooms at all levels. She might have said: 'You are the messiest children I've ever seen! You don't care about tidiness or cleanliness. You are just terrible!' This is most definitely not an example of genuineness or realness, in the sense in which I am using these terms. There is a profound distinction between the two statements which I would like to spell out.
>
> In the second statement she is telling nothing of herself, sharing none of her feelings. Doubtless the children will sense that she is angry, but because children are perceptively shrewd they may be uncertain as to whether she is angry at them, or has just come from an argument with the principal. It has none of the honesty of the first statement in which she tells of her own upsetness, of her own feeling of being driven to distraction.
>
> Another aspect of the second statement is that it is all made up of judgements or evaluation, and like most judgements, they are all arguable. Are these children messy, or are they simply excited and involved in what they are doing. Are they all messy, or are some as disturbed by the chaos as she?

Rogers understood the difficulties in achieving these attitudes. He stated it as follows:

> Actually the achievement of realness is most difficult, and even when one wishes to be truly genuine, it occurs but rarely. Certainly it is not a matter of the words used, and if one is feeling judgmental, the use of a verbal formula which sounds like the sharing of feelings will not help. It is just another instance of a facade, of a lack of genuineness. Only slowly can we learn to be truly real. For, first of all, one must be close to one's feelings, capable of being aware of them. Then one must be willing to take the risk of sharing them as they are, inside, not disguising them as judgements, or attributing them to other people (p. 114).

Principles for Learning

Rogers abstracted a number of principles about learning. These principles (Rogers, 1969, p. 114) are:

1. Human beings have a natural potential for learning.
2. Significant learning takes place when the subject matter is perceived by the student as having relevance for his/her own purposes, when the individual has a goal he/she wishes to achieve and sees the material presented to him/her as relevant to the goal, learning takes place with great rapidity.
3. Learning which involves a change in self-organization in the perception of oneself is threatening and tends to be resisted.
4. Those learnings which are threatening to the self are more easily perceived and assimilated when external threats are at a minimum.
5. When the threat to the self is low, experience can be perceived in differentiated fashion and learning can proceed.
6. Much significant learning is acquired through doing.
7. Learning is facilitated when the student participates responsibly in the learning process.
8. Self-initiated learning which involves the whole person of the learner feeling as well as intellect is the most lasting and pervasive.
9. Independence, creativity and self-reliance are all facilitated when self-criticism and self-evaluation are basic and evaluation by others is of secondary importance.
10. The most socially useful learning in the modern world is the learning of the process of learning, a continuing openness to experience and to incorporate into oneself the process of change.

Some idea of what Rogers learned about methods of facilitating learning can be obtained from his guidelines for facilitating learning (Rogers, 1969, p. 164).

1. It is very important for the facilitator to set the initial mood or climate of the group or class experience.
2. The facilitator helps to elicit and clarify the purposes of the individuals in the class as well as the more general purposes of the group.

Rogers goes on to say about the facilitator: 'If he is not fearful of accepting contradictory purposes and conflicting aims, if he is able to permit the individual a sense of freedom in stating what they would like to do, then he is helping to create a climate for learning.'

3. The facilitator relies upon the desire of each student to implement those purposes which have meaning for the student, as the motivational force behind significant learning.

4. The facilitator endeavours to organize and make easily available the widest possible range of resources for learning.
5. The facilitator regards himself/herself as a flexible resource to be utilized by the group.
6. In responding to expressions in the classroom group, the facilitator accepts both the intellectual content and the emotionalized attitudes, endeavouring to give each aspect the approximate degree of emphasis which it has for the individual or the group.
7. As the acceptant classroom climate becomes established, the facilitator is able increasingly to become a participant learner, a member of the group, expressing his/her views as those of one individual only.
8. The facilitator takes the initiative in sharing himself/herself with the group feelings as well as thoughts in ways which neither demand nor impose, but represent simply a personal sharing which students may take or leave.
9. Throughout the classroom experience, the facilitator remains alert to the expressions indicative of deep or strong feelings.

Rogers goes on to say that these feelings should be understood and the empathic understanding should be communicated.

10. In his functioning as a facilitator of learning, the leader endeavours to recognize and accept his/her own limitations.

Rogers, in his explanation of this principle, explains how these limitations affect facilitation and also what the facilitator should do when his attitudes are not facilitative of learning. Rogers says that:

> He [the facilitator] can grant freedom to his students to the extent that he is comfortable in giving such freedom. He can only be understanding to the extent that he actually desires to enter the inner world of the students. He can only share himself to the extent that he is reasonably comfortable in taking that risk . . . There will be many times when his attitudes are not facilitative of learning. He will find himself being suspicious of his students. He will find it impossible to accept attitudes which differ strongly from his own. He will be unable to understand some of the students' feelings which are markedly different from his own. He may find himself angry and resentful of student attitudes toward him and angry of student behaviours. He may find himself feeling strongly judgmental and evaluative. When he is experiencing attitudes which are non-facilitative, he will endeavour to get close to them, to be clearly aware of them, and to state them just as they are within himself. Once he has expressed these angers, these judgements, these mistrusts, these doubts of others as something coming from within himself, not as objective facts in outward reality, he will find the air cleared for a significant interchange between himself and his students. Such an interchange can

go a long way toward resolving the very attitudes which he has been experiencing, and thus make it more possible for him to be more of a facilitator of learning.

Applying Rogers' Principles

These principles have been put to use in a number of educational settings, such as programs aimed at humanizing medical education, attempts to change the school system in California, teacher education and a graduate program in nursing at the Medical College of Ohio.

In the latter program, in using Rogerian principles to establish a master's degree in nursing, there were two recurring issues. One had to do with the faculty sharing power and responsibility. In some cases the faculty did not respect their own limits and granted students freedoms with which the faculty was not comfortable. For example, several faculty members had allowed students to negotiate out of activities that the faculty considered essential to the student's learning. At times, the faculty felt hurt when the students did not recognize or value what the faculty had to offer. The authors of the article (Chickodonz et al., 1986) describe this experience:

> Considerable effort was required to create an environment in which students could express themselves openly to faculty. The faculty's mere verbalization of a safe environment did not make it safe in the students' experience. Honesty and openness were difficult to achieve. This was especially evident in handling students' confrontations with the faculty. As students became empowered, they were often angry with the faculty about course requirements (and grading criteria).
>
> Gradually it became clear that the person-centred approach was not an idealistic, utopian educational form. What was discovered to be true was that the person-centred approach is essentially a person-to-person relationship between teacher and students.

What was required was that the experience of both the teacher and the learner be acknowledged.

The second major issue was that of evaluating students and giving them grades for the course. As part of an academic institution, the faculty was expected to evaluate students. The usual type of evaluation by faculty was not seen by students as sharing with them the power and the responsibility for their learning. Gradually, faculty discovered strategies for sharing decisions in the evaluation process with students. One was to be very clear about the criteria for evaluation before the papers were assigned and written. Another was to comment on a draft and allow the students to rewrite papers before they were given a grade. Yet another was to use peer evaluation in grading the papers.

There were three effects of this program on students. One was that the students came to accept more responsibility for their learning and became more self-directed. In addition, students felt less helpless and exercised more power in the academic setting. A third effect was that students established more interdependent relationships with faculty.

Frequently these Rogerian educational principles proved to be successful. However, sometimes school administrations and entrenched bureaucracies opposed the changes that were taking place and terminated some programs. Rogers found that the politics of education and of the educational establishment were an important determinant of the success or failure of the use of these principles.

In addition to the reports on the success or failure of the programs where these principles have been tried out, research has also been conducted on the effects of the facilitating attitudes of the teacher on the students. In studies by Aspy and Roebuck, empathy, congruence, and positive regard were measured by trained raters who rated audio tapes of the classroom interactions. In addition to rating for facilitating attitudes, the tapes were also rated for Flander's interaction analysis and for Bloom's Taxonomy of educational objectives.

Aspy and Roebuck report (1969):

> In one study involving 600 teachers, 10,000 students (from kindergarten to grade twelve) of teachers who were trained to offer high levels of empathy, congruence and positive regard were compared with control students of teachers who did not offer high levels of these facilitative conditions. The students of high facilitative teachers were found to:
>
> 1. Miss fewer days of school during the year;
> 2. Have increased scores on self-concept measures, indicating more positive self-regard;
> 3. Make greater gains on academic measures, including both math and reading scores;
> 4. Present fewer disciplinary problems;
> 5. Commit fewer acts of vandalism to school property;
> 6. Increase their scores on I.Q. tests (grades K-5);
> 7. Make gains in creativity scores from September to May; and
> 8. Be more spontaneous and use higher levels of thinking.
>
> In addition, these benefits were cumulative; the more years in succession that students had a high functioning teacher, the greater the gains when compared with students of low functioning teachers (Rogers, 1983, p. 202–03).

Aspy and Roebuck measured the effects of the facilitating attitudes on reading, mathematics and English achievement. They trained some teachers in

Table 1: Mean differences in adjusted gain[1] between students of trained (facilitative) teachers and untrained teachers

Grade level	Reading achievement	Math achievement	English achievement
1–3	+ 10.88[3]	Not tested	Not tested
4–6	+ 3.66[3]	+ 15.48[3]	+ 18.66[3]
7–9	+ 2.96[3]	+ 4.10[3]	+ 11.75[3]
10–12	+ 1.56[4]	+ 1.94[4]	+ 0.96[5]

Notes:
1. Covariates were intelligence quotient and pre-test standing.
2. $p < .001$
3. $p < .01$ + in favour of control (no training) group
4. $p < .05$ + in favour of experimental (training) group
5. Not significant.

these facilitative attitudes and then compared the achievement of the students taught by the trained and untrained teachers. Table 1 reports the results of one typical study.

In summary, we have seen that Rogers was concerned with the motivation and self of the student rather than with how the student should be taught. Rogers assumed that, in the student, there remains an innate capacity for growth. This self-actualizing process, which, if the process is freed, will lead to self-initiation and learning which is more rapid, more thorough and lasting than traditional learning.

These self-actualizing processes are freed when a teacher has particular attitudes. That is, these processes are freed, and self-initiated learning occurs, when the congruent teacher unconditionally prizes and responds empathetically to the world of, to the interests and enthusiasms of, the student. The history of the programs where these teacher attitudes have been attempted indicates that it is difficult for teachers and administrators to change their attitudes, to share their power and responsibility and to trust the intrinsic motivation of their students to learn. The history of these programs also indicates that, where teachers and administrators change their attitudes, the student's motivation, learnings and behaviour is improved.

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7

On the Path towards Thinking: Learning from Martin Heidegger and Rudolf Steiner

Bo Dahlin

Introduction

Thinking is an important educational activity. Whether as a student or as a teacher, all education requires thinking of some form or other (purely cognitive, technical, moral or aesthetic). Thinking is also a mental activity of intrinsic and essential importance to philosophy; one could hardly engage in philosophical activity without thinking. From the Pre-Socratics up until our own time many philosophers have reflected on the nature of thinking. Parmenides, Plato, Tomas Aquinas, Descartes, Kant, Fichte and Heidegger are only a few of the more important historical figures in this regard.

The main purpose in this paper is to pursue the question of the nature of thinking. Naturally, within the frames of an article it is impossible to consider all the philosophers who have made important contributions to this question. I will limit myself to taking up and comparing the ideas of Martin Heidegger and Rudolf Steiner, first because I consider them to be among the most radical philosophers of thinking in modern times; second because I believe they may mutually illuminate each other's point of view. Heidegger's and Steiner's thinking on thinking is similar in some interesting respects, but very different in others. Towards the end of the paper I will also touch upon some educational and pedagogical aspects of the development of thinking.

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Martin Heidegger: Thinking Being

In his essay *The end of philosophy and the task of thinking* Heidegger (1977a) claims that "[w]e still need an education in thinking". Although it was written half a century ago I believe this need is still there. There still seems to be a lack of understanding even of the sense in which Heidegger asked this question about thinking. The understanding of thinking that is needed "at the end of philosophy" is not expressed in a system of rational propositions. It is rather an unpretentious asking about new possibilities of experience, "awakening a readiness for a possibility" (ibid., p. 378); not a new metaphysical system or a new theory of cognitive psychology. In the wake of Heidegger philosophy must open itself to the power of experiences that shatters our conceptual maps and reminds us of their fragility (Woods 2002).

Perhaps the recent progress of brain research has made it even *less* possible to understand Heidegger's question today. Brain research seems to increase the tendency to turn thinking into a phenomenon conceived within objectivist (or instrumentalist) frameworks, forgetting the fact that it is *I* or *we* that think, not the brain. (I will return to this question later on.) "We ourselves are, in the strict sense of the word, put in question by the question [of thinking]", as Heidegger says in another work (1977b, p. 362), related to the same theme. In this work[1] Heidegger repeatedly returns to the statement that the most thought-provoking thing in our thought-provoking times is *that we still do not think*. Hence, we must (still) learn to think. A strange claim, considering all the mental activity and "information processing" going on in modern societies, not least in education, academy and research. But even though there may be a lot of thinking going on, science itself seems unable to find thinking, as long as it objectifies the human being and does not heed the existential challenge of the question: the *call* of/for thinking. Unless science accommodates a phenomenological turn to the *immediate experience* of thinking, it will inevitably misunderstand and misrepresent this call. An interesting example of this kind of misrepresentation can be found in the transhumanist ideas of Ray Kurzweil (2005).[2] Even though Kurzweil's book *The singularity is near* is not scientific in the strict sense, it illustrates a gesture of disownment which is implicit in all reductionist approaches to thinking: thinking is objectified as something external to itself; something which can be studied and manipulated as any other mechanism or organism separate from the thinking subject. One of Kurzweil's basic ideas is that human intelligence is just smart enough to "understand our own thinking – *to access our own source code*, if you will – and then revise and expand it" (ibid., p. 4; italics mine). Kurzweil considers himself a "patternist", that is "someone who views patterns of information as the fundamental reality" (p. 5). Thus, the source code of human thinking is presumably a particular pattern of information, which can be objectified, grasped and manipulated – at least in principle but, so Kurzweil believes, in a not too distant future also in actual

life. From Heidegger's (and Steiner's) point of view, what is misrepresented in this vision is the fact that any objectification and manipulation *presupposes* thinking, that any "source code" of thinking must itself be constituted by a thinking which essentially transcends its constituted object.

Heidegger has different names for this transcendence: *Lichtung* or (in the later works) *Aletheia*; translated as openness or "unconcealment":

> Unconcealment is, so to speak, the element in which Being and thinking and their belonging together exist. (Heidegger 1977a, p. 388)

In *Aletheia*, Being and thinking "belong together". This is Heidegger's interpretation of the famous sentence of Parmenides, that "Being and thinking are the Same". In another text Heidegger (1969) illuminates the notion of belonging together by distinguishing between *belonging* together and belonging *together* (in German *Zusammen*-gehören versus Zusammen-gehören). Saying that two things, A and B, belong *together* is for Heidegger an expression of reductionism: A and B are then identical, reduced to one and the same thing. This notion is a common trait of the philosophical paradigm of "metaphysics" and representational thinking, in which Being is seen as the universal *cause* of things. In contrast, if A and B *belong* together, they preserve their identities and yet exist only through each other. It is in this sense that Being and thinking belong together. The belonging of thinking to Being is a longing for Being by thinking – and the longing of Being for thinking to uncover it, to "appropriate" it. In German, this "poetising" would of course be expressed differently. The "*gehören*" in "*Zusammengehören*" is related to the verb "*hören*", which means "to hear", that is to listen, and hence to attend to. Being and thinking attend to each other and *tend* towards each other. Therefore, following the idea that the essence of the human being (or of being human), is thinking, Heidegger notes:

> A belonging to Being prevails within man, a belonging which listens to Being because it is appropriated to Being. [. . .] Man and Being are appropriated to each other. (1969, p. 31)

By saying that thinking and Being *belong* together, Heidegger "ontologizes" thinking. Thinking is not a volatile and shadowy by-product of neurophysiologic processes. By relating thinking to unconcealment, as the element in which thinking exists, Heidegger seems to imply that thinking takes part in the allowing-to-be which is unconcealment. Thinking becomes an intrinsic part of that openness which necessarily precedes the appearance of any being or (thought) thing. As a precondition of every being thinking therefore also must precede both "subject" and "object". Hence, thinking precedes all epistemological and ontological distinctions, for this very reason it cannot be an object of technological revision. However, all of this can be,

and *has* been, *forgotten* by human thinking, and more so precisely through the modern technological world conception.

We need to (re-)discover Heidegger's mode of "thinking Being". Thinking Being does not mean to think "about" Being. Nor does it mean that the human being is "a being that thinks". Thinking Being means that thinking and Being *belong* together. This insight may be part of the education of thinking that is (still) lacking. In contrast to the calculative thinking of instrumental reason, it is a meditative thinking which, according to Heidegger, was there in the beginning of philosophy but was very soon forgotten.[3] Referring to another fragment of Parmenides, talking about "the untrembling heart of unconcealment", Heidegger comments:

> The meditative man is to experience the untrembling heart of unconcealment. What does the phrase of the untrembling heart of unconcealment mean? It means unconcealment itself in what is most its own. it means the *place of stillness* which gathers in itself what grants unconcealment to begin with. (Heidegger 1977a, p. 387; italics mine)

What is it that is gathered in this stillness? What is it that grants unconcealment? The Being of all beings. . . ? And why is there an "untrembling heart" connected to this? Presumably only the direct experience of meditative thinking can give satisfying answers to such questions. Heidegger's reported enthusiasm for Zen Buddhism and its meditation practices suggests that he believed in a path leading to such experiences (cf. Caputo 1986, p. 204ff; Kim 2004, p. XVII; for a more general comparison between Heidegger and East Asian spiritual philosophies, see May 1996). Such a path or practice is, however, not to be understood as a kind of mental technology – this would assimilate it to the hegemony of modern instrumental reason and miss the point completely. As Sallis remarks:

> The path of thinking is not first constructed as a path by thinking but is rather a way which already lies before thinking as that which calls upon us to think. (1970, p. 2)

As Caputo (1986) explains Heidegger's view, we have to find our way with the question(s) of Being and thinking, and their belonging together, by ceasing to seek for metaphysical "grounds". We have to make "a leap of thought" by which we arrive at groundedness in Being itself. According to Caputo, Heidegger's suggestions for how to achieve this leap are comparable to what Meister Eckhart called *Gelassenheit*, or "detachment". The leap itself seems also similar to what is called *satori*, or "enlightenment", in Zen Buddhism. In Buddhism, enlightenment implies (among other things) gaining a new perspective on the ego. Similarly, in an essay on Heraclitus Heidegger suggests that in genuine thinking the voice of the ego becomes "merely another appearance within the clearing [*Lichtung*]", as Zimmerman (1983, p. 91)

expresses it. The ego, or subject, becomes just one among many other beings appearing in the openness.

For Heidegger, *Lichtung* or *Alêthea* is "the opening which first grants Being and thinking", but this opening is also Parmenides stillness of the quiet heart "from which alone the possibility of the belonging together of Being and thinking, that is, presence and apprehending, can arise at all." (1977a, p. 387). Here Heidegger points to the *apprehending* aspect of thinking. The reason for this seems due to the context in which this statement appears, which deals with the issues of phenomenology and the experience of truth. Nevertheless, if the belonging together of Being and thinking presupposes a stillness of the heart, it must involve something more than thinking as apprehension. It is my proposal that Rudolf Steiner's emphasis on the significance of thinking as spiritual activity, to which I turn in the next section, throws further light on the nature of this meditative thinking.

The German word *Lichtung* contains the word for light, *Licht*. Surely, it is no coincidence that Heidegger chose this word, since light has a long standing connection with reason, and thinking is the main faculty of reason. It is "by the light of reason" that we see the logical connections between ideas. However, the light that appears in the *Lichtung* is not the classical light of reason, for "the light of reason does not heed the opening" (1977a, p. 386). It *needs* it, but does not heed it, nor does it produce it. The light of reason is not the same as the light that appears in genuine thinking. "[T]hinking must become explicitly aware of the opening" (ibid., p. 385), and in this opening "rests a possible *radiance*, that is, the possible presencing of presence itself" (ibid., p. 387; italics mine). Obviously, this radiance is another kind of light than the light of reason.

It seems obvious that by "ontologizing" thinking, Heidegger continues (albeit in a different mode) a strand of thought which can be found in the mysticism of a Meister Eckhardt or in the objective idealism of a Hegel: the human being is understood as a highly significant *ontological* category. In the human being something takes place which is essential for Being as such. Thinking Being entails "the mutual appropriation of man and Being", through a leap of thought:

> What a curious leap, presumably yielding us the insight that we do not reside sufficiently as yet where in reality we already are. Where are we? In what constellation of Being and man? (Heidegger 1969, p. 33)

Heidegger continues by explaining that the "constellation of Being and man" in which we are is that of the *Gestell*. The *Gestell* is perhaps translatable as "the framework of technological rationality" (in the English translation it is called simply "the framework"). This is a particular mode of appropriating Being by the human being, the culmination as it were of the paradigm of "metaphysics", causality and representational thinking.

By introducing the *Gestell* Heidegger leaves the stillness of the meditative heart and enters the more sinister area of calculative thinking and instrumental rationality. However, he also seems to consider the *Gestell* as a challenge for humankind to appropriate Being in a new way. Within the framework of instrumental rationality the human being is alienated from Being, and therefore from herself. The experience of alienation may create the impetus for appropriating Being in a new way. On the other hand, in our times this alienation has perhaps gone so far and become so widely spread that it passes for the normal state of things, as "natural", as the way things are. And so Kurzweil can publish best-selling books on the future "transcendence" of human biology through technology. The *Gestell* is establishing itself as *totalité*.

There also seems to be a certain pessimism in Heidegger's view on the possibilities for humankind (in the West, at least) to grow out of the *Gestell* as the "constellation of Being and man" in our time; consider for instance his statement that "only a god can save us now" (Heidegger 1976). This probably reflects his tendency to see thinking as over-determined by Being, rather than the other way around. In contrast, for Rudolf Steiner thinking is a fundamental aspect of the possibility of human freedom and hence the starting point of any change and future development.

Rudolf Steiner: The Subject Lives by the Grace of Thinking

Rudolf Steiner (1861–1925) has recently been called the best kept secret of the twentieth century (Schickler 2005). Generally perceived and disregarded as an "occultist" or mystic, few academic researchers bother to study his works. It is therefore little known that he held a doctorate in philosophy and published many texts highly relevant for the philosophical discussions at the end of the nineteenth and beginning of the twentieth century (cf. Welburn 2004). As a 21-year-old student of the natural sciences he was appointed editor of Goethe's scientific writings for the then standard German edition of Goethe's works. Later on he was widely respected as an intellectual force in the German-speaking world, before he "disgraced himself" academically by becoming an active member of the Theosophical movement.[4]

In a lecture given in Berlin in 1914, Steiner (1991a) characterizes human thinking in a way which from a general point of view is similar to Heidegger. One of the first things he says is that human beings seldom really think. Instead, we are content with *words*. Furthermore, the situation is such that in order to realize that we do not really think, we have to – think. It is evident that thinking for Steiner is different from the "mental talk" of everyday life, the major part of which, if one is honest, consists of associations of words and memories.

For Steiner, genuine thinking is *alive*: it is an intense spiritual activity.[5] It uses concepts and ideas not in static forms, but as dynamic possibilities. At the same time it is *clear and precise*. A concept according to Steiner is a particular potentiality of what may be called *noetic movements*. As a simple example Steiner (1991a) takes the concept of the triangle. This concept encompasses all triangles in whatever shape. In thinking the *concept* triangle, and not of a *particular* triangle, we have to think of the sides of the triangle as in constant movement in relation to each other. This is what every mathematician or geometrician must do intuitively (consciously or unconsciously) if she wants her reasoning to be general and not just about one particular triangle. Yet this original intuitive experience of a concept seems, according to Steiner, not be accommodated within most academic philosophical systems. Philosophers have often been too intent on fixing the definition of words in static linguistic structures. Concepts are rarely understood as *dynamic essences*.

Comparing this argument to Heidegger's well-known claim that we confuse beings with *Being* and forget the latter, we realise that the concept of Being from Steiner's point of view presumably has to be a living whole, since it must encompass "everything that is", that is *every thing*, but not as a kind of "common denominator" – for instance as "the property to exist" – but as that which livingly and graciously "gives" existence. In other words, not very different from Heidegger's *Aletheia*: the element in which thinking exists and the "allowing-to-be" of every being. This has a further parallel in Steiner's view of thinking as an activity preceding the subject–object distinction.

> Thinking is *beyond* subject and object. It produces these two concepts just as it produces all others. [. . .] The subject does not think because it is a subject; rather it appears to itself as subject because it can think. [. . .] [M]y individual subject lives by the grace of thinking. (Steiner 1998, p. 60; translation mine)

Thus, *the subject–object distinction can be discovered and constituted only in and by thinking*. Thinking precedes all conceptual distinctions.[6] This means that Steiner, like Heidegger, in his own way "ontologizes" thinking. Steiner regards the thinking we know from our everyday consciousness as a shadow of its essential reality, which is through and through a spiritual activity. For him, thinking distinguishes itself from sensing and feeling in that in itself, as pure activity, it is universal, whereas the latter are individual processes.

> In thinking we have that element given us which welds our separate individuality into one whole with the cosmos. In so far as we sense and feel (and also perceive), we are single beings; in so far as we think, we are the all-one being that pervades everything. (Steiner 1998, p. 91; translation mine)

Steiner takes a vital step beyond Heidegger by emphasizing the fact that in the everyday state of consciousness there is usually no awareness of our thinking *activity*; we are only aware of its results, which are the *thoughts* that it produces.[7] We know *what* we think (more or less), but not *how*. In everyday life, we are not conscious of the mental activity as such, which gives rise to the thoughts we have. Yet it is precisely the transition from one thought to another that is accomplished by means of thinking as *activity*. Any particular thought is only a product or result of this activity; it is no longer active *thinking*, but a finished *thought*.

It may be argued that thinking activity is always accompanied by thoughts, which cast their veil over the activity, clouding it over so to speak. Aristotle was very firm on this, claiming that thinking is *always* accompanied by what he calls *phantasms*, what we today would probably call mental images, representations, or words (for a elucidating treatment of this issue, see Castoriadis 1997a). For Aristotle, nothing exists without (some form of) matter except "thought thinking itself", *noēsis noēseōs*, pure activity (*energeia*), what he also called God or the supreme Being. From this point of view, human beings cannot expect to experience pure thinking activity, thinking without *phantasms*. Here Steiner would perhaps say that the conditions of possibility for pure thinking have changed after the event of Christ, since thereby (according to common Christian belief) "God became human".

However, one need not go deep into speculative theology to deal with this question. It is enough to consider the possibility of strengthening the capacity to dwell consciously in the activity of thinking while the accompanying *phantasms* are *also* present, but hovering at the periphery of awareness. Before we go further into this possibility I will take up another philosopher who was very occupied by thinking: Descartes. Some passages of his writings could be interpreted as saying that we *are* in fact aware of our thinking activity. In *Rules for the direction of the mind* Descartes points to the need for "a movement of thought which is continuous and nowhere interrupted" in order to ascertain the logical connections between the separate facts in a long chain of deduction. Since it is difficult to retain all the facts and connections in memory,

> . . . I would run them over from time to time, keeping the imagination moving continuously in such a way that while it is intuitively perceiving each fact it simultaneously passes on to the next; and this I would do until I had learned to pass from the first to the last so quickly, that no stage in the process was left to the care of the memory, but I seemed to have the whole in intuition before me at the same time. (Descartes 1990, p. 232)

From this and similar passages it may seem that Descartes is talking about the same activity of thinking as Steiner, and in terms which do not point beyond a normal state of consciousness. However, there are indications that

even Descartes did not regard the thinking needed for the fruitful conduction of science as part of the ordinary state of mind. Speaking about the necessity to "remain a long time in contemplation" of known facts "until we are accustomed to behold the truth clearly and distinctly" (ibid., p. 236), he remarks that "the mind can be made much more expert at such work *by art and exercise*" (p. 237; italics mine). He also said we must search for all possible means by which "our thought may be kept attentive" (p. 239). Hence, even Descartes is pointing to the necessity of mental exercises in order to reach a more attentive, less ordinary state of consciousness, in which the activity of thinking may be followed with deeper awareness. But what then about the following statement of Descartes, from the so called *Second replies*:

> But it must be noted that, although *we are always aware of the acts or operations of our minds*, we are not always aware of the mind's faculties or powers, except potentially. By this I mean that *when we concentrate on employing one of our faculties*, then immediately, if the faculty in question resides in our mind, *we become actually aware of it*, and hence we may deny that it is in the mind if we are not capable of becoming aware of it. (Descartes 1996, pp. 74–75; italics mine)

This is part of Descartes' reply to the objection that there can be things in the mind of which we are not aware, contrary to what Descartes has claimed to be the case, in so far as we are "thinking things". The claim that we are always aware of the "acts and operations" of the mind seems to imply that we are actually aware of our thinking activity in a way which Steiner denies is the case in the everyday state of mind. However, I contend that it is more reasonable to interpret Descartes as saying that we can be aware *that* we are thinking, which is very different from consciously *entering into* the activity of thinking as such. Even the statement that "when we concentrate on employing one of our faculties [. . .] we become actually aware of it" is most reasonably interpreted in the same way. It is similar to the simplest movement of our limbs: I can be aware, even completely conscious, of my *intention* to grasp the glass of wine, and I can immediately experience the fact that my hand *is* grasping the glass, but what really happens *between* my intention and my hand grasping the glass – that remains in darkness, like in sleep.

Polanyi's (1983) distinction between *focal* and *subsidiary* awareness can help clarify this issue. Whereas focal awareness is fully conscious, subsidiary awareness has different degrees of consciousness, being more or less "ineffable" (ibid., p. 92f). The ineffable is that which I know of but cannot describe clearly in words. Hence, I know of course that my thinking is a process, I know *that* I think. It is part of my subsidiary awareness. But to actually enter with focal awareness or full consciousness into what happens between two or more thoughts requires a concentration which rarely (if ever) occurs in our everyday state of mind.

On the basis of these arguments it seems plausible to accept that we cannot enter the active thinking process in full consciousness within our ordinary frame of mind. For Steiner, this also has to do with the difference between the faculties of thought and will. The *activity of* thinking is the *will* in thinking, which in ordinary consciousness remains in a subconscious, dreaming state, while the waking consciousness is focused on the thoughts produced (the representations or *phantasms*) (Steiner 1983). However, even in ordinary consciousness one may realize that this subconscious activity must be independent of the brain, since otherwise "the laws of logic and of physiology must be the same" (ibid., p. 133; translation mine). I will return to the question of the relation between thinking and the brain below.

However, Steiner claims that it is possible to attain levels of intensified awareness, in which the thinking activity itself becomes a fully conscious and living experience. Steiner (1998) calls this state of consciousness an "exceptional state". This state can be described as an experience of *thinking* observing itself coming into *being*. How can this state be achieved? Steiner's answer is relatively straightforward: the precondition to achieving the consciousness of the activity of thinking is a form of meditation exercise:

> In the ordinary consciousness it is not the thinking itself which is experienced, but through the thinking, that which is thought. Now there is a work of the soul which gradually leads one to live not in the objects of thought, but in the activity of thinking itself. (Steiner 1984, p. 161; translation mine)

This is not the place to go into explicit descriptions of the meditative exercises Steiner refers to as "work of the soul" (for more about these, see Steiner 1992a). However, even in hinting at such things today, one takes the risk of being relegated to the "esoteric" or "New Age" bandwagon. It is therefore important to stress that for Steiner meditation has nothing to do with attempting to achieve some kind of inner bliss or Nirvana. It is meant to cultivate certain forces of the soul with a degree of precision and discipline akin to mathematical reasoning, strengthening these forces to the point where the conscious experience actually becomes independent of its physical instrument, the brain.

Steiner's Spiritualism and Brain Research

Brain research has gone through intense developments during latter decades. On the basis of results of this research, scientific or reductive materialism has found new reasons for propounding its views of the human being (Farah and Murphy 2009). Materialist reductionism seeks the causes of thinking and consciousness in the physical organ of the brain (cf. Horgan 1999; Schouten and Looren de Jong 2007; Warner and Szuba 1994). Heidegger

does not explicitly address the possibility that thinking is "nothing but" a neurophysiologic brain process, and it seems difficult to use his philosophy as a direct argument against the claims of reductive materialism. Steiner, in contrast, argues explicitly against materialist ontology while at the same time acknowledging the results and possible usefulness of neurophysiologic research. Steiner never denied the dependence of consciousness and ordinary mental processes on the brain.[8] However, he interpreted it differently from reductive materialism. He often resorted to the metaphor of the mirror to illustrate the nature of this dependence. As it is necessary for each one of us to have a mirror in front of us in order to be able to perceive our face, so it is necessary for consciousness to have the "mirroring apparatus" of the brain in order to become aware of itself (cf. Steiner 1984, p. 156f). Where such a "mirror" is lacking, or damaged, consciousness cannot arise, or it arises in a deficient way.

This interpretation is easy to harmonize with known empirical facts pointing to the loss of mental functions as a result of brain injury. While reductive materialists imagine seeing in such facts a confirmation of the thesis that the brain produces consciousness, Steiner sees in them evidence of the fact that the brain acts as a kind of mirror for consciousness. However, this mirror is not a fixed one, it is living and changing, and Steiner emphasizes that *each act of consciousness requires a kind of preparation of a specific area of the brain to become the mirroring apparatus of the mental act*. The spiritual activity of thinking "pushes back" the human brain organisation and so to say replaces it (Steiner 1991a).

Since thinking needs to prepare the brain as a mirror in order to become aware of itself there is a certain dependence of thinking (and other acts of consciousness) on neurophysiologic processes in specific areas of the brain. As the colours of the sunrise appears on the eastern skies *before* the sun itself is seen rising, and yet are *caused* by the sun, so neuronal processes are a kind of colour play evoked by thinking on the clouds of the brain in preparation for the "sunrise" of the conscious manifestation of thought. The appearance of neuronal processes signals that the mirror of thought is being forged in the brain by the thinking spirit.

> Human thinking appears to the ordinary experience only in and through the [human body and soul] organisation. [However, this organisation] does not influence the essence of thinking, but *it steps back* when the activity of thinking enfolds itself: it suspends its own activity, it makes the space free; and in this free space there enters the activity of thinking. It is incumbent upon the essential element which works in thinking to achieve two objectives: firstly, *to push back the activity of the human organisation*, and secondly to set itself in its place. (Steiner 1998, p. 147; translation and italics mine)

This also explains the temporal delay between the onset of neuronal processes and the actual conscious experience related to them, as demonstrated by the

seminal experiments of Benjamin Libet conducted in the 1980's, and a number of follow-up experiments of the same kind.[9] These experiments are often interpreted as demonstrating beyond all doubt that brain processes causes mental phenomena, for the simple and obvious reason that such processes *come first*, and are *followed* by conscious experiences. However, this was not the conclusion that Libet himself drew, and there are some unreflected presumptions behind such a conclusion. For instance, the simple example of the relation between the sun and the colours appearing on the sky before it arises illustrates that in our experience a cause does not necessarily precede its effect. If Steiner is right (and there is as yet no proof that he is not), the neuronal processes preceding the conscious experience are caused by thinking, which prepares the brain to "mirror" the thought and making it conscious; just like the sun announces itself through the colours on the sky before its actual appearance.[10]

The purpose of meditation exercises described by Steiner (1992a) is, as mentioned above, to strengthen the soul forces in such a way that one becomes able to maintain consciousness independently of the "mirroring apparatus" of the brain. As soon as one is able to do that, a direct insight into the reality of thinking as a spiritual activity is possible. One may also gradually come to realize the reality of the spiritual world in which we are immersed at every moment of our lives, but which remains imperceptible to our ordinary sense organs.

A Meditative Interlude

In order to come to a more immediate experience of what I am trying to convey in this paper, the reader is encouraged to meditate silently on the following sentence for a few minutes: *Thinking cannot be explained by anything external to itself because it is always thinking that does the explaining.*

This sentence is designed so that its noetic content points towards the thinking which produces it. (The statement is also in agreement with Steiner's philosophy.) Through meditation on such a sentence one may come to experience the difference between *thought* as the noetic content of any thinking process, and *thinking* as the mental activity which "produces", "constitutes" or "constructs" this content. *Thought* may partly be explained by external factors, since the noetic content almost always is about something external to thinking itself, and this "aboutness", that thinking always has an object external to itself, must somehow reflect itself in the thought. However, *thinking* cannot be explained by external factors. The thinking activity can only be explained by itself, that is, by thinking. Meditation, or an "inner work of the soul", is needed in order to have a fully conscious *experience* of thinking (not thought). If on the basis of such experiences one asks what it means to explain thinking, one will *see* that thinking cannot be explained by

something external to itself. A non-thinking object or process – of a biochemical or neurophysiologic nature – cannot be the *cause* of thinking, something from which or out of which thinking activity would arise or emerge as an *effect* (or with which it would be identical, as in reductive materialism). All such explanations are actually the *results* of thinking activity; they cannot themselves be explained by anything else.

Steiner (1983, p. 137) refers to the German philosopher Gideon Spicker, who pointed out that whatever philosophy one holds for true, there is one unavoidable but improvable presupposition common to all: *the necessity of thinking*. No philosophical investigation, however sharp and deep, can go beyond this supposition. It must be unconditionally accepted and it cannot be proved, because all proof already takes it for granted. Behind or below this supposition, says Spicker, a bottomless abyss opens up, an infinite darkness which no light can penetrate. However, Steiner contends, this is so only for the kind of thinking which is bound to rational or logical understanding (*verstandesmässige Denken*). In meditative or living thinking (*erlebtes Denken*) this bottomless abyss of infinite darkness gradually lightens up and reveals itself as a spiritual world. Naturally, the light referred to here is not the light of reason; it is rather like the *radiance* that Heidegger describes as related to thinking "becoming explicitly aware of the opening [*Lichtung*]" (quoted above). This radiance appears when thinking becomes aware of itself as activity, when it becomes a living experience.

Bringing Heidegger and Steiner together in an attempt to yet again understand the nature of thinking, I would suggest the following. The activity of thinking brings forth the noetic content of thought. Thinking "listens" to the appropriateness of the noetic content, as compared to the original *intent* of that which is to be thought (the question, the issue at hand). That which (still) is to be thought is actually an aspect of thinking which is *ahead of itself*.[11] Genuine thinking is a self-transcendence, in so far as the self is constituted in and by thinking. It is taking part of a cosmic world process.

Pedagogies for Thinking

After these admittedly somewhat sketchy descriptions of the nature of thinking, I now turn to the educational and pedagogical aspects of this issue. To start with, it is interesting to note that both Heidegger and Steiner understood thinking to be an activity expressing itself in many forms, not only in the kind of sublime meditations hinted at in the previous sections. Here it is worth quoting Heidegger at length:

> We are trying to learn thinking. Perhaps thinking, too, is just something like building a cabinet. At any rate, it is a craft, a 'handicraft', and therefore has a special relation to the hand. [. . .]

> But the craft of the hand is richer than we commonly imagine. The hand does not only grasp and catch, or push and pull. The hand reaches and extends, receives and welcomes – and not just things: the hand extends itself and receives its own welcome in the hands of others. The hand holds. The hand carries. The hand designs and signs, presumably because man is a sign. Two hands fold into one, a gesture meant to carry man into the great oneness. The hand is all this, and this is the true handicraft. [. . .] *Every motion of the hand in every one of its works carries itself through the element of thinking*, every bearing of the hand bears itself in that element. *All the work of the hand is rooted in thinking.* (1977b, pp. 356–357; italics mine)

The actions of the hand described in this quote extend from the practical work of pushing and pulling, to the social gesture of greeting and welcoming, to the spiritual gesture of prayer. And thinking is the common element in all these actions.[12] In a similar vein, Steiner pointed out that although the human soul life can be roughly differentiated into thinking, feeling, and willing, these three functions always work together, they are not separate mental compartments but intertwined processes. There is willing in thinking, thinking in willing, and feeling in-between both (will for Steiner is that which actually makes the hand move). From this it can be concluded that when we talk of thinking in the sense of Heidegger and Steiner, we do not only refer to inner activities like meditation. These activities are rather like especially intensified cultivations of that "element of thinking" which is present in all human actions. Hence, the cultivation of this "element" in all the forms in which it appears would also contribute to the development of thinking.

Furthermore, it is interesting to note that some present educational thinkers have already put forward ideas and described actions in line with the point of view presented in this paper. One example is that of Caranfa (2006), who suggests that the problem of education today is that it fails to teach the significance of silence and of listening. According to Caranfa, the present one-sided focus on "discourse" and "critical thinking" is contraproductive, because silent listening is the very source of discourse and genuine (critical) thinking:

> Our failure to teach that there is "more" to knowledge than what "we can tell" is perhaps our greatest shortcoming as educators. The problem of education is a direct result of our failure to listen, to teach silence. To be alone and to listen should have priority over discourse and critical thinking. (Caranfa 2006, p. 98)

For Heidegger genuine thinking arises as an "echo" to the silent speech of Being, heard and harkened to in the *Gelassenheit* of meditation. Silence and listening is necessary in order for us to hear this speech. They are essential aspects of any meditative practice, and they are not incompatible with

everyday school work. A practical illustration is given by Fisher (2006), who tells the story of how he used to start his lessons with a few minutes exercise in silent listening. This simple action seemed to have a positive effect on an otherwise unruly class of youngsters. The practice of "listening with the spirit" is also of use to adults, for instance in team work, as discussed by Moss and Barnes (2008) and Levine (1994). Levine, furthermore, refers to both Heidegger and Steiner.

As Caranfa hints in the quote above, it may also be necessary to cultivate a certain ability to be alone with oneself. Being alone is a first step towards being "all-one". It opens up a space in which thinking can deepen and the echo of Being's word can be heard. Nietzsche at one point complained:

> I have gradually seen the light as to the most universal deficiency in our kind of cultivation and education: no one learns, no one strives after, no one teaches – *the endurance of solitude*. (1997, p. 188)

Being a highly creative thinker, Nietzsche had probably some personal experiences in this direction.[13] However, if Steiner's interpretation of the nature of thinking as a *spiritual* activity in the most concrete and radical sense of this word is true, children's development of thinking may have deeper roots than what is normally considered. It may be that the materialistic understanding of life predominant in contemporary cultural life is an obstacle to this development. If we educate in a frame of mind which reduces the thinking activity of human beings to a product of their brains, we may in fact be undermining the development of thinking. Thus the question of the appropriate cultivation of thinking ceases to be merely a question of appropriate methods; it becomes a question of the epistemological and ontological frameworks for educational practice. This question goes very deep. In certain ways science wields a great power in contemporary (Western) culture, actually comparable to that of the church in medieval times (cf. Wilson 1994). Yet the heated conflicts between Darwin and the Bible have perhaps been merely a prelude: as Goldston (2008) notes, the two fields of genetics and neuroscience are presently "verging on drawing the ultimate materialist picture of human nature – humans as nothing more than proteins and electrical impulses" (p. 17). It is here that the spiritual science of Rudolf Steiner offers an alternative interpretation of the world, which in its research methods actually fulfils the requirements of the stringency of science (Majorek 2002), and yet persistently rejects the materialistic *interpretations* of the results of modern scientific research.

It is well known that Rudolf Steiner founded an "educational system" known today under the label "Steiner Waldorf" or "Steiner" schools.[14] In his educational ideas he paid much attention to the question of the right development of thinking. Steiner's non-materialistic, spiritual framework is of course one of the cornerstones of his pedagogical ideas. Apart from a general

atmosphere conducive to the cultivation of spiritual life Steiner also introduced a number of specific educational procedures which may contribute to the development of thinking skills. Even though the conscious cultivation of the inner meditative activity described above, leading to the insight into the reality of thinking as a spiritual activity, properly belongs to adult life it was Steiner's conviction that it can and even needs to be prepared for in childhood through proper education (cf. Oberski 2006). The following are some concrete examples.

In the lower classes of a Steiner school pupils are taught so-called Form Drawing which consists in drawing sometimes very complex colourful patterns which are first drawn on the blackboard by the teacher. In the painting lessons of the lower classes the medium used are water-colours with the emphasis on the free play of colour rather than fixed form. Both of these aesthetic activities seem to be conducive to freeing children from excessive dependence on fixed patterns and forms, preparing them instead for dealing with the flowing and extremely complex reality characteristic of living beings.

The general emphasis given to the arts, and especially to music, in Steiner schools seems also to enhance the ability to "listen to the world", rather than impose oneself onto it, which is – as pointed out above – a necessary prerequisite of developing thinking in the deeper sense discussed in this paper. A specifically Steiner school art form is the art of movement called Eurhythmy, inaugurated by Steiner in 1911 as a performing art, and later adapted for school use (Steiner and Usher 2007). Eurhythmy combines a very precise "vocabulary" or "alphabet" of gestures and movements for specific sounds as well as for musical tones and intervals, with a practically unlimited scope for individual creativity and expression in interpreting poems or music, thus laying foundations for a kind of instinctive, sensorimotoric understanding of regularity and lawfulness in the flow of life.[15]

Another aspect of Steiner education which seems to be conducive to living thinking is Steiner's repeated insistence on the need for *characterisation* rather than definition when introducing new concepts. He also emphasised the importance of keeping concepts "pliable", so that they can "grow" together with the children. If a definition is given at the start of the learning process, thinking is in a way already fixed and limited by the definition. Steiner compares it to putting "ice-gloves" on the hands of the child, as if freezing the forces of thinking (Steiner 1991b). He describes this need for characterisation and "living concepts" in his first course for the future teachers of the first Steiner school in Stuttgart in 1919 (Steiner 1992b, pp. 133–145, especially p. 139f). He stresses that one comes to an adequate understanding of phenomena not through fixing one's ideas about it early in the cognitive process by means of a definition, but by considering various aspects of a phenomenon from as many points of view as possible, and coming to a riper grasp of it only at the end of such a process.

Finally, one further element of Steiner education which should be mentioned in the present context is the methodical principle used in teaching natural science. This consists in starting the teaching about any natural phenomenon with pure *observations*, for instance of an experiment such as the refraction of light in passing a prism, consciously holding back any theorizing about it. This is followed by as careful as possible *reconstructing* or *recollecting* the observed phenomena without them being physically present, followed by – on the following day – the *conceptualization* of that which was observed (Steiner 1986, pp. 46–48). Attentive dwelling on the observations of the senses enhances the potential of immediate experience to break through the armour of preformed conceptions or ready-made thoughts. The recollection of the observations made earlier stimulates penetration of what was experienced by active thinking (Schieren 2008). This approach is a good exercise in the discipline of allowing phenomena to speak for themselves, rather than imposing a network of pre-established concepts on them (cf. Dahlin 2001). It allows the children's judgement to mature without "jumping to conclusions". It teaches open-mindedness, flexibility, truthfulness, and exactitude in dealing with phenomena of nature. It also takes advantage of the beneficial influence of sleep on the learning process, an influence which was repeatedly stressed by Steiner and which has recently been confirmed by neurobiologists in a number of studies (Hairston and Knight 2004; Huber et al. 2004; Yoo et al. 2007).

Conclusion

The question of "what is thinking" is of basic significance to education as well as to philosophy. In this paper I have argued for a spiritualistic understanding of thinking, drawing upon Steiner and Heidegger. I have also pointed to some consequences that such an understanding of thinking could have for pedagogy and education. The first step, however, must be for *us*, teachers and researchers, to realise the necessity of learning to think *ourselves*. In this connection it is worthwhile noting a growing interest, at least in the USA, to apply contemplative practices in education, for teachers as well as for students.[16] In 2006, *Teachers College Record* even devoted a whole issue to the theme of contemplation in education. In one of the papers, (Zajonc 2006, p. 1756) points out that the academy "has nothing to fear from contemplative inquiry" because such inquiry is "in some measure already part of a covert curriculum that educates for discovery, creativity, and social conscience". (However, the extent of this "covert curriculum" probably varies a lot between subjects and disciplines.)

Contemplative practice is a way to learn to think, that is, to learn to *live consciously* in the *activity* of thinking, not only in thoughts. This leads to

openness to Being, overcoming the forgetfulness of Being that Heidegger lamented. On a more profane level, it probably also leads to more clear and exact thoughts, but not necessarily more clever ones.

Notes

1. The German title of the work is *Was heisst Denken*, translated as either "What calls for thinking?" (Heidegger 1977b) or "What is called thinking?" (Heidegger 1968).
2. Kurzweil is a successful developer of various forms of Artificial Intelligence, such as optical character recognition; see http://www.kurzweilai.net/index.html?flash=1 (Accessed 09/03/2009). For a more elaborate critique of Kurzweil's transhumanist ideas, see Radovan (2007).
3. Wood (2002) elaborates Heidegger's notion of calculative thinking as "the subordination of the world and one's intercourse with the world to determination, whether it be linguistic, aesthetic or economic, so that in a real sense, our relation to it becomes a project" (p. 16). According to Castoriadis, the thinking of Being "cancelled itself out as soon as it became the thinking of determination" (1997b, p. 295). When determinative thinking becomes more important than existential ontology, meditative thinking cannot maintain itself. In contrast, meditative thinking could be defined as an attentive waiting and listening for things and beings to reveal their nature by themselves. Thinking then does not speak merely out of itself, but lends its voice to the Being of beings.
4. This disgrace appears in another light if one considers the great but largely hidden impact of mystical and esoteric traditions on Western philosophy, especially in Germany; see for instance Magee (2001) and Benz (1983).
5. Steiner proposed that his main philosophical work, *Der Philosophie der Freiheit*, would be best translated into English as *The philosophy of spiritual activity*. Steiner's approach in this work is basically phenomenological and largely focused on the experience of thinking. The concepts of spirituality, spiritual, or spirit are admittedly difficult to define in a clear and incontestable manner. Steiner himself never makes a *definition* of spirituality in so many words, preferring instead to describe and characterize. If pressed for a definition, I would say that the spirit is that which is active and productive in the processes of thinking, feeling, perceiving and willing. Spirituality has to do with the states of consciousness accompanying these processes. However, this definition says nothing about the spiritual forces in nature or the cosmos, which for Steiner are equally important aspects of spirituality. It would be interesting to compare Steiner's notions of spirituality with those expressed by present day educational thinkers, for instance Bainbridge (2000), Miller (2006), and Noddings (2008), to name but a few.
6. See Graber (2007) for an interesting comparison between this insight of Steiner and the constructivist epistemology of Niklas Luhmann.
7. It may be argued that the parallels pointed out between Heidegger and mystical or contemplative traditions implies that he also realized that we have to go beyond our everyday state of mind to come to genuine thinking. However, Heidegger did not explicitly emphasize this in his philosophical texts; it is *others* who have pointed to the similarities. Whereas for Steiner the idea of higher or deeper states of consciousness is central to all his philosophical work, for Heidegger it seems to have a more peripheral and contingent significance. As Caputo (1986) points out, Heidegger was not a mystic but there are mystical elements in his philosophy.

8. There is of course no contradiction in principle between brain research and a spiritualistic understanding of the human being, or of mental processes. See for instance Austin's (1998) impressive study of the neurophysiologic aspects of Zen meditation. However, there seems to be a need to uncover and develop other paradigms of brain research than that of scientific materialism.
9. The paradigm of these experiments was described in Libet et al. (1982). A good collection of Libet's papers can be found in Libet (1993).
10. I am indebted to Marek Majorek for this argument; see Majorek (2008) for a more complete refutation of materialistic reductionism in brain research.
11. I cannot resist to refer here also to Merleau-Ponty (1992), who in his phenomenological reflections on the *cogito* of Descartes claims that thought must be understood "in terms of that strange power which it possesses of *being ahead of itself*, of launching itself and being at home everywhere, in a word, in terms of its *autonomy*" (p. 371; italics mine). This insight can be reformulated by saying that the normally hidden from-view *thinking activity* is that aspect of human mentation which is always "ahead of *thought*, i.e., the consciously held idea, notion or representation. Hence Merleau-Ponty can somewhat paradoxically maintain that "thought itself [. . .] puts[s] into things what it subsequently finds in them" (ibid., p. 371). Furthermore, Merleau-Ponty brings out the relation between thinking and being when he says: "What I discover and recognize through the cogito [. . .] is the deep-seated movement of *transcendence* which is my very being, the simultaneous contact with my own being and with the world's being" (ibid., p. 377; italics mine).
12. Heidegger's philosophical poetics about the hand has recently been (at least partly) illustrated empirically; see Broaders et al. (2007) who report a study showing that encouraging children to make hand gestures while solving mathematical problems brings out their implicit knowledge and facilitates new learning. See also Goldin-Meadow (2005).
13. Steiner actually wrote a very appreciative book on Nietzsche's philosophy (Steiner 1985).
14. Steiner himself did not like to use the term "system" about his educational ideas, probably because it has a dead and static character. His ideas are rather like a living, organic whole.
15. Cf. footnote 12 above.
16. Cf. http://www.mindfuleducation.org/.

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8

Rousseau on Learning: A Re-Evaluation

Christopher Winch

Introduction

This article examines Jean-Jacques Rousseau's theory of learning and assesses its strengths and weaknesses. The theory is an integral part of the account of education developed in *Emile*.[1] Not only is *Emile* a work of sustained literary brilliance but it is rigorously worked out from its own premises.[2] It also prefigures some of the insights in epistemology and the philosophy of mind that are attributed to Ludwig Wittgenstein. Any attempt to deal with the theory of learning that it sets out needs to engage closely with the fundamental ideas of the book and how they hang together, before criticism can be effective.

Rousseau's positive contribution to philosophical and psychological thinking about learning can be described as follows. Human beings are not disembodied intelligences but embodied creatures who are part of the natural world. The thrust of Rousseau's educational program and, by implication, of his epistemology, is to take individuals as whole, organic beings, part of the natural order of things and to develop them in more than narrowly intellectual ways.[3] This remains the case despite the empiricist character of his description of the genesis of ideas and of their use (*Emile*, pp. 32, 340).[4]

Rousseau does not take the view that human beings are best seen as essentially solitary individuals, but the idea of human society that he develops as the proper medium for mutual association and self-expression, does not allow him to give either a satisfactory account of human learning or of the nature of social relations. His unwillingness to see that a normative order

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is constitutive of *all* social relations of the human type runs through his writing and keeps him from appreciating the importance and indeed, the *necessity* of normative intervention in upbringing from the earliest stages of life.[5]

Finally, there is the developmentalist heritage of Rousseau. This arises from his view of the human condition as one of growth, maturity, and decay. Although this is a valuable insight, it also contains dangers. These arise from two sources, both of which can found within Rousseau's thinking. The first is the contention that the sole, or at least the main source of motivation and hence of motivation to learn, is to be found primarily within individual human beings, rather than within human beings in the context of their social surroundings. The second is the idea of readiness, that certain things cannot be learned until the child is at the stage at which it is capable of learning them. The account of readiness poses a danger of over-dogmatic thinking about what children can or cannot learn at any particular stage of their lives which may lead to a systematic underestimate of their capacities.[6]

Rousseau's Epistemology

At a superficial glance, Rousseau's account of learning is quite similar to that of John Locke. Like Locke, Rousseau starts with *sensation* as the source of human knowledge. The role of the mind in receiving sensations is passive. However, Rousseau asserts, unlike Locke and David Hume, that what the mind does with sensations is a kind of activity, namely that of judgment, whose way of working is partly constitutive of our character. For example, Locke writes; "By *Reflection* then . . . I would be understood to mean that notice which the mind takes of its own operations, and the manner of them, by reason whereof there come to be *ideas* of these operations in the understanding."[7] Compare the Lockean account with that offered by Rousseau.

> At first our pupil had merely sensations, now he has ideas; he could only feel, now he reasons. For from the comparison of many successive and simultaneous sensations and the judgment arrived at with regard to them, there springs a mixed or complex sensation which I call an idea (*Emile*, p. 165).

Notice that it is the *pupil*, not his *mind*, that judges. Rousseau has little patience with the idea that the starting point for understanding the human intellect is to conceive of it as a disembodied spirit and he explicitly criticizes Locke for taking this view (*Emile*, pp. 218–219). It is far less clear, however, that Rousseau made a complete break with mentalistic individualism regarding personal identity and the possibility of disembodied existence after death (*Emile*, pp. 246–247). Be that as it may, he does not regard the human mind as fully formed from birth, either through the possession of innate ideas or through being a *tabula rasa* ready to receive ideas. For Descartes

and the Empiricists, the mind has a structure which is complete from birth, waiting only for the particular experiences that the individual chances to undergo. In Rousseau's account, minds undergo changes which are directly related to maturation and to our experiences of the natural world and of other human beings. Furthermore, the way in which we judge is partly constitutive of our characters and, by implication, ways of judging can be learned (*Emile*, 165–166).

Although sensation is passive, *judgment* is a type of activity which we can perform more or less well and which, by implication, we can learn to do better. Our manner of judgment is partly constitutive of the kinds of people we are; poor judgment in one respect tells others that we are false, in another respect it tells people that we are superficial. On the other hand, we can be judged to have solidity of character by the quality of our judgments. We are not born with this ability to form judgments, according to Rousseau; it develops at an appropriate stage in human growth.

This seems to imply that the character and quality of human judgment is capable of developing for the better under the *tutelage* of other people. Our powers of judgment, one might think, can be shaped so as to promote thoroughness and exactitude and their corresponding personal qualities. It would be natural to think of the authoritative teacher as the person to cultivate judgment and character through explicit direction. However, Rousseau does not take this line, but insists instead on the generally baleful influence of society and of others on the formation of a young person's judgment.

There are problems with the epistemology. For example, the contention that perception is largely a passive reception of sensation is a great oversimplification. Since the work of Ludwig Wittgenstein, the complexity of the relationship between sensation, judgment, and perception has just begun to be appreciated.[8] However, Rousseau is aware of the fact that judgment has a role to play in perception in his discussion of whether or not it is the clouds or the moon that are moving or whether or not a stick half-immersed in water is straight.

Not only is judgment involved in perception, but it can be either active or passive. Much of the judgment involved in our perceptions is passive: for example, that *this* is what we perceive. We cannot be misled about our sensations and so our judgments about these cannot be mistaken. We can, however, be in error about *what* we perceive through sensation, and in making judgments of this kind we are active and can get it right or fail to do so. For example, if I have never eaten ice cream before and the immediate sensation on doing so for the first time is one of discomfort, then my judgment that this sensation is uncomfortable is immediate and automatic: I do not do anything to make it and I cannot be mistaken about what it is that I am judging. Indeed, it could be said that my sensation and my judgment are only separable with some difficulty. On the other hand, if I cry out that the ice cream is burning me, I have made a mistaken judgment about what the ice

cream is doing to me. My perception that the ice cream is burning me is based on an uncomfortable sensation (which involves passive judgment) and an active judgment that this sensation is the same in character to others that I have had which have been uncomfortable and which have harmed me. In this case I have proceeded wrongly from an induction that past discomforts of a like kind were caused by heat, therefore so is this one (*Emile*, p. 166). In this instance, I have failed to learn through my inappropriate use of past experience. The implication is that I will be able to make correct judgments through more accurate reflection on an increasingly wide range of experience. It would, again, in conventional pedagogic practice, be natural to think that the authoritative teacher could make good the deficiency in judgment through instruction, but Rousseau will have none of this.

Nature

Rousseau is thought of as the philosopher who extolled the state of nature as the condition in which men flourished best and which best expressed their species nature. This view is at best an oversimplification, at worst, seriously misleading. Was it his view that human beings should live as solitaries, coming together only for purposes of reproduction or for other operations absolutely necessary for human survival? This does not seem to be the case, since Rousseau sees the capacity for social intercourse as an important part of personhood. The ability to use language to communicate with others is a significant constituent of that capacity. Rousseau shows himself to be well aware of the socially constituted nature of language learning.[9]

Therefore, some form of social existence appears to be part of man's natural being; it is, one might say, part of the human species' nature to interact and communicate with other human beings. But if we accept this interpretation of what Rousseau meant, then we have to deal with an apparent paradox. The contrast between "natural" and "social" implies that there is a specific difference between these two states. This in turn leads us to the idea that the specific difference lies in what is distinctive about social as opposed to natural relations. We know that this cannot imply that man is naturally solitary and we know that Rousseau meant both more and less than that he was merely gregarious by nature. Less, because he was quite prepared to allow solitary existence for large periods as a normal mode of existence for man. More, because in association with other men, there is far greater scope for relationships through a shared language and culture than is possible for other species.

But if this is so, then what sense can we attach to the notion that there is a natural state of human existence and that man finds his best expression in this natural state, whereas he stands in danger of corruption through entering into social relations? The answer is that Rousseau sees certain forms of social relations to be inimical to the proper development of human

nature and that these relations can develop within the bosom of unavoidable and beneficial forms of human association. Such an interpretation allows us to see Rousseau as a consistent and logical thinker and this view is supported by a detailed examination of *Emile* and the *Discourse on Inequality*.[10] Rousseau appears to have believed that social association is natural when it does not involve the overt imposition of one human will upon another. The idea is that natural association is based on reciprocally free and equal respect between people.

This conception of the natural is allied with the more conventional notion of natural as meaning "part of the natural order," in the sense of being part of our biological destiny. These two conceptions are not mutually contradictory. We all have impulses or passions which derive from our biological destiny; within the social frameworks which we construct, our response to this biological destiny can take two forms. The first form is beneficial and "natural" in the first sense, namely it involves intercourse between humans based on the non-imposition of one will on another. Explicit denial of someone's need on the part of someone who is capable of fulfilling that need would be an example of the invidious imposition of one will upon another and hence of an "unnatural" form of association. Likewise, the overt imposition of will on the part of someone who does not have a genuine need is also unnatural; for example, if I ask someone to do something for me merely for the sake of it. The claim that "natural" excludes "social" or that "natural" merely means "benign form of social association" will not, therefore, stand up to scrutiny. Neither will the idea that these two notions of natural are mutually contradictory; what is natural for humans is both what arises from biological destiny and what is beneficial for their flourishing in human relationships. The relationships themselves are founded on our need to satisfy the passions that arise from biological destiny.[11] It should be noted, however, that he does not consider that the overt imposition of one will upon another *could be beneficial* and hence natural in his sense in precisely those situations in which it was done, not to gratify a sense of power or domination, but in order to further the interests of the individual imposed upon. Rousseau's failure to see that this could happen in a non-corrupting way is one of the major obstacles to accepting his account of learning or, indeed, of teaching.

We need to know why beneficial situations so rarely obtain and how the original (as Rousseau claims) natural state of association could so easily degenerate into the kinds of inimical and limiting forms that are everywhere so prevalent. The question is the more pressing as the very prevalence of "unnatural" forms of association suggests that they arise from deep-rooted tendencies within human nature, not from rare circumstances. Although Rousseau's account of how these forms of association can arise is subtle and detailed, it does not properly meet the criticism made, namely that the invidious forms of association appear to arise as a prevalent human tendency whenever men form social institutions.

On Rousseau's own account, the urge to dominate and to subjugate, although unnatural (in the sense that it does not arise from the need to fulfill our biological destiny) can appear at the earliest stages of human life (*Emile*, pp. 33, 36). Unless the needs of a baby are carefully managed, therefore, the tendency to dominate will appear at a very early stage in life. So also will the suspicion and fear that arises from the frustration of the infant's will. The baby's impotence leads to its vulnerability and to the rebuffing of its nascent will. Here again, in another striking passage, one can find the sources of paranoid resentment of others which, according to Rousseau, are unnatural, seemingly arising in the most everyday of human circumstances for example in the smacking of a crying baby (*Emile*, pp. 33, 36).[12]

In this situation, the persistent crier feels the *injustice* of being smacked and all his rage and resentment arises from this. According to Rousseau, this imposition of the will by the nurse is an expression of injustice. From this kind of situation arises the suspicion, resentment, and desire to overcompensate for real and imagined wrongs that is characteristic of inflamed *amour propre*. There is a clear implication in what Rousseau says that it is the overt imposition of will which causes the resentment because doing *this* is unjust and it is the perception of actions like this being done to oneself that lead to social and psychological ills (*Emile*, p. 33).[13] But if this is so, such situations are a virtually inevitable part of everyday life. The natural response according to Rousseau, namely to ignore the crying baby, is in fact a highly unnatural one for many people. A large proportion of adults placed in such a situation with a crying baby will react either with resentment, as does the nurse in Rousseau's own example, or with comfort. This latter reaction as we have already noted, is also likely to lead to inflated *amour propre* in certain very common circumstances. Since both these reactions are, in a sense "natural," that is they are part of the normal spectrum of human responses when confronted with this kind of distressing behavior, the kind of response or lack of response that Rousseau suggests is appropriate to develop natural forms of human relationship is not only atypical, it would have to be *cultivated* in most people, since it would go against their "animal" reactions to the situation. One would have to walk a moral and emotional tightrope in order to promote the kinds of reaction that Rousseau considers to be conducive to the development of natural (in his sense) relationships between people. Indeed, the strategy of the tutor in *Emile* is precisely to walk such a tightrope. But an important question is begged; namely why are the common reactions of resentment and comfort that we exhibit towards infants not "natural" in *his* sense? That is, why do they not arise *both* from our biological nature *and* be such as to promote human flourishing? We are given no good reason to suppose that they could only arise from a gratuitous urge to dominate.

One might consider the example above to be one of marginal importance, but Rousseau certainly did not. He writes of the relationship between baby

and carer: "These tears which you think so little worthy of your attention, give rise to the first relation between man and his environment; here is forged the first link in the long chain of social order" (*Emile*, p. 32). Rousseau intends this to be a comment about the growth of affective awareness of other human beings and its role in promoting the distinctive psychological characteristics of individuals, which in turn affect the relationships that they form with others. Whether or not he is right about this, there is however, another point of great importance in this relationship, which is neglected by Rousseau and about which he has, in a sense, nothing to say. In these simple situations, where movements of resentment, sympathy, and encouragement towards another are made at a spontaneous and unreflective level, there arises the infant's first awareness of the normative character of social life; his later awareness of the structure of society, of individual and social morality, of religious belief and of the intellectual achievements of mankind, all stem from his primary encounter with the affective awareness that others have of him. Through these encounters, he first becomes aware of the rule-governed nature of human society and all that this implies.

Rousseau appears unable to see that our reactive behavior toward our offspring, and theirs toward us, are part of human natural history and form the foundation of the rule-governed associations that constitute human society. The "natural" reaction in his sense contains an evaluative component, namely the judgment that free and equal associations alone are beneficial. But if this is so, his conception of *natural*, although consistent, contains within it the very features of society that he wishes to recommend to us. A society without the possibility of the overt imposition of one will on another will not be a society in the sense in which this term is usually understood. Rousseau's conception of the natural in human relationships is not only implausible: if followed through, it would lead to the most artificial forms of human association.

His conception of what is natural is made less than convincing by an inability to distinguish between benign and malignant forms of the overt interaction of human wills with one another. His ideal is a co-operative one, but co-operation can only be secured through the mutual agreement of partners. However, partners can only agree with each other (as opposed to associate habitually) through a normative framework. Such a framework can only exist within the wider institution of language. Language itself involves authority as to what are correct and incorrect forms of communication and, for a young child, that authority resides in the adults closest to it and their reaction to the child's early attempts to communicate. At their earliest and most primitive, these will involve the kinds of affective response of resentment, concern or encouragement that we have followed through the examples above.

There is, as Rousseau sees, a chain on which the social order depends, which runs from the cries of the baby to the most powerful political institutions, but that chain has to have as a vital link the overt imposition of one

will on another for even the kinds of beneficial and natural association which he favors to be intelligible, let alone to flourish. These occur in what G.P. Baker and P.M.S. Hacker have called the *normative activities* that constitute rule-following behavior: correcting, approving, defining, interpreting, and teaching, for example.[14] These do not just involve the exercise of power; they rely for their effectiveness on the *authority* of whoever is teaching; that is, appropriate knowledge and skill together with a recognition on the part of society that, for example, a particular parent or caregiver is a proper person to give such instruction.[15]

It is also a conceptual chain, one that traces connections between our concepts and hence describes part of the grammar of our language. Rousseau attempts to make this chain a causal one, which operates through individual psychology. The psychological account of how this causal chain issues in a malign set of psychological attributes and an unhealthy set of social relations is done with great subtlety, but in the end lacks any clear evidential basis. The grammatical chain is formed by the way in which concepts of rule and rule-governed behavior, together with the normative reactions and practices associated with them, are implicated at every stage of human association, from the most domestic to the most public.

It can hardly be denied that there are malignant as well as benign and neutral forms of authority or of the imposition of one will upon another, but it can be denied that such phenomena are *necessarily* malignant. And of course, whether or not one finds a particular interaction malignant, will to a large extent, depend on the judgment made about the likely outcome of that interaction and, in this respect, Rousseau's evaluation is but one among others that are possible.

Amour Propre and Amour De Soi[16]

Each of us, according to Rousseau, has a sense of the importance of the preservation of his own well-being. We take care to ensure that we survive and are physically comfortable, guided by a sense of what constitutes our well-being. Not only is this a necessary feature of our lives but it is also a desirable one, allowing us and indeed motivating us to become active in the world to promote our own best interests. This tendency is called by Rousseau, *amour de soi*. *Amour de soi* is, in a sense, an animal sense of self-preservation and flourishing, which does not, of itself, involve the consideration of other human beings (*Emile*, pp. 173–175).

Amour propre, on the other hand, is *amour de soi* with a social and moral dimension, that is, it involves the standing which we have with other human beings (*Emile*, pp. 175–176). Once again, there is nothing that is inherently undesirable about our having a sense of *amour propre*. At its most fundamental, *amour propre* is nothing more than a wish to be properly recognized

as a human creature by other human creatures. Someone who is not recognized as a human, who is not capable of creating a moral space around himself which gives others pause is, to paraphrase Simone Weil, not properly human.[7]

It is tempting to regard the contrast between *amour de soi* and *amour propre* as a contrast between benign and malignant forms of self-regard. N. T. Dent, however has argued convincingly that this is a major oversimplification of Rousseau's thinking and fails to locate the proper importance of *amour propre* in human life. *Amour propre* in its healthy or natural state (and "natural" is used here in the sense intended by Rousseau), consists in a human being's desire to be recognized as a moral entity worthy of equal respect and consideration from others. As an aspect of *amour de soi*, the prime motivational factor in our lives, it is also the force that develops our dealings with the world, our satisfaction of animal needs, our relationships with others and our learning. It follows that learning will depend largely on the operation of *amour propre*, which in order to remain healthy will need to be insulated both from the tendency to make imperious demands (the subordination of others' will to one's own) and from the tendency of others to dominate one's own will.

Since most human relationships in the world as it is actually constituted will involve the imposition of will on a non-mutually agreed basis, in a way that involves conscious awareness of the person whose own will is being imposed upon, it follows that the healthy development of *amour propre*, and hence the development of learning, must proceed independently of the *overt* influence of the wills of others on the pupil or of his on other peoples'. Any other route runs the risk of producing in the pupil inflamed *amour propre*, arising from awareness of his own imperious domination on the one hand or from paranoid resentment and suspicion due to awareness of the imperious domination of another.

We have already explained how, for Rousseau, judgment is an active faculty which, in different forms, appears at an appropriate point in human development; a healthy *amour propre* will go on to ensure the proper development of judgment. The pupil will, through disinterested curiosity, develop judgment which is sound and exact rather than superficial, inaccurate, or even mad. The latter characteristics are more likely to be present in judgment when it is driven by inflamed *amour propre*, through either sullenness and resentment or through an inordinate desire to show off among other people.

These considerations do not mean that a child must be educated outside any social context whatsoever, but they do mean that his encounters with the social world must be carefully controlled so that the development of *amour propre* is not diverted into harmful channels at the same time, thus distorting the development of judgment. Rousseau gives some examples of how he thinks that this can be done in the various encounters that Emile has (for instance, with the gardener and at the fairground). In each of these

encounters, the child is learning about such things as the dangers of acquisitiveness and of pride as well as about the need to respect the *amour propre* of others. Later in the book, the development of sentiment, particularly in relation to the growth of sexual passion, is handled through the careful management of encounters with the opposite sex in the person of Sophie. During all these processes, *amour propre* is the driving force in learning, but it is also one of attributes of Emile which is itself being *covertly* shaped and guided in the right direction.

Rousseau's Developmentalism

Rousseau's own particular conception of the natural, his view of the malignant character of many social relationships, and his insistence on the active nature of judgment, have had very important consequences for our thinking about childhood, about how children learn and about how they should be educated. Equally important is his view that the human life cycle, particularly in its early stages, passes through distinct phases on the passage to adulthood. Rousseau's stage theory of development is not as comprehensive nor as rigid as the systems of later stage theorists such as Jean Piaget. Nevertheless, it contains many of the essential elements of some of those systems.

The main elements of Rousseau's account of human development consist in the following: first, a phase where knowledge is gained more or less solely through sensation; second, a phase where judgment is formed on the basis of the comparison of sensation and through induction on the basis of past judgments and past sensory experiences; third, a phase in which a cultivated awareness of others is gained. In this final phase, the exercise of reason becomes fully developed. Throughout each of these phases, motivation is provided by the individual's *amour propre*, which flourishes best when kept away from the possibility of dominating or being dominated by other wills (*Emile*, p. 130).

However, this isolation cannot continue into adulthood, particularly when the individual's awareness of and response to others is at issue. *Amour propre* should be developed in such a way that the right responses should be possible, in order that invidious relationships based on domination and submission are no longer likely to occur. Instead, *amour propre* should be extended to become a concern for others, so that, for example, in pity, the person pitying takes on the concerns of the person to be pitied and makes them his own. For this to be possible, it is necessary both that *amour propre* is developed in a healthy way and that judgment is properly developed.

The growth of concern for others is necessary for our growth as moral beings; our ability to recognize that there is a moral order, or indeed our failure to do so, or our tendency to respond to it in perverted ways, is a function of the way in which sentiments toward others have grown, in turn as a

result of the development of our own *amour propre* and our ability to reason. According to Rousseau, sentiments are a species of idea; when we are directed to think of ourselves by the impression received from the senses, rather than the object, we are talking about sentiment (*Emile*, p. 253). Judgment can work on sentiment in order to make it other-regarding as well as self-regarding; this is part of the process of growth of a healthy *amour propre*.

Thus, Rousseau's account depends on a sequence of stages whose pattern is invariant. It is teleological in the sense that there is a desired outcome which should emerge in early adulthood and the motor of development is *amour propre* (which encompasses the more animal *amour de soi*) which itself undergoes growth and development. The progression from one stage to another is invariant not just for empirical reasons. That the development is as it is, is a matter of grammar. Judgment depends on sensation as its raw material and the growth of proper sentiments towards one's fellow human beings can only arise as a result of emotional responses in which a certain maturity of judgment is implicated through experience of sentiments relating to oneself in the first instance.

There is also in Rousseau a strong emphasis on the notion of "readiness" or the idea that knowledge, skill, and understanding can only be acquired when young people are intellectually ready for them. His views on readiness are quite firm; criticizing the Catholic church for assuming that a child of seven has reached the age of reason, he writes that even the age of fifteen cannot be said to be the age of reason with complete confidence: this is not merely a matter of opinion, but of natural history (*Emile*, p. 221).

Elsewhere he asserts that one cannot reason with a child, as reason is the last faculty to develop and so cannot be used to develop itself (*Emile*, pp. 53–54). These views have very important implications for education and indeed Rousseau is not afraid to draw them out. It follows from his views about the development of reason that education must be placed on a primarily affective basis until well into adolescence. Not only should children not be exposed overtly to the wills of others, they should not be exposed to certain kinds of educational processes that will place demands on a faculty which is not yet properly developed. The educational situations in which Rousseau places Emile: the incident with the gardener, overcoming fear of the dark, the incident at the fairground, his finding his way back to Montmorency, are based primarily on an education of the emotional response; the Montmorency incident shows how Emile's use of reason will be spurred on by the desire to find his way home, rather than for any disinterested curiosity about navigational principles. The teaching of geometry, Rousseau recommends, should be based on imagination and memory rather than deduction (*Emile*, pp. 109–111). The teaching of geography should be based on affective response to natural phenomena and on the curiosity that this engenders (*Emile*, pp. 131–134). The learning situations that the tutor sets up do, however, also contain a very strong element of manipulation.

A Critique of Rousseau's Views of Learning

Despite the great strengths of Rousseau's anthropological approach to epistemology which, in some respects, prefigures the work of Wittgenstein, his views of human nature and human growth contain misconceptions. These fall under two principal headings: one concerns the rejection of the normative in human dealings and its confusion with tyranny; the other concerns the notion of development and his observation that developmental stages are based on the natural history of human beings. The two misconceptions are closely related.

We have seen how Rousseau regarded the development of a healthy *amour propre* being dependent on children and young people not being overtly subject to the wills of others. Despite Rousseau's awareness of the fact that humans are essentially social beings, his failure to draw out the consequences of this in his educational theory leads to the implausible view first, that most social encounters contain more malign than they do beneficial content, and secondly that comparative isolation is the best condition for a young person.

It is not difficult to concede to Rousseau the contention that many social encounters are malign and that this malignity arises from the vainglorious human urge to dominate other people. It is also possible to concede that these sorts of encounters have long-term baleful consequences, both for individuals and for social relations generally. It is quite another point, however, to maintain that *any* overt domination of one will by another that is not sanctioned by a prior contractual agreement is malign, and it is also speculative in the extreme to suppose that one can trace the ills of adulthood and of adult society through the bad experiences that a baby might have in being smacked for crying or for being allowed to dominate his mother. This is not to deny, of course, that adverse circumstances in a child's environment and family upbringing, particularly if these adverse circumstances result from pathological conditions in family life, may bring about the results that Rousseau describes. But his account needs to work not just for the extreme, but also for the most everyday circumstances, in order to carry conviction. And for these, Rousseau fails to produce any evidence.

The deep problem for the Rousseauan account, however, is not just the empirical implausibility of his claims but his denial that the overt imposition of one will on another has any beneficial effects. This amounts to a denial of the possibility of forming any of the social bonds that constitute a human society. It is only within the nexus of correction, encouragement, approval, and resentment that young human beings learn to become followers of societal norms. These sorts of primitive "animal" interactions form the basis of our introduction to the normativity that characterizes human society.[18] They cannot but involve the overt imposition of one will on another; this is part of what is meant by such terms as "approval," "correction" or "discouragement."

As was argued earlier, these normative practices constitute the authoritative backdrop of normative behavior; in their nature they have to be overt, otherwise the rules that they are used to prescribe would not be recognized as rules: one may learn to *follow* as opposed to *act in accordance with* a rule through training but not through conditioning. Rousseau's denial that any such exchanges can be beneficial not only excludes Emile from the possibility of growing up and learning in a society which is in any way normal, it precludes him from growing up in a society that is recognizably normative; that is, human at all. It is important to realize, however, that the tutor constantly relies on the *covert* imposition of will in order to get Emile to learn. In some ways, the tutor's pedagogic technique resembles *conditioning* rather than training or instruction.[19] It is quite plausible to suggest that a child's discovery that it was being manipulated in such a comprehensive way would be far more likely to engender paranoid resentment than most normal forms of training and instruction would ever do.

The second line of criticism of Rousseau relates to his developmentalism. According to Rousseau, it is part of our natural history not only that different emotional and intellectual capacities become available to us at different stages of our life, but that they do so at specifiable times. As a general observation about human natural history, some of these remarks are trivially true, some more interestingly so. It is trivially true, for example, that the interests and intellectual capacities of a five year old boy are likely to be different from those of an adolescent girl. It is less trivially true, but nevertheless not surprising, to learn that young children are incapable of the range of affective and emotional response to members of the opposite sex that are normal to adolescents and adults. It is actually interesting, informative and valuable to learn about the likely normal patterns of growth in physical and perceptual capacity in very young children.[20]

It is far less clear that there are patterns of development that occur in all members of the human race which fix in a predetermined and invariant way, what the pattern of perceptual, emotional, moral, and cognitive development of an individual will be and the ages at which the different aspects of these patterns will occur. In this case it is no good appealing, as Rousseau did, to human natural history. The first reason is that the occurrence and the patterning of learning is very often highly specific to individuals and to the contexts in which they are learning. The second is that cultural variation may well play a very important role in learning. The third is that Rousseau's developmental account, like those which succeed it, depends on a form of *intrinsic* rather than *extrinsic* motivation in order to account for the fact that individuals develop and learn in the way that they do. For Rousseau, the need for a source of intrinsic motivation is pressing, since he cannot include in his account any motivation that arises from the overt imposition of the wills of other human beings on Emile since these are always liable to bring about a harmful development of *amour propre*, through the engendering of resentment.

It is true that the idea of *amour de soi* has some grounding in observation of human natural history: human beings, like other animals, will seek to satisfy animal needs and to promote their own well-being without particular encouragement from others (although they may well need to learn from others in order to make these processes effective). *Amour propre* has to account for the human propensity to learn and to develop abilities, not merely in those attributes which promote 'animal' well-being, but also in those attributes which constitute the accomplishments of human society. Since Rousseau himself dismisses many of these accomplishments as nugatory, it is far from clear how *amour propre* could select the appropriate accomplishments to pursue, let alone provide the impetus to pursue them, given that, as Rousseau himself admits, the importance and worthwhileness of these particular accomplishments is a matter of value judgment which may differ from person to person. In addition, *amour propre* as he describes it is at once too fragile and too robust to constitute a plausible psychological category. Too fragile because it can so easily be damaged; too robust because it is to provide almost the sole motivation for learning.

Even if an individual were motivated in the appropriate way, it is still an enormous leap of faith to suppose that strong motivation alone could provide sufficient resources for successful learning to take place. We are, in effect, asked to believe that the knowledge and skill that the human race have accumulated is of no use to a youngster, that he must recover what is valuable from it almost entirely through his own efforts. Given that this view is a direct consequence of Rousseau's unwillingness to countenance any forms of instruction and training (for reasons which should by now be clear), the justificatory burden that the educational prescriptions place on the speculative moral psychology on which the theory rests is pretty well intolerable unless one is convinced on independent grounds of the plausibility of Rousseau's thesis.

Finally, Rousseau's own form of developmentalism leads him (like Piaget after him), to differentiate the different stages of human development very sharply and also implausibly. Certain things cannot be learned at all at certain stages; there is no point, for example, in giving children religious education as they are incapable of grasping the abstract ideas that religion expresses.[21] Rousseau appears not to subscribe to the view that one may partially grasp a concept at one stage and fully grasp it at another; learning seems to be an all-or-nothing affair (*Emile*, p. 220). Whatever his reasons for thinking this, a rule-based account of concept-formation, of the kind that Rousseau would probably reject (for reasons that should be clear), would allow for the partial formation of concepts as a consequence of a growing, but incomplete, grasp of the rules governing the use of concept words.[22]

Rousseau's account of learning is of much historical interest and arguably of great influence today. It would be rash, however, to make it or its derivatives a pillar of contemporary educational or pedagogic practice.

Notes

1. For a relatively benign overview of *Emile* from the point of view of a traditional liberal educator, see R.S. Peters, "The Paradoxes in Rousseau's Emile," in R.S. Peters, *Essays on Educators* (London: Allen and Unwin, 1981). For a recent account of the influence of Rousseau on other progressive educational thinkers, see John Darling, *Child-Centred Education and its Critics* (London: Chapman, 1994), chap. 2 and 3. All quotations from *Emile* are taken from J.J. Rousseau, *Emile ou l'education*, first published in 1762. For convenience, citations and quotations are taken from the English translation by Barbara Foxley (London: Dent, 1911). This work will be referred to as *Emile* with page numbers in the text for all subsequent citations.
2. N.J. Dent, "The Basic Principle of Emile's Education," *Journal of Philosophy of Education* 22, no. 2 (1988a): 139–50.
3. John Darling, "Rousseau as Progressive Instrumentalist," *Journal of Philosophy of Education* 27, no. 1 (1993): 27–38.
4. Rousseau does not appear to subscribe to a systematic doctrine of innate ideas. But he does appear to believe that the sentiment of justice is innate. He also appears to believe that certain capacities are innate, although manifested within a social context.
5. Rousseau does, of course, see the need for some kind of normative order, but only one that is based upon the free association of equals. But the question posed here is, "What are the conditions that would allow the free association of individuals to arise?" and answering *that* question presupposes the prior existence of a normative order.
6. For more on this, see John Darling, "Understanding and Religion in Rousseau's Emile," *British Journal of Educational Studies* 33, no. 1 (1985): 20–34.
7. John Locke, *An Essay Concerning Human Understanding*, book II, chap. 1, p. 78. (1690; reprint, London: Dent, 1961).
8. See for example, Ludwig Wittgenstein, *Remarks on Philosophical Psychology*, vol. I (Oxford: Blackwell, 1980).
9. Rousseau, *Discourse on Inequality* (London: Dent, 1913), 174–79.
10. Dent makes out a powerful case for inclining to this view, N.J. Dent, *Rousseau* (Oxford: Blackwell, 1988). The interpretation of "natural" in this section owes a great deal to Dent's discussion.
11. Ibid., 14–18 and 74–78 for a detailed discussion.
12. Contrast Wittgenstein's remark, "Anyone who listens to a child's crying and understands what he hears will know that it harbours dormant psychic forces, terrible forces different from anything commonly assumed. Profound rage, pain and lust for destruction," in Ludwig Wittgenstein, *Culture and Value*, trans. Peter Winch (Oxford: Blackwell, 1980), 2e.
13. Here Rousseau appears also to sanction the existence of an innate sense of justice in humans.
14. G.P. Baker, P.M.S. Hacker, *Wittgenstein: Rules, Grammar and Necessity* (Oxford: Blackwell, 1985), 45–47.
15. It has quite correctly been pointed out that the tutor aims for total control over his pupil, but this control is concealed and manipulative, relying for its effect on Emile's lack of awareness of how he is learning, see Eliahu Rosenow, "Rousseau's *Emile* an Anti-utopia," *British Journal of Educational Studies* XXVIII, no. 3 (1980): 212–24. Both Rosenow, "Rousseau's *Emile*," and Peters, *Paradoxes in Rousseau's Emile*, and are, however, wrong in thinking that this control constitutes authority; it is, rather, the covert employment of superior power.
16. In describing what Rousseau means by these terms, I am greatly indebted to the account developed in Dent, *Rousseau*.

17. Simone Weil, *Iliade. Poeme de Force*, cited in Peter Winch, *Simone Weil: The Just Balance* (Cambridge: Cambridge University Press, 1989), 105–6.
18. See P.F. Strawson, "Freedom and Resentment," in *Freedom and Resentment and other Essays* (London: Methuen, 1974).
19. See Rosenow, "Rousseau's *Emile*" and Christopher Winch, "Education Needs Training," *Oxford Review of Education* 21, no. 3 (1995): 315–26 for a fuller account of how this works in *Emile*.
20. See Kathy Sylva and Ingrid Lunt, *Child Development* (Oxford: Blackwell, 1982) for some examples.
21. For a fuller account of Rousseau on religious education see Darling, "Understanding and Religion."
22. For the elements of such an account, see Peter Geach, *Mental Acts* (London: Routledge, 1957).

9

Learning Democratic Reason: The Adult Education Project of Jürgen Habermas

Stephen Brookfield

It all started with Jack Mezirow. In 1981, in an article that provided the theoretical background to his earlier work on women's consciousness change, Mezirow published "A Critical Theory of Adult Learning and Education." What was surprising to many about Mezirow's 1981 article was the fact that his theory of adult learning drew heavily on the ideas of a German intellectual – Jürgen Habermas – whose work had only recently begun to appear in English. In a series of books published in the 1970s, Habermas (1970, 1971, 1973, 1975, 1979) developed a concept of democracy grounded in a theory of communication. He accepted critical theory's articulation of the extension of technocratic consciousness into everyday life then argued that a theory concerned with human liberation should replace the Marxist emphasis on how people organize and conduct modes of production with a focus on how they organize and conduct their communication. If we could understand the conditions necessary for people to participate in full, free, and equal discourse, Habermas argued, then we would have a theory – the theory of communicative action – that would guide the operation of democracy. Mezirow's 1981 article took Habermas's concern with the emancipatory dimensions of communicative action, reinterpreted emancipatory action as adult perspective transformation, and linked this to contemporary adult educational ideas of self-directed learning and andragogy. This prompted a vigorous debate between Mezirow and his interpreters and critics (see, for example, Collard & Law, 1989; Clark & Wilson, 1991; Mezirow, 1989, 1991b, 1992, 1994, 1997; Tennant, 1993).

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Mezirow subsequently broadened his ideas into a full-blown theory of adult transformative learning (1991a; Mezirow & Associates 1990, 2000) that has crossed theoretical traditions as diverse as linguistics, information processing, artificial intelligence, and cognitive development. As Mezirow develops his ever-expanding theory of transformative learning, it has fallen to others to interpret the relevance of Habermas's constantly evolving body of work for adult education. Of these interpreters Michael Welton is undoubtedly the most prominent. In a series of articles and chapters, Welton (1991, 1993, 1995, 2001) has parlayed Habermas's own convoluted, dense, endlessly hyphenated prose into a justification of adult educators' need to move beyond simplistic declarations of the importance of social transformation to "speak in more self-limiting and precise ways about the asymmetrical relationship between the system (state and work) and the lifeworld (civil society)" (Welton, 2001, p. 32). Giving up "the old Marxian dream of total change" (Welton, 2001, p. 32) is necessary in Habermas's (and Welton's) view if we are to work to achieve realistic and specific social changes in particular contexts. In Habermas's view the industrial working class is no longer the chief engine of revolutionary change, so we must locate our efforts at resistance in social movements and grassroots activism across a wide range of issues. For him this is the only realistic chance we have of preserving and extending the democratic process within civil society. Learning how to defend the lifeworld against the system and learning how to restrict the increasing influence of steering mechanisms within the public sphere (ideas to be considered later in this article) are articulated by Habermas as adult learning projects at the heart of 21st-century democracy.

Reclaiming Reason: Locating Habermas in the Critical Theory Tradition

Habermas is often described as a critical theorist, and there is no doubt that his ideas have been strongly influenced by that tradition's continuing debt to, and debate with, Marx. However, Habermas himself mentions many times that he was not formally schooled in the tradition (indeed, he belonged to the Hitler Youth in his early adolescence) and that knowledge of it came through his own self-education. In Habermas's view, the Frankfurt school never existed in Frankfurt, only in New York during the 1930s exile of the school's members (Habermas, 1985, p. 68). Undeniably, though, Habermas's own intellectual journey and his autobiography are inextricably intertwined with critical theory. He was hired as Adorno's research assistant, came to occupy the Max Horkheimer Chair in Philosophy and Sociology at the Frankfurt Institute, and could speak about his personal conversations with Marcuse just before Marcuse's death (Habermas, 1992a).

At times Habermas refers to himself as a Marxist, declaring in one breath that "today I value being considered a Marxist" (1992a, p. 82) while in the next breath cautioning that "I'm not a Marxist in the sense of believing in Marxism as a sure-fire explanation" (p. 82). For him Marxism is a useful heuristic tool for understanding the logic of capitalism's development, providing "the impetus and the analytical means to investigate the development of the relationship between democracy and capitalism" (1992a, p. 82). In Habermas's view "the fundamental question posed by Marx" is "how capitalist expansion . . . affects the structure of the life-world" (1992a, p. 91). In line with Marx, Habermas sees theorizing as having an explicitly emancipatory intent. The purpose of theorizing about society is to understand the mechanisms and relations at play so that these can be altered to give greater opportunity for people to realize their creative potential. Historical materialism – Marx's theoretical understanding of how the organization of productive forces up to capitalism has shaped social evolution – is bound up with humans' attempts to become more self-aware. It "specifies the conditions under which reflection on the history of our species by members of this species has become objectively possible" (Habermas, 1973, p. 1). The theory's purpose is to galvanize the proletariat (and those bourgeois individuals who wish to aid the revolution) by providing insight about the process of revolutionary change. It "names those to whom this theory is addressed, who then with its aid can gain enlightenment about their emancipatory role in the process of history" (Habermas, 1973, p. 2). In *Communication and the Evolution of Society* (1979), Habermas refers to historical materialism as "a theory that needs revision in many respects but whose potential for stimulation has still not been exhausted" (p. 94) and describes himself as engaged in a project to help it "attain more fully the goal it has set for itself" (p. 94) of providing guidelines for the creation of democratic socialism.

How does Habermas set about reconstructing Marxism for the contemporary era? Here the centrality of learning – particularly adult learning – clearly emerges. If a distinguishing characteristic of humans is their capacity to learn, then social science and educational theoreticians need to focus more on how adults can learn to create a more moral, just democracy. Marx's mistake (to Habermas) was that he "localized the learning process important for evolution in the dimension of objectivating thought – of technical and organizational knowledge, of instrumental and strategic action, in short, of productive forces" (Habermas, 1979, p. 98). Focusing on how people learn to organize production efficiently and exploitatively is too restrictive, given that the capacity for learning permeates all facets of adult life. In Habermas's view there are good reasons for assuming that adult learning processes "also take place in the dimension of moral insight, practical knowledge, communicative action, and the consensual regulation of action conflicts" (Habermas, 1979, p. 98). If we are to preserve and extend the democratic process we need to help adults learn how to anticipate and resolve the inevitable contradictions

and tensions of democracy. Historical materialism should be broadened, in Habermas's opinion, to explore the "learning processes that are deposited in more mature forms of social integration, in new *productive relations*, and that in turn first make possible the introduction of new productive forms" (Habermas, 1979, p. 98).

For Habermas, then, "a critical theory of society can no longer be constructed in the exclusive form of a critique of political economy" (1970, p. 120). It must broaden its concern to investigate matters of morality and communication, particularly how a democratic society might organize itself to promote the fullest and freest communication possible among its adult members. To him this is *the* adult learning project of the contemporary era. Habermas has commented that "it was always my feeling that there was no adequate theory of democracy in Marxism" (1992a, p. 188) and that "the old Frankfurt school never took bourgeois democracy very seriously" (p. 99). So one thrust of his Marxist reconstruction is to establish the creation of genuine democracy as the purpose of revolutionary change. This has led him to engage with American pragmatism, especially the work of Charles Pierce and his "radical-democratic humanism" or "logical socialism" (Habermas, 1992a, p. 189). Habermas acknowledges that he has "relied on this American version of the philosophy of praxis when the problem arises of compensating for the weaknesses of Marxism with respect to democratic theory" (1992a, p. 149) and sometimes prefaces his observations with remarks like "as a good pragmatist" (1985, p. 198).

Habermas has also incorporated aspects of liberalism into his work, thus committing the ultimate betrayal of Marxism to many on the left. Acknowledging that "my Marxist friends are not entirely unjustified in accusing me of being a radical liberal" (1992a, p. 171), Habermas views the liberal ideal of personal freedom as an important criterion to employ when judging whether or not democracy exists. To him freedom is indivisible and universal. It cannot be said to exist if any in a society are unfree: "the individual cannot be free unless all are free, and all cannot be free unless all are free in community" (1992a, p. 146). He is careful to distinguish freedom from anarchic selfishness, as in "do your own thing without regard to others." Freedom is a social relationship in which the rights one person takes to herself are extended to all others. Hence "freedom of choice in the last instance can only be thought of in internal connection with a network of inter-personal relationships" (1992a, p. 146). It is present only "in the context of the communicative structures of a community, which ensures that the freedom of some is not achieved at the cost of the freedom of others" (1992a, p. 146). This valorizing of freedom applies equally to socialism: "socialism and liberty are identical" (1992a, p. 75) in his view, and socialist theory is "an attempt . . . to indicate the necessary conditions which would have to be in place for emancipated life-forms to emerge" (1992a, p. 145). Socialism is only a useful idea insofar as "it serves as the idea of the epitome of the

necessary conditions for emancipated forms of life, about which the participants themselves would have to reach understanding" (Habermas, 1994, p. 113). This interpretation of socialism stresses its democratic imperatives, in the manner of Marcuse and Fromm, rather than the principle of collective ownership and control of the means of production.

As well as overemphasizing the means of production, Habermas feels that critical theory also overstresses the way reason has become distorted under capitalism. A major element of his life's work is to link the importance of learning how to reason to adults' ability to participate in democratic decision making. To him, books such as *Eclipse of Reason* (Horkheimer, 1974) and *Dialectic of Enlightenment* (Horkheimer & Adorno, 1972) "took refuge in an abstract critique of instrumental reason and made only a limited contribution to the empirical analysis of the over-complex reality of our society" (Habermas, 1992a, p. 56). Habermas does not agree with Horkheimer and Adorno that reason has been so totally instrumentalized that it has been denuded of all moral force. He is alarmed that *Dialectic of Enlightenment* is forced "to oversimplify its image of modernity so astoundingly" (Habermas, 1987b, p. 112) in its effort to prove that "in cultural modernity, reason gets definitively stripped of its validity claim and assimilated to sheer power" (p. 112). He also makes the point that Horkheimer and Adorno use critical reason to prove the impossibility of using critical reason. In *Dialectic of Enlightenment* the "description of the self-destruction of the critical capacity is paradoxical, because in the moment of description it still has to make use of the critique that has been declared dead" (Habermas, 1987b, p. 119).

Habermas places his own understanding of reason "much closer to the practical attitudes of Marcuse . . . to the idea that the life of theory is a project of practical reason, or conducted in its name" (Habermas, 1992a, p. 190). He declares his "special affinity with the existentialist, i.e. the Marcusean, variant of critical theory" (1992a, p. 150), which he believes affirms the possibility of reestablishing reason to serve the creation of a humane democracy. Marcuse beckons to Habermas because Marcuse "made appeals to future alternatives" (Habermas, 1985, p. 67), "spoke a straight, affirmative language, easy to understand" (p. 69), and constantly displayed "one of his most admirable features – not to give into defeatism" (p. 76).

Leaving aside the reference to Marcuse's easy-to-understand language, Habermas's comments on Marcuse could apply equally to Habermas himself. If *Dialectic of Enlightenment* "holds out scarcely any prospect for an escape from the myth of purposive rationality that has turned into negative violence" (Habermas, 1987b, p. 114), then Habermas's own books set out to reclaim reason and place it at the center of his attempt to ground democracy in a theory of communication. In *Postmetaphysical Thinking* (Habermas, 1992b) he states as his aim "to defend and make fruitful for social theory a concept of reason that attends to the phenomenon of the lifeworld and permits the 'consciousness of society as a whole' . . . to be reformulated on the

basis of a theory of intersubjectivity" (p. 141). He disapproves of the radical critique "which equates reason as a whole with repression – and then fatalistically and ecstatically seeks refuge in something wholly Other" (1992b, p. 8). For him, dismissing reason as hopelessly compromised and the willing, uncritical servant of capitalism or technocracy is too simplistic. It throws the baby of critical reason applied in the cause of democracy out with the bathwater of compromised reason, serving the cause of capitalist exploitation. Habermas's view of critical theory "retains a concept of reason which asserts itself simultaneously against both scientific mutilation and existentialist downgrading, and which is furthermore also critically applied to itself" (1992a, p. 55).

Habermas's reclamation of reason as the heart of critical theory is a central theme in his work. Reframed as validity, reason underscores his theory of communicative action, which focuses on the assessment of validity claims (is what we say understandable, true, and sincere?) implicit in every speech act or utterance. His concept of the ideal speech situation – "a description of the conditions under which claims to truth and rightness can be discursively redeemed" (Habermas, 1992a, p. 171) – is pivotal to his understanding of the place of reason in human communication. The ideal speech situation establishes an ideal of full, free, and equal discourse in which understandings and agreements are reached through the giving of reasons for action. Habermas uses the ideal speech situation "to reconstruct the concept of reason, that is, a concept of communicative reason, which I would like to utilize against Adorno and Horkheimer's *Dialectic of Enlightenment*" (1992a, p. 93). Reason also lies at the heart of his discourse theory of deliberative democracy, which explores the reaching of decisions through rationally driven efforts to come to consensus. In fact reason, in Habermas's view, underlies the very survival of the species: "a species that depends on for its survival on [*sic*] the structures of linguistic communication and co-operative, purposive-rational action must of necessity rely on reason. In the validity claims, however implicit, by means of which we are obliged to orientate ourselves in our communicative actions, a persistent, albeit repeatedly suppressed, claim of reason lies concealed" (1992a, p. 58).

Reason serves human emancipation, and critical theory's concern with emancipation is reaffirmed in Habermas's own work. He says he "cannot imagine any seriously critical social theory without an internal link to something like an emancipatory interest" (1992a, p. 193). Just as reason is a species survival need, so is the desire for emancipation "the calling into question, and deep-seated wish to throw off, relations which repress without necessity" (1992a, p. 194). The drive for freedom is so "profoundly ingrained in the structure of human species . . . intimately built into the reproduction of human life" (1992a, p. 194) that it must be considered "part of the basic structure of the theory of cognitive interests" (1992a, p. 194). For him, then, a critical theory of adult learning studies how people learn to realize their

emancipatory cognitive interest in personal relationships and in the creation of political forms that guard this interest zealously.

Habermas connects the human striving for emancipation with a version of ideology critique that is focused specifically on patterns and structures of communication. Ideology critique unmasks how ideas and theories we accept as true – and definitions of what we consider reasonable conduct and aspirations – serve to support the interests of the powerful. To Habermas "ideology critique wants to show how . . . validity claims are determined by relationships of power" (1987b, p. 116). Embedded in a critical theory of communicative action, ideology critique reveals "the relations of power surreptitiously incorporated in the symbolic structures of speech and action" (Habermas, 1973, p. 12). Realizing the existence of these relations is the necessary precursor to learning how to alter them. In Habermas's view "the relations of power embodied in systematically distorted communication can be attacked directly by the process of critique" (1973, p. 9), with the resulting insights leading to "emancipation from unrecognized dependencies" (1973, p. 9). Once again, reason is reclaimed as crucial to emancipation.

Before leaving this discussion of Habermas's relationship to the critical theory tradition, it is important to note that Habermas stresses the self-critical nature of criticality. In his estimation critical theory applies critical reason to its own propositions, which must always be considered provisional. He believes that critical theory "can only make pronouncements with a claim to propositional truth" (1992a, p. 101) and that we should conduct "the attempt to continue critical social theory in an unreservedly self-correcting and self-critical mode" (1992a, p. 212). Critical theory's lack of attention to empirical proof is a serious flaw, in Habermas's opinion, and his own writing displays an astonishing grasp of empirical work in linguistics, anthropology, sociology, cognitive and developmental psychology, and economics. For him critical theory moves forward by engaging its critics on the one hand (something Habermas does constantly) and seeking empirical confirmation or refutation of its propositions on the other.

Problems Addressed by Critical Theory

The Collapse of the Public Sphere

I read Habermas as a theorist of democracy who believes that a society can be judged as more or less democratic according to the ways its adult members learn how to come to decisions about matters that affect their lives. The more democratic the society, the fuller the information to which its citizens have access. The more complete their learning, the fewer the distortions that constrain their communication. Democracy is all about learning to engage in the freest, least restricted communication possible. The greater the freedom

of conversation, the higher the chance that true critical reason – reason employed to create a just, humane democracy – will emerge.

Habermas argues that under contemporary industrial capitalism, however, certain social developments have prevented the democratic way of life. Society has become too vast and complicated for everyone to sit around a table and talk about how they wish to arrange things. To use the terms that Habermas employs across his work, the public sphere has collapsed, and both civil society and the lifeworld have become dominated by – steered by – mechanisms of money and power. Terms such as *the public sphere, life-world* and so on are unfamiliar to many American adult educators and have prevented them from fully engaging with Habermas's work. But these concepts are so integral to his attempts to outline how democracy can be established that they cannot be avoided. I hope readers already familiar with these ideas will forgive my explication of their meaning in the next few paragraphs.

At the core of Habermas's concern is the collapse of the public sphere, that is, the civic space or "commons" in which adults come together to debate and decide their response to shared issues and problems. The public sphere is "a network for communicating information and points of view; i.e. opinions expressing affirmative or negative attitudes" (Habermas, 1996, p. 360). The "streams of communication" that flow through this network "are, in the process, filtered and synthesized in such a way that they coalesce into bundles of topically specified *public* opinions" (Habermas, 1996, p. 360). As people talk with varying degrees of informality about issues that affect them, viewpoints emerge that represent the chief clusters of their opinions and that are noticed by journalists, commentators, pundits, politicians, government officials, pollsters, media workers, and so on. As a result the opinions developed informally in the public sphere come to affect how more formal political and legislative deliberations are conducted. In this way the public sphere is "an intermediary between the political system, on the one hand, and the private sectors of the lifeworld and functional systems, on the other" (Habermas, 1996, p. 373). This intermediary structure never coalesces into a formal system or structure. By definition the public sphere is fluid and resists calcification; "publics cannot harden into organizations or systems" (Habermas, 1996, p. 374) as their boundaries "remain permeable in principle" (p. 374).

Sometimes the public sphere is the site of brief conversations among a few people; sometimes a more sustained discussion in a larger group takes place. People talk episodically when riding the bus, at subway stops, in pubs, on the street. But they also talk in the interstices of larger public events: waiting in line for the cinema, at halftime at soccer matches, in the corridors between sessions at academic conferences, over coffee at a political congress. There is also a more abstract form of talk that happens when readers, viewers, listeners, and Internet users around the world connect with each other through media and technology. These different levels of the public sphere are interconnected and flow in and out of each other so that "all the partial

publics constituted by ordinary language remain porous to one another" (Habermas, 1996, p. 374). Sometimes, as Newman (1999) illustrates, adult educators can initiate an informal conversation (an episodic public sphere) that results in a coalescence of opinion and a desire to do something about a situation (what Habermas calls *political will-formation*).

In *The Structural Transformation of the Public Sphere* (1989b), Habermas painstakingly traces how "the communicative network of a public made up of rationally debating private citizens has collapsed" (p. 247) as society becomes ever larger and more differentiated into complex subsystems. The town meeting, village green gathering, and tribal circle cannot provide effective forums for the kind of public discussion of community concerns that lies at the heart of democracy. Yet democracy cannot exist without a public sphere in place that allows people to talk out their feelings and opinions and gather their political energies behind a particular movement for change. For Habermas "democratically constituted opinion and will formation depends on the supply of informal public opinions that, ideally, develop in structures of an unsubverted political public sphere" (1996, p. 308). In the absence of any arena in which adults can come together to debate and engage in political will formation (the development of strands of opinion and the decision to act on these that sometimes comes after prolonged discussion), we cannot accurately talk about public opinion.

Habermas defines public opinion as an informed viewpoint that is offered by a group of people involved in an issue after a full consideration of all the relevant facts. In his view, however, true public opinion rarely develops. Instead of a full conversation and the emergence of political will formation that real public opinion represents, we have a political discourse controlled by media institutions. In his words public opinion "has partly decomposed into the informal opinions of private citizens without a public and partly become concentrated into formal opinions of publistically effective institutions" (1989b, p. 247). We have our personal longings and frustrations that we voice to family, friends, and colleagues or through occasional letters to editors, elected representatives, or public officials. Or we have organizations, pressure groups, and institutions (corporations, government agencies, labor unions, the American Association of Retired Persons, and so on) that disseminate the views of those who occupy the top positions in these groups, whether or not these views actually reflect the opinions of members. The mass media then either serve as the mouthpiece for these organizations or reframe their opinions to support the existing system. In line with the Frankfurt School's critique of media and popular culture, Habermas believes that "the electronic mass media of today is organized in such a way that it controls the loyalty of a depoliticised population" (1973, p. 4). In these ways the public sphere is severely diminished. Lacking the communicative vehicles through which they can meet, discuss, and decide their opinions on how economic and social forces are shaping their lives, adults are left privately vociferous but publicly voiceless.

The diminution of the public sphere is a theme threading throughout Habermas's work. It features as prominently in later books such as *Between Facts and Norms* (1996), *On the Pragmatics of Communication* (1998), and *The Postnational Constellation* (2001) as it does in his earliest work (*The Structural Transformation of the Public Sphere* [1989b] was originally published in Germany in 1962). Across all these books Habermas reiterates his concern that adults have lost the habit of participating in political decision making. With the growth of capitalism and the move from the industrial to the information society, the education system and class structure combine to force people into more and more specialized roles and functions, leaving them less and less prepared for participation in public discourse. This, and not a widespread lack of basic skills, is *the* adult learning crisis in Habermas's view. Economic development's logic means that "the unavoidable division of labor results in an unequal distribution of information and expertise" (Habermas, 1996, p. 325). Some members of society, because of their class position, racial identity, and education, have greater access to information and hence have greater life chances than others. This inequity is further compounded by the way "the communications media intervene with a selectivity of their own in this social distribution of knowledge" (Habermas, 1996, p. 325). For example, adults' access to, and technical knowledge of, the workings of cyberspace are determined partly by their education, income, occupation, and status, all of which reflect the wider organization of society for the benefit of certain groups. Without access to, or knowledge of, communication technology, large parts of the population are locked out of the public flow of communication. Without ownership of an influential organization or pressure group, large numbers of adults have no channel through which to voice an opinion. In this situation "the structures of the public sphere reflect unavoidable asymmetries in the availability of information, that is, unequal chances to have access to the generation, validation, shaping, and presentation of messages" (Habermas, 1996, p. 225).

What are some of the consequences of the collapse of the public sphere? One is the growth of a destructive privatism, an unhealthy, unrestrained focus on the self. Habermas notes the widespread belief that since one has no way to influence discussion and decisions in the wider society, one may as well pursue private goals without regard to the effects this has on others. In *Legitimation Crisis* (1975) he describes the condition of a "structurally depoliticized public realm" (p. 37) in which administrative decisions are made independent of people's interests. We have the "application of institutions and procedures that are democratic in form, while the citizenry, in the midst of an objectively political society, enjoy the status of passive citizens with only the right to withhold acclamation" (Habermas, 1975, p. 37). In such a situation civic privatism – "political abstinence combined with an orientation to career, leisure and consumption" (Habermas, 1975, p. 37) – is bound to flourish. Habermas notes how a "familial-vocational privatism

complements civic privatism" (1975, p. 75) by establishing "a family orientation with developed interests in consumption and leisure on the one hand, and in a career orientation suitable to status competition on the other" (p. 75). These forms of privatism are underscored by popular theories extolling the virtues of meritocracy, the rise of democratic elites, and the efficient workings of technocratic systems.

As well as the growth of a privatized attitude to life, the diminution of the public sphere neutralizes intellectual challenges to the dominant order. When intellectuals act as social critics to reveal and uncover the existence of social inequities, they need a public to consider, and then possibly act on, such critiques. With no public to debate the arguments and evidence they offer, no commons in which their analyses can be heard, intellectuals are impotent, offering only the sorts of notes to a dying civilization or messages in bottles mentioned at the end of *Dialectic of Enlightenment* (Horkheimer & Adorno, 1972), *Eclipse of Reason* (Horkheimer, 1974), or *One Dimensional Man* (Marcuse, 1964). By definition, intellectual work (particularly critical theory) is premised on the existence of a public sphere to receive it:

> when intellectuals, using arguments sharpened by rhetoric, intervene on behalf of rights that have been violated and truths that have been suppressed, reforms that are overdue and progress that has been delayed, they address themselves to a public sphere that is capable of response, alert and informed. (Habermas, 1989a, p. 73)

This sphere is itself dependent on, and safeguarded by, the existence of constitutional safeguards. Intellectuals "rely on a half way constitutional state" (Habermas, 1989a, p. 73) and on "a democracy that for its part survives only by virtue of the involvement of citizens who are as suspicious as they are combative" (p. 73).

The Decline of Civil Society

The collapse of the public sphere is a function of a concurrent social development, the decline of civil society. Civil society essentially comprises all those forms of collective human association not directly controlled by the state or corporations. Everything from carpools to professional organizations to alternative political movements is potentially part of civil society. Unlike the more amorphous and porous public sphere, civil society frequently organizes itself into groups with clearly designated hierarchies of communication and conditions for membership. The Adult Education Research Conference (AERC) and the Commission of Professors of Adult Education (CPAE) in their different ways show some of the variety of civil society. AERC, with its nomadic annual wanderings across the North American continent, its lack of a formal membership, and its reliance on word of mouth

to publicize its activities, is a loosely organized part of civil society. By way of contrast, CPAE is more closely structured. To be part of CPAE, for example, one needs to hold a job with the title "professor" and to teach university graduate courses in adult education. One also needs to be part of a larger, dues-paying professional organization (the American Association for Adult and Continuing Education), with its attendant qualifications for membership.

Habermas defines civil society as "composed of those more or less spontaneously emergent associations, organizations, and movements that, attuned to how societal problems resonate in the private life spheres, distill and transmit such reactions in amplified form to the public sphere" (Habermas, 1996, p. 367). Within the different institutions of civil society people discern problems of social organization that they sometimes try to raise as issues within the public sphere. In the field of adult education, for example, some practitioners lament the infiltration of human capital perspectives into the ways adult educators think about, and do, their work. Others are worried about the way adult literacy sometimes becomes a palliative to preserve an unequal system, rather than a force for social change. The decline of voluntarism, the replacement of face-to-face learning by online instruction, the ascendance of efforts to certify, license, and professionalize the field, the denial of funding to more radical, alternative adult educational initiatives, and the general marginalization of provision for adult education (the last to be funded, the first to be cut) – all these are concerns that arise in that part of civil society we call *adult education* and that some within that part try to "distill and transmit" to the larger public sphere as items for discussion.

Marginalized groupings, by the way, are not entirely powerless. Sometimes those organizations and movements exiled to the periphery of civil society have "the advantage of greater sensitivity in detecting and identifying new problem situations" (Habermas, 1996, p. 381). Habermas cites as examples the way that certain issues (ecological threats, Third World crises, feminism, multiculturalism) "were broached by intellectuals, concerned citizens, radical professionals, self-proclaimed 'advocates', and the like" (1996, p. 381) before occupying space in an admittedly diminished public sphere. As non-governmental organizations, environmental agencies, and activist groups across the world begin to coordinate their activities in opposition to global capitalism, there is increasing talk of the idea of international civil society. As with domestic civil society, the international counterpart also forces issues into the realm of the international public sphere, ensuring that the agendas of formal institutional groupings such as the World Trade Organization have to take account of international civil society's concerns. Given that the organizations of domestic and international civic society frequently generate issues that claim attention in the public sphere, Habermas argues that "the communicative structures of the public sphere must (rather) be kept intact by an energetic civil society" (1996, p. 369).

Unfortunately civil society is diminished as the political system of state power, and the economic system of the capitalistic pursuit of profit, become

ever more dominant in our lives. In Newman's (1999) words "civil society may become what is left over in our lives after the parts that really matter have been taken out" (p. 150). When the political and economic systems operate completely independently of civil society, then major decisions regarding our lives are made with no chance for their merits to be questioned or for alternatives to be proposed or discussed. There is little point in joining a tenants' group, or showing up at neighborhood meetings, if all we are able to do is choose among options shaped and presented to us by political or business interests on matters that are relatively trivial. Spending inordinate amounts of time debating the shape of a new bus shelter while a local industrial plant pollutes the neighborhood's air, for example, is a pale version of the robust civil dialogue a democratic society requires.

If civil society is on the defensive, then the forces that determine how the political and economic systems run (what Habermas calls "steering mechanisms") operate more or less unchallenged. The steering mechanisms of money (the pursuit of profit through the exchange economy) and power (the maintenance by dominant groups of a system of ideological and technocratic domination) start to encroach on civil society. For example, the market – the web of economic exchanges, price control mechanisms, cartel agreements, and patterns of consumption – impinges on our lives in ways that seem uncontrollable, beyond our influence. Boom and bust, recession and growth, help-wanted signs or long dole queues – all these seem like random happenings, as unpredictable and beyond our control as a sudden rain shower. In Habermas's words economic crises "lose the character of a fate accessible to self-reflection and acquire the objectivity of inexplicable, contingent, natural events" (1975, p. 30). In addition we use market analogies – the "free market of ideas" is a good one – to structure the conversations we have in civil society and in the public sphere. The self-fulfilling fallacy of this analogy is that market operations are not free at all. Those who exercise the greatest influence in the "free" market are often those who already have the greatest power. The same is true of conversation circles. Those used to speaking because they have the right accent, because they have a facility in the dominant language, or because their education, money, skin color, gender, or social position ensure their opinions will be listened to exercise a disproportionate influence.

The Invasion of the Lifeworld

As well as encroaching on civil society, the steering mechanisms of money and power also invade the lifeworld. This is dangerous since "communication in a public sphere that recruits private persons from civil society depends on the spontaneous inputs from a lifeworld whose core private domains are intact" (Habermas, 1996, p. 417). If the lifeworld is controlled by money and power, then all the discussions we have in the public sphere,

and all the topics we raise for discussion in the organizations of civil society are profoundly tainted and compromised by money and power without our ever being aware of that fact.

Unlike the public sphere or civil society, which can at least be seen physically (albeit sometimes fleetingly) in the form of conversations, gatherings, associations, and organizational activities, the lifeworld is chiefly a mental, even a psychic, phenomenon. It exists prereflectively, inside consciousness. Segments of the lifeworld can be glimpsed when they are thrown into sharp relief as situations we have to respond to, and this is where we can see most clearly the encroachment of steering mechanisms. But as the shadowy "horizon of shared, unproblematic beliefs" (Habermas, 1996, p. 22), the life-world cannot be penetrated. In Habermas's view it is by definition unknowable. The lifeworld is so ingrained in our structures of perception and communication that we cannot stand outside it and reflect back on it. It is "always already there," to use a common Habermas phrase, "a context that cannot be gotten behind and cannot in principle be exhausted" (1987a, p. 133).

What exactly is the lifeworld? In one of the most quoted sentences from the second volume of *The Theory of Communicative Action* (1987a), Habermas describes it as "the intuitively present, in this sense familiar and transparent, and at the same time vast and incalculable web of presuppositions that have to be satisfied if an actual utterance is to be at all meaningful, that is, valid or invalid" (p. 131). As one graduate student dryly remarked to me when I presented this definition, "That's not exactly helpful is it?" A simpler definition on the same page is perhaps more helpful; "the lifeworld forms the indirect context of what is said, discussed, addressed in a situation" (Habermas, 1987a, p. 131). It is all those assumptions that frame how we understand the experience of life and how we try to convey that experience to others. Thus, "the lifeworld forms a horizon and at the same time offers a store of things taken for granted in the given culture from which communicative participants draw consensual interpretative patterns in their efforts at interpretation" (Habermas, 1987b, p. 298). I think of the lifeworld as the background rules, assumptions, and commonsense understandings that structure how we perceive the world and how we communicate that perception to those around us. This kind of primordial, prereflective knowledge hovers in the background of existence, a shadowy frame to all we think and do.

The lifeworld is all-pervasive, the perceptual oxygen we breathe without ever really being aware of our rhythmic inhalations or the way they keep us alive. Because it "only exists in the distinctive, pre-reflexive form of background assumptions, background receptivities or background relations (it) dissolves and disappears before our eyes as soon as we try to take it up piece by piece" (Habermas, 1992a, p. 109). It saturates our conversations, forming "the horizon in which communicative actions are 'always already' moving" (Habermas, 1987a, p. 119). The cultural knowledge embedded in the lifeworld is "always already familiar" (Habermas, 1987a, p. 132), representing

"a storehouse of unquestioned cultural givens from which those participating in communication draw agreed-upon patterns of interpretation for use in their interpretive efforts" (Habermas, 1990, p. 135). So every time we communicate with another person, as I am trying to do with you by putting these marks on a page, we do so within a cluster, a web, of unwittingly shared understandings and unacknowledged ways of perceiving. Hence "as we engage in communicative action, the lifeworld embraces us as an unmediated certainty, out of whose immediate proximity we live and speak" (Habermas, 1996, p. 22).

A key element in Habermas's treatment of this idea is that "the lifeworld always remains in the background" (1987a, p. 131), impenetrable and unknowable. No matter how hard we try to uncover and examine it, we are doomed to perpetual frustration. This is because "the life-world is so unproblematic that we are simply incapable of making ourselves conscious of this or that part of it at will" (Habermas, 1992a, p. 110). If we try to identify and examine the cultural knowledge it contains, we see it vaporize just as it starts to assume shape: "no sooner has it been thematized, and thereby cast into the whirlpool of possible questions, than it decomposes" (Habermas, 1996, p. 23). To study the lifeworld's contours would be as impossible as a bigmouthed bass's levitating out of a Minnesota lake and making a leisurely survey of the water's surface in midair to discern where the juiciest minnows are swimming or where the most predatory anglers are moored.

Again and again, across all his writing, Habermas emphasizes the enclosing totality that is the lifeworld. In *The Theory of Communicative Action* (1987a), it is "a horizon behind which we cannot go . . . a totality with no reverse side" (p. 149), in *The New Conservatism* (1989a) "a background totality" and "a totalizing vortex" (p. 120), in *Postmetaphysical Thinking* (1992b) "a porous whole of familiarities that are prereflexively present" (p. 16), in *The Philosophical Discourse of Modernity* (1987b) "an intuitively known, unproblematic and unanalyzable, holistic background" (p. 298), and in *Between Facts and Norms* (1996) "a penetrating, yet latent and unnoticed presence . . . a sprawling, deeply set, and unshakable rock of background assumptions, loyalties, and skills" (p. 22). Although the lifeworld represents total enclosure, there are times we can breach its fences or stumble across gaps in its walls. Habermas allows the possibility of our becoming aware of the false knowledge, distorted assumptions, and self-destructive presuppositions the lifeworld contains when we are confronted with a particular situation that demands action.

In action situations the lifeworld's horizon becomes a little less hazy as a segment of it "comes into view" (Habermas, 1987a, p. 132). Since adulthood entails "the constant upset of disappointment and contradiction, contingency and critique in everyday life" (1996, p. 22), there are plenty of opportunities for us to confront these different lifeworld segments. Situations constantly arise – jobs disappear, relationships fall apart, neighborhoods change,

friends betray us (or we betray friends), those close to us fall seriously ill or die – that demand responses. As we work through these situations, we realize that lifeworld knowledge and assumptions are perhaps not the accurate, dependable realities we had imagined them to be. Even though the total lifeworld is preflectively known and "given to the experiencing subject as unquestionable" (1987a, p. 130), we can examine that segment of it thrown into sharp relief by the need to set goals and take action. Habermas writes that "in the light of an actual situation . . . the relevant segment of the lifeworld acquires the status of a contingent reality that could also be interpreted another way" (1987a, p. 131).

When adults deal with situations that demand actions from them, glimpses of the lifeworld become possible. Pieces of it also come into view in the process of what Habermas calls *symbolic reproduction*. The lifeworld is always being renewed and re-created as we involve ourselves in communicative action. On the one hand "in fallibly interpreting a given situation" (Habermas, 1996, p. 324), communicative actors (that is, adults trying to understand what's happening to them and hoping to reach agreements with others in the situation) "must draw from resources supplied by their lifeworld and not under their control" (p. 324). On the other hand, "actors are not simply at the mercy of their lifeworld. For the lifeworld can in turn reproduce itself only through communicative action" (Habermas, 1996, p. 324).

In communicative action our assumptions and intuitive preunderstandings are all the time being put to the test as we are asked tacitly to accept suggestions, justifications, and social arrangements that are presented to us as obvious fact. Habermas believes that "in communicative action, which requires taking yes/no positions on claims of rightfulness and truthfulness, no less than reactions to claims of truth and efficiency, the background knowledge of the lifeworld is submitted to ongoing tests across its entire breadth" (1987b, p. 321). Every time we are asked to nod our heads – literally or figuratively – to something that someone else says, or to the way a situation is framed for us, the lifeworld is put to a brief examination.

As any totalitarian leader sooner or later realizes, reproducing a closed system of ideas is a slippery business. Inevitably and eventually unforeseen events intervene to take the reproductive process out of the leadership's control. This is even more the case where what is being reproduced – understandings, assumptions, intuitions – is symbolic rather than material (such as organizational rituals, institutional behaviors, and economic and community conventions). Of course "the symbolic reproduction of the life-world and its material reproduction are internally interdependent" (Habermas, 1987b, p. 322) in that the smooth functioning of social institutions depends on people's sharing an unspoken agreement to their legitimacy. Overall, then, the lifeworld strives to ensure continued social solidarity through the transmission of "culturally ingrained background assumptions" (1987b, p. 298).

The symbolic reproduction of the lifeworld fulfills three important functions: the propagation of cultural traditions, the integration of groups by norms and values, and the socialization of succeeding generations" (Habermas, 1987b, p. 299). As a result of this reproduction, people draw from the lifeworld "consensual patterns of interpretation," "normatively reliable patterns of social relations," and "the competencies acquired in socialization processes" (Habermas, 1987b, p. 314). Cultural reproduction "secures the continuity of tradition and a coherency of knowledge sufficient for the consensus needs of everyday practice" (Habermas, 1987b, p. 343). The cultural frame from which we operate structures the way that "newly arising situations can be connected up with existing conditions in the world" (Habermas, 1987b, p. 343) and helps us decide what is the most appropriate response to a situation. Social integration "takes care of the coordination of action by means of legitimately regulated interpersonal relationships and lends constancy to the identity of groups" (Habermas, 1987b, p. 344). Such integration aims to ensure that we learn the habitual ways our group solves problems, sets goals, resolves disputes, and so on. Finally, socialization "secures the acquisition of generalized capacities for action for future generations and takes care of harmonizing individual life histories and collective life forms" (Habermas, 1987b, p. 344).

Cultural reproduction, social integration, and socialization happen only as we communicate with each other. In this way the lifeworld "reproduces itself only through ongoing communicative actions" (Habermas, 1996, p. 32). All the speech acts and linguistic utterances we produce as we strive to understand each other's behaviors and try to come to communicative agreements serve to reproduce the lifeworld. So communicative action and lifeworld reproduction are contemporaneous: "the network of communicative action is nourished by resources of the lifeworld and is at the same time the medium by which concrete forms of life are reproduced" (Habermas, 1987b, p. 316).

Two points of entry into examining the lifeworld are available to adults. They can analyze situations demanding action, or they can study the numerous everyday agreements they implicitly make as part of lifeworld reproduction. Habermas believes that philosophy can help us use these points of entry to discern when the lifeworld is being invaded by the steering mechanisms of money and power. One important task of philosophy is to "contribute to making us conscious of the deformations of the lifeworld" (Habermas, 1992b, p. 50), as in challenging the unspoken assumption that competition is a natural survival mechanism. Habermas quotes as an example of ideological domination "the idea that the capacity to compete on an international scale – whether in markets or in outer space – is indispensable for our very survival" (1987b, p. 367). This, he says, is "one of those everyday certitudes in which systemic constraints are condensed" (1987b, p. 367). Another might be infiltration of the concept of retooling into the lexicon of adult

education. Retooling the workforce through adult education turns adult education into a force serving the system (since workers are trained to perform the job functions the economy needs to work more efficiently) and one that dehumanizes people by viewing them as machines (since retooling, like recalibration, is something one does to a collection of moving but inanimate parts).

The invasion of the lifeworld by administrative and economic systems is a matter of extreme concern to Habermas. He refers to an "arising awareness of the infiltration of capital into areas of life which until now were shielded from it by tradition, and within which the values of capitalist society (competition for status, pursuit of gain, instrumentalization of existence) were not hitherto dominant" (Habermas, 1992a, p. 66). When we study crises in our lives, we can sometimes see just how much our instinctive ways of understanding and responding to these have become shaped by capitalistic or bureaucratic ways of thinking. An intimate relationship falls apart, and the partners lament their wasted emotional investment. Parents having trouble with their children are told to establish a series of contracts specifying duties, obligations, and expectations. These are manifestations of how "the foundations of a lifeworld that is already rationalized are under assault" (Habermas, 1992a, p. 117). When we think of our days as divided into work time, relaxation time, quality time, and family time, or when we regard our marriages as work teams geared to the achievement of particular goals (such as raising children or buying a house), then "what is at stake is the symbolic reproduction of the lifeworld itself" (Habermas 1992a, p. 117) as it becomes dominated by bureaucratic rationality.

Habermas's analysis of the crises facing contemporary society is somber reading. The collapse of the public sphere, the decline of civil society, and the invasion of the lifeworld are manifestations of a broader loss of social solidarity – in his view the truly endangered resource on the planet (Habermas, 1996, p. xlii). In *Theory and Practice* (1973), a collection of essays mostly published in the 1960s, he sounds a distinctively Marcusean note in his warning about how false needs and false freedom separate people from each other: "scurvy and rickets are preserved today in the form of psychosomatic disturbances, hunger and drudgery in the wasteland of externally manipulated motivation in the satisfaction of needs which no longer 'are one's own'" (p. 196). In contemporary society the "anonymous compulsion of indirect manipulation" (Habermas, 1973, p. 196) extends further and further to invade "ever more extensive domains of social life" (p. 196). In such a society social compulsions are felt as inner needs: "directives lose their form of commands and are translated by means of sociotechnical manipulation in such a manner that those forced to obey, now well integrated, are allowed to do, in the consciousness of their freedom, what do they must" (Habermas, 1973, p. 196).

This loss of solidarity and co-option of our inner needs by commerce and administration is compounded by the collapse of our belief that reason can be used to create a better world. In *Between Facts and Norms* (1996), Habermas declares that the 20th century "has taught us the horror of existing unreason" (p. xli) and that, as a result, "the last remains of an essentialist trust in reason have been destroyed" (p. xli). With the rejection of reason "politics has lost its orientation and self-confidence before a terrifying background" (Habermas, 1996, p. xli). Ecological crises, North/South disparities, ethnic strife, and the collapse of socialism have all cast doubt on people's capacity to build a humane world. But this is just the surface of the problem. In Habermas's view "the unrest has a still deeper source, namely, the sense that in the age of a completely secularized politics, the rule of law cannot be had or maintained without a radical democracy" (1996, p. xlii). The prospects of such a democracy's emerging are dim indeed as long as the tendencies outlined so far remain unchallenged.

However, all is not lost in Habermas's view, and it is a disastrous mistake to replace reason with a hurtling into unreason. If reason can be rescued from its co-option by money and power, then adults can learn how to use it to build a more participatory democracy. Democracy is Habermas's response to domination and, as we shall see in a moment, he ties his interest in adult learning and his theory of communicative action to the idea of a truly deliberative democracy. Such a democracy would help counter "the depoliticization of the mass of the population" (Habermas, 1970, p. 75) and go some way to reviving a public realm currently "confined to spectacles and acclamation" (p. 75). It would also help sever the link between technocracy (the possession and exercise of scientific and technological skills or information by a small, unrepresentative elite) and domination. Like Marcuse, Habermas sees the uncritical acceptance of the technocracy thesis – "a perspective in which the development of the social system seems to be determined by the logic of the scientific-technical progress" (1970, p. 105) – as lying at the core of domination.

Technocracy acts as a force for domination by promoting the belief that life is principally a matter of technical adjustment. All problems – emotional, spiritual, and social – are seen as fixable by the application of technology. This "dominant, rather glassy background ideology, which makes a fetish of science, is more irresistible and farther-reaching than ideologies of the old type" (Habermas, 1970, p. 111), because it secures "the repression of 'ethics' as such as a category of life" (p. 112). Technocratic consciousness turns all questions concerning how to live into instrumental, rather than moral or ethical, questions. People set personal or spiritual goals and make ethical or moral decisions as if they were purely technical matters. As a result "the reified models of the sciences migrate into the sociocultural lifeworld and gain objective power over the latter's self-understanding" (Habermas, 1970, p. 113). Anticipating current controversies over genetic engineering by 3 decades or

more, Habermas sketches out a frightening extension of technocratic domination in which "behavioral control could be instituted at an ever deeper level tomorrow through biotechnic intervention in the endocrine regulating system, not to mention the even greater consequences of intervening in the genetic transmission of inherited information" (1970, p. 118).

As he sees societies grow larger and increasingly differentiated, Habermas offers the hypothesis that "the more complex the systems requiring steering become, the greater the probability of dysfunctional effects" (Habermas, 1989a, p. 51). Productive forces become devoted to destructive ends, attempts to plan society (transportation, health, education, welfare) backfire disastrously and induce more disruption than existed before. The increasing commercialization and bureaucratization of life generates "disturbances, pathological side-effects" (Habermas, 1992a, p. 112) in the lifeworld "and interferes with its symbolic reproduction" (p. 246). Although superficially reassured by technocratic logic, people are subject to a deeper unease. Habermas writes of the subtle "deformation of the lifeworld thesis that is regimented, dissected, controlled, and watched over" (1989a, p. 59) and the ways that "social conflicts . . . have been shifted over into the psychological and physical domains and internalized" (p. 59). People are plagued by the unspoken sense that economic, ethnic, or ecological disasters are likely to explode at any moment.

The preconscious awareness that pathological disturbances lie just under the surface of existence induces a feeling of hopelessness, what Habermas characterizes as "a certain *fin-de-siecle* mood, a sense that time is running out" (1989a, p. 189). In his view the dread that lurks, dimly sensed, in the periphery of life is reflected in the popularity of postmodern analysis. To him it is no accident that the theories gaining in influence today are those that illustrate how the forces from which modernity draws its utopian self-confidence "are in actuality turning autonomy into dependence, emancipation into oppression, and reason into rationality" (Habermas, 1989, p. 51). In a theoretical alternative to the nihilism these theories can induce, Habermas draws on the affirmative strain of critical theory he associates with Marcuse to propose a new model of democracy based on the innate need of humans to communicate. It is to his belief in the power of adults learning communicative action and the centrality of this to the democratic dream that we now turn.

Learning Democracy and the Centrality of Adult Learning

In the preceding paragraphs I acknowledged Habermas's liking for the affirmative strain of critical theory represented by Marcuse, who at one point declared "no one could be more of a democrat than I am" (1970, p. 80) while also recognizing that "the true conditions of democracy still have to

be created" (p. 80). Like Marcuse, Habermas has as one of his central projects the understanding and creation of the conditions for democracy. Adult learning has a crucial role in this effort, since Habermas's hope for regenerating democracy resides in adults' capacity to learn, in particular, to learn how to resist the decline in social solidarity by recognizing and expanding the democratic processes inherent in human communication. Adult learning, for Habermas, is contemporaneous with existence, a naturally occurring phenomenon that can be prevented only by some act of suppression conducted by an external force. In many ways the most intriguing phenomenon for him is not how adult learning happens, but how it doesn't happen. If learning is such an omnipresent part of adulthood, then the problem that needs explaining is why it isn't everywhere. To quote a typically Habermasian turn of phrase, "not *learning*, but *not-learning* is the phenomenon that calls for explanation" (Habermas, 1975, p. 15).

The explanation Habermas proposes as to why adults are not continually and conspicuously learning is that contemporary political and economic systems, and their various steering media, attempt to foreclose the possibility of any learning that challenges systemic imperatives. If critical learning cannot be blocked at the outset, then these systems try to divert its energy into channels that confirm the legitimacy of the existing order. But make no mistake about it, in Habermas's view learning is what adults do all the time, unless something actively prevents this from happening. Adults have "an automatic inability not to learn" (Habermas, 1975, p. 15) that is a defining feature of adult existence. Although he works within a different intellectual tradition than many of those adult educators who research self-directed learning, Habermas agrees with their contention that adults learn continuously and in a variety of settings. This continuous learning happens irrespective of whether or not these adults are participating in formally sponsored and arranged programs of education.

In *Legitimation Crisis* (1975) Habermas sketches out two broad forms of learning, nonreflexive and reflexive, a distinction taken up by Mezirow in his influential 1981 article. Nonreflexive learning is learning without a critical element. It is learning to submit without resistance to rules of debate, argument analysis, and decision-making processes that the dominant culture favors because they cut off any prospect of challenge to that culture and prevent the linking of decision making to deeper moral inquiry. Hence "non-reflective learning takes place in action contexts in which implicitly raised theoretical and practical validity claims are naively taken for granted and accepted or rejected without discursive consideration" (Habermas, 1975, p. 15).

Reflexive learning, on the other hand, is learning suffused with criticality. In this kind of learning, we learn to question and challenge everyday practices or social arrangements by discussing with others the extent to which these can be justified. Since it is conducted by using others as critical mirrors, reflexive learning is therefore inherently communicative. It involves

our comparing our experiences and opinions with those of others and considering with them the merits of the evidence proposed to justify different beliefs or courses of action. Thus "reflexive learning takes place through discourses in which we thematize practical validity claims that have become problematic or have been rendered problematic through institutionalized doubt, and redeem or dismiss them on the basis of arguments" (Habermas, 1975, p. 15). Put more simply, reflexive learning involves our talking over with others the conflicting evidence available to us on whether or not things have been ordered the best way they could be in society and whether or not corporations, bureaucracies, and governments act with the best interests of the people at heart.

The extent to which adults engage in reflexive learning is not a matter of chance but rather one of social determination. It depends on "whether the organizational principle of the society permits (a) differentiation between theoretical and practical questions and (b) transition from non-reflexive (pre-scientific) to reflexive learning" (Habermas, 1975, p. 15). For example, learning to question the distribution of resources, the right of certain groups to rule, or the morality of a president's unilaterally ordering the invasion of another country can be blocked or prevented outright if the lifeworld holds such learning to be deviant, immoral, or unpatriotic. In this way what look like self-directed learning projects are not individually determined at all, but socially framed. Indeed, as a general rule the development of an individual's reflective capacities is always culturally bounded: "since the cognitive development of the individual takes place under social boundary conditions, there is a circular process between societal and individual learning" (Habermas, 1979, p. 121).

One dimension of reflexive learning of interest to Habermas that does not appear much in the adult learning literature is evolutionary learning. Habermas sees such learning as the overall lever for societal development, "the fundamental mechanism for social evolution in general" (Habermas, 1975, p. 15). Without a socially sanctioned engagement in learning, society remains in stasis. In reviewing historical and anthropological evidence, Habermas observes that "the initial state of archaic societies . . . could itself be changed only by constructive learning on the part of socialized individuals" (Habermas, 1979, p. 121). Consequently it is in a society's best interests (assuming, of course, that evolution is a good thing) to organize evolutionary learning processes as well as relying on their natural emergence.

Two conditions need to be in place for evolutionary learning to occur; "on the one hand, unresolved system problems that represent challenges; on the other, new levels of learning that have already been achieved in world views and are latently available but not yet incorporated into action systems and thus remain institutionally inoperative" (Habermas, 1979, p. 122). The case of global warming represents one contemporary opportunity for evolutionary learning to occur, racial tension another, the African continent's

AIDS epidemic a third. In each situation an unresolved system problem has emerged that clearly represents an enormous challenge to humankind. These are all system problems because they either are caused by the actions of people in a system run for economic profit or are naturally occurring but exacerbated to crisis levels by the desire for profit or the refusal of those in power to admit a problem exists. Some adults in civil society – activists, concerned professionals, and so on – have forced awareness of the need to learn new ways of responding to these crises into the public sphere. President Bush's refusal to sign the Kyoto accord, race riots in downtown Cincinnati or Oldham (England), and the prevarications of pharmaceutical companies over whether or not to abandon their exorbitantly profitable pricing policy regarding the sale of AIDS treatment drugs in poor Third World economies were all granted media space in the weeks and months surrounding my writing the first draft of this paragraph.

At the same time that these "unresolved system problems" have emerged, activists have offered a variety of responses to them. To take the example of global warming, there have been proposals for government control of corporations and industries that produce emissions that deplete the ozone layer, for alternative energy policies, for a move to smaller or electric cars, for a massive increase in investment for public transportation, for more stringent requirements for fuel additives, for punitive taxation on those who buy gas guzzlers, and for an acceptance that air conditioning is a costly luxury – not a necessity – in warm climates. All these proposals have been successfully sidelined by the oil, gas, nuclear, and auto industries and by an administration that includes prominent former figures in these industries amongst its senior public officials. However, Habermas is obstinate in his belief in the hopeful possibilities of learning and looks to history, particularly the move of archaic, preindustrial societies to organize productive systems, to provide evidence of a general theory of evolutionary learning.

To Habermas, it is clear that social progress depends on the organization and institutionalization of learning processes. As a society coheres into a unit with a shared sociocultural identity, it ensures that "learning processes are socially organized from the start, so that the results of learning can be handed down" (Habermas, 1979, p. 171). Hence the establishment of the education system, models of apprenticeship, and the transfer of knowledge in churches, families, and friendship networks. Such learning processes "are from the outset linguistically organized, so that the objectivity of the individual's experience is structurally entwined with the intersubjectivity of understanding among individuals" (Habermas, 1979, p. 173). We learn in communities as social beings, and our development of knowledge is dependant on our ability to understand what others are telling and showing us. The ways I interpret my own experiences as an adult educator are not, therefore, idiosyncratic but rather draw on concepts and frameworks learned through conversation with other adult educators in person and through their writings.

Learning systems can also be created that institutionalize norms of critical skepticism, as, for example, in the concept of education for critical professional practice. Habermas's definition of this kind of practice involves the mix of credible practical experience and sociopolitical awareness that seems to me to characterize much writing on critically reflective adult education. Hence, adult education for critical professional practice combines "the combination of competence and learning ability to permit the scrupulous handling of tentative technical knowledge and the context-sensitive, well-informed willingness to resist politically the dubious functional application or control of knowledge that one practices" (Habermas, 1970, p. 47). In other words, as a critical professional one is skilled in one's area of practice, but also skilled in recognizing when one's practice is being put at the service of the system and against the interests of its less powerful members.

Adult Learning as Communicative Action

Habermas's theory of communicative action is probably his most famous idea and, along with the invasion of the lifeworld, the part of his work best known in adult education. What is forgotten sometimes is just how central adult learning is to this theory. Habermas's ideas on communicative action "start from the trivial assumption that subjects capable of speech and action cannot help but learn" (Habermas, 1992, p. 165). He moves, sometimes confusingly, between a normative view of communicative action as a chosen way of reaching agreement with the fewest possible distortions and manipulations and communicative action as an unavoidable empirical reality existing almost irrespective of adults' intentions. He summarizes this latter view by declaring that "in everyday communicative practice, socialed individuals cannot avoid *also* employing everyday speech in a way that is oriented toward reaching understanding" (Habermas, 1994, p. 101). Hence, "whenever we mean what we say, we raise the claim that what is said is true, or right, or truthful" (Habermas, 1994, p. 102). It is not that "people *want* to act communicatively but that they *have* to" (Habermas, 1994, p. 111). Child rearing, education, friendships, work relationships, community action – "these are elementary social functions that can only be satisfied by means of communicative action" (Habermas, 1994, p. 111).

Once again, the interesting question is less the conditions under which adults learn and more the conditions that prevent this wholly natural and predictable process from happening. If adults are not learning, then something is getting in the way. Given that learning is, as we have seen, a social process dependent on our membership in speech communities in which we pursue intersubjective understanding, it is the lack of such communities that is often the problem. In Habermas's view "reaching mutual understanding . . . depends on contexts characterized by a capacity for learning, both at the

cultural and personal level" (1996, p. 324). These contexts exist in societies that exhibit "a discursive mode of sociation" (Habermas, 1996, p. 324) but are prevented from emerging in societies that encourage "dogmatic worldviews and rigid patterns of socialization" (Habermas, 1996, p. 324). In contexts that allow communicative action, the possibility of who will do the learning is always open; "within a process of reaching mutual understanding, actual or potential, it is impossible to decide a priori who is to learn from whom" (Habermas, 1990, p. 26). This is a common idea in adult education, usually expressed in the hope that the roles of teachers and learners will move around an adult learning group.

What exactly is communicative action? In Volume 1 of his massive *Theory of Communicative Action* (1984), Habermas defines communicative action as happening "wherever the actions of the agents involved are coordinated not through egocentric calculations of success but through acts of reaching understanding" (p. 286). Communicative action is premised on the disposition to try to understand another's point of view, a common theme echoed among writers on discussion and dialogue (Bridges, 1988, Brookfield and Preskill, 1999; Burbules, 1993). Habermas writes that "in communicative action participants are not primarily oriented to their own individual successes; they pursue their individual goals under the condition that they can harmonize their plans of action on the basis of common situation definitions" (1984, p. 286). The ability to put aside egocentric calculations of success in a society run by money and power is a learned ability. Indeed, in Habermas's view learning to do this is *the* adult learning task, made doubly difficult by the existence of schooling systems run according to the competitive ethic and by the spread of civic or familial privatism documented earlier in the article.

In Habermas's writings on the dialogic conditions necessary for communicative action to occur, there is a direct connection to adult education's traditional concern with discussion as the uniquely adult teaching and learning method. In communicative interactions "the participants coordinate their plans consensually, with the agreements reached at any point being evaluated in terms of the intersubjective recognition of validity claims" (Habermas, 1990, p. 58). What we agree to, or decide on, in a conversation is based on our acknowledging that what others are saying has merit. Habermas writes that when people talk through an issue and come to shared understanding or decision, they "make three different claims to validity in their speech acts . . . claims to truth, claims to rightness, and claims to truthfulness" (1990, p. 58). In fact, "every speech act involves the raising of criticizable validity claims aimed at intersubjective recognition" (1996, p. 18).

Habermas's writings on communicative action have a functionalist, even a legalistic tone that can be off-putting to adult educators. Communicative action, validity claims, intersubjective recognition, and understanding – these are hardly terms we use to describe our daily practices to each other.

When opening a conversation about how much milk we need to get today, what is the best way for England to beat Germany in a World Cup qualifying match, or who is going to meet the school bus today, I would never say, or even think, that for the conversation to have any meaning it must involve something called validity claims. I might, after a moment or two thinking about it, acknowledge that my partners in conversation are trying to communicate, so we could call ourselves communicative actors. And I might also grant the possibility that we're trying to understand each other's positions and come to common agreement. But raising validity claims? What's that got to do with getting milk?

Yet Habermas contends that raising validity claims is something intrinsic to every human conversation. In his view "anyone acting communicatively must, in performing any speech action, raise universal validity claims and suppose that they can be vindicated" (Habermas, 1979, p. 2). These claims are the basic conditions of speech that people strive to meet when they attempt to communicate in good faith with each other. If I struggle to understand what you're saying and try to make my comments to you as comprehensible as possible in return, then I am communicating in good faith. If I then try to connect to, build on, and take account of what you have said as I respond to you, I am likewise sincerely trying to build some shared understandings. What Habermas calls communicative action – two or more people trying to come to an understanding or agreement – is premised on the good-faith effort of those involved to speak in the most truthful, best-informed way they can. In an interview, Habermas says that "whenever we mean what we say, we raise the claim that what is said is true, or right, or truthful" (1994, p. 102). In communicative action, then, "speaker and hearer know implicitly that each of them has to raise the aforementioned validity claims if there is to be communication at all (in the sense of action oriented to reaching understanding)" (Habermas, 1979, p. 4).

Two things are striking about this idea. First, not all conversational interactions are examples of communicative action. Indeed, in a society dominated by money and power, a great deal of communication will be the exact opposite of this kind of talk. People will speak to exploit, or dominate, others or to justify and support a system that legitimizes this domination. True communicative action is a rarity in life, something that deliberately needs to be fostered. This is where the role of adult education, and the actions of adult educators, become relevant. Within the dialogic tradition of adult education there is a belief that speaking in the way that Habermas describes as communicative is something that adults can learn. There are, furthermore, the assumptions that adult educators can teach these orientations to speech, that they can create learning opportunities in which these ways of speaking are honored and practiced, and that they can do their best to model their commitment to these dialogic forms in their own educational actions. Dialogic teaching is premised on the idea that dispositions of democratic

discussion – the sorts of reciprocity and mutuality endemic to Habermas's notion of validity claims – can be taught and learned.

The second thing that is striking about communicative action is how its unabashed hope in the possibility of two or more people coming to understand each other's views and agreeing on a common course of action stands firmly against postmodernism. From a postmodern perspective, Habermas is engaged in something of a fool's errand. If postmodernism teaches us anything (and teaching us something is too directive an activity for many in this orientation), it is that language can never be trusted. Logocentrism – the assumption that a core of discoverable meaning exists at the center of speech and writing – is completely rejected. Words are viewed instead as slippery, opaque, and contextual. From a postmodern perspective, the thoughts I have can never be expressed in words in exactly the way I think them. Furthermore, despite my best intentions to craft words that convey my meanings as transparently and accurately as possible, the meanings that you take from them will never be exactly what I intend. Your experiences and history will always skew how you understand the words I use and ensure that you invest them with connotations and meanings I never intended.

Despite the postmodern critique of this theory of communicative action, Habermas steadfastly refuses to ditch modernity's dream of using human reason to create a more humane world. Part of that dream is clearly bound up with the possibility of adults' learning to speak to each other in honest and informed ways so that they can hold democratic conversations about important issues in a revived public sphere. Since learning to talk in this way is the most important hope for creating democracy, there could hardly be anything more important in civil society for Habermas than adult education. Adult educators who possess the ability and inclination to create conversational settings in which people learn to base their communication on validity claims are precious resources indeed from his point of view. Before getting carried away regarding the planet-saving role of adult education, and particularly before getting any deeper into the nature of validity claims, I want to leave the theory of communicative action for a moment (but only for a moment) to return to the centrality of adult learning in Habermas's work, in particular, to the way he interprets ego development as an adult learning process.

Adult Learning and the Development of Moral Consciousness

As well as viewing reflexive adult learning as the lever of social evolution and arguing that adults' learning to act communicatively is crucial to reviving the public sphere (and thereby expanding democracy), Habermas sees the development of moral consciousness as a learning process that occurs primarily in adult life. This last idea is rooted in Habermas's early formulations

of the interests people have in developing different kinds of knowledge. In *Knowledge and Human Interests* (1971), he presents his influential categorization of technical, communicative, and emancipatory knowledge, arguing that emancipatory knowledge – "analyses that free consciousness from its dependence on hypostatized powers (p. 313) – is a function of people's capacity to become reflective. To Habermas "the emancipatory cognitive interest aims at the pursuit of reflection" (1971, p. 314). Without a capacity for critical reflection we are unable to separate our identity from the steering mechanisms of money and power that have invaded the lifeworld. Our sense of who we are becomes constructed in terms of how successfully our actions exemplify the systemic imperatives of treating relationships as profit-making activities to which we can apply a cost-benefit analysis of the emotional dividends that accrue to us. So becoming reflective is crucial for ego development, for the self-conscious construction of an identity.

If ego development is a learning process that crosses the lifespan, then it is in its adult stages that the evolution of full moral consciousness potentially occurs. In *Moral Consciousness and Communicative Action* (1990), Habermas cites Kohlberg's work on adult moral development to support his own contention that becoming moral is signaled by "the transition from normatively regulated action to practical discourse" (p. 170). In other words, the development of morality is indicated by people's ability to detach themselves from everyday thinking and decide (after participating in discussions with others about the ethical justifications of various approaches to situations) how to act in ways that are not ideologically predetermined. Moral consciousness emerges as a person "passes into the post-conventional stage of interaction" (Habermas, 1990, p. 160), in which "the adult rises above the naivete of everyday life practice" (p. 160). Passing into this postconventional stage is marked by an awareness of life's contingencies, by an acknowledgment of the contextuality of beliefs, and by the ability to recognize how one's thinking is ideologically shaped. To Habermas "only at the post-conventional stage is the social world uncoupled from the stream of cultural givens" (1990, p. 162).

What does it mean to be "uncoupled from the stream of cultural givens"? Here Habermas harks back to Marcuse's emphasis on the need for distance, privacy, and isolation as necessary to the development of critical consciousness. If people are to act morally, they need to learn how to create some distance from their immediate concerns so that they can view these without the pressures put upon them by the imperatives of the situation or the force of "common sense". One way to do this is to talk with others who have different experiences or who interpret the same experience in markedly different ways. As the adult "becomes a participant in discourse, the relevance of his experiential context pales" (Habermas, 1990, p. 161). The "relevance of [the] experiential context" is often judged as an unalloyed good in adult education circles (experience being thought of as something that should

always be tied to learning), so it is interesting to read this critique of its potential for domination. Here Habermas is pointing out the dark side of experience, the way its familiarity and immediacy can foreclose new and unfamiliar understandings. Discussing different perspectives on experience helps people think "independently of contingent commonalities of social background, political affiliation, cultural heritage, traditional forms of life, and so on" so that they "can now take a moral point of view, a point of view distanced from the controversy" (Habermas, 1990, p. 162).

In an interview in *Autonomy and Solidarity* (1992a), Habermas clarifies the meaning of a moral point of view, seeing it as an awareness of the contextuality of one's own beliefs and values. Hence "to see something from a moral point of view means that we do not elevate our own understanding of the world or our self-understanding to the status of criteria for universalization of a mode of action" (Habermas, 1992a, p. 269). We recognize the provisionality of our convictions even as we act as if they were certitudes. Those holding moral viewpoints are open to "test their universalizability from the perspective of all the others" (Habermas, 1992, p. 269) that pertain to that particular situation.

Habermas is careful to acknowledge that he is describing only the possible development of adult moral consciousness and that the reality is very far away from the situation. He acknowledges that

> empirical investigations come out strongly against the idea that all adult members of a society, even of modern Western societies, have acquired the capacity for formal-operational thought (in Piaget's sense) or for post-conventional judgments (in the sense of Kohlberg's theory of moral development). (1992a, p. 165)

But in holding out the possibility that widespread independent moral thought could at some point form a hedge against the lifeworld's occupation, he is once again practicing that affirmative brand of Marcusean critical theory he finds so appealing. In his words, "I maintain only . . . that individuals can develop structures of consciousness which belong to a higher stage than those which are already embodied in the institutions of their society" (1992a, p. 165).

In speaking of the widespread possibility of adults across a society being able to move to a postconventional stage of reasoning, Habermas is exhibiting the kind of universalistic emphasis that has aroused strong criticism. He is aware of the intellectual unfashionability of his position, acknowledging that "I am defending an outrageously strong claim in the present context of philosophical discussion: namely, that there is a universal core of moral intuition in all times and in all societies" (1992a, p. 201). However, he is not arguing that this core assumes the same shape in all contexts. What he does contend is that these intuitions spring from the same origin: from the conditions of symmetry and reciprocal recognition which are unavoidable presuppositions

of communicative action" (1992a, p. 201). The giving of reasons for action is one such presupposition, the readiness to grant others the same communicative rights as oneself another.

Habermas's position of moral universalism is, paradoxically, a rejection of cultural universalism. He defines a universalistic value orientation as one entailing the rejection of the universal validity of one's own beliefs. A morally universalistic outlook means that "one does not insist on universalizing one's own identity" and that "one does not simply exclude that which deviates from it" (Habermas, 1992a, p. 240). Instead of a xenophobic certitude, "one relativizes one's own way of life with regard to the legitimate claims of other forms of life" (Habermas, 1992a, p. 240). One also "grants to the strangers and the others, with all their idiosyncracies and incomprehensibilities, the same rights as oneself" (Habermas, 1992a, p. 240). The expectation of adopting such a perspective is that "the areas of tolerance must become infinitely broader than they are today" (Habermas, 1992a, p. 240).

The Theory of Communicative Action

As we have already seen, communicative action is action taken by adults with the purpose of reaching understanding and agreement with each other. Indeed, my phrase "action taken by adults" probably implies more intentionality than Habermas intends. The reality for him is that communicative action is, in a deep sense, unavoidable and unwitting. In a 1994 interview, he says, "I never say that people *want* to act communicatively but that they *have to*" (p. 111). To Habermas "in everyday communicative practice, socialed individuals cannot avoid (also) employing everyday speech in a way that is oriented toward reaching understanding" (1994, p. 101). This is because "there are elementary social functions that can only be satisfied by means of communicative action. Our intersubjectively shared, overlapping lifeworlds lay down a broad consensus, without which our everyday praxis simply couldn't take place" (Habermas, 1994, p. 111). Rearing children, co-operative action of any kind, and solving problems "without the costly recourse to violence" (Habermas, 1994, p. 111) are all examples of these social functions in his view.

This desire for mutual understanding lies at the heart of human speech. In Habermas's view "reaching understanding is the inherent telos of human speech . . . the concepts of speech and understanding reciprocally interpret one another" (1984, p. 287). The point of speech, indeed in many ways the point of life, is to come to understandings with others that allow us to build relationships and alliances, thereby giving our lives meaning. When people agree on something, they enjoy "the intersubjective mutuality of reciprocal understanding, shared knowledge, mutual trust, and accord with one another" (Habermas, 1979, p. 3). This kind of agreement represents the sort of

solidarity that Habermas earlier described as the most endangered resource on the planet. Agreement thus underlies social action. It is integral to the kind of political will formation so necessary to democracy. Without agreement the intersubjective energy that propels collective action in the pursuit of common goals cannot develop.

Reaching agreement for Habermas is therefore inherently democratic. In his view "a communicatively achieved agreement . . . cannot be imposed by either party (whether instrumentally via intervention or strategically via undue influence)" (1984, p. 287). Hence, embedded in human communication – especially that concerned with how we decide to live as a community – are certain democratic norms. First, as we have seen, "coming to an understanding requires the rider uncoerced" (Habermas, 1984, p. 392). Those involved must feel that the understanding has been reached of their unforced volition. Second, coming to an understanding is based on the truthful giving of reasons for conduct. It is "a process of mutually convincing one another in which the actions of participants are coordinated on the basis of motivation by reason" (Habermas, 1984, p. 392). Third, "coming to an understanding means that participants in communication reach an agreement concerning the validity of an utterance; agreement is the inter-subjective recognition of the validity claim the speaker raises for it" (Habermas, 1987a, p. 121).

The concept of validity claims features strongly in the early Habermas, particularly in *Communication and the Evolution of Society* (1979) and in *Theory and Practice* (1973). As already discussed, Habermas believes adult learning happens primarily through speech. In social systems "subjective learning processes take place and are organized within the framework of ordinary language communication" (Habermas, 1973, p. 12). When we engage in "ordinary" conversation, we are continually learning to assess the validity claims embedded within another person's words. Validity claims are the unspoken assumptions we make regarding the truth and sincerity of another person's comments. Is the person talking to us interested in stating her views as clearly as she can so that we have a good chance of understanding what she's trying to say? Or is she appearing to be open and honest so as to get us on her side in order to make it easier for her to influence us for her own ends? Habermas believes that each time we enter into a conversation, we are continually judging how far we can trust what our partner is saying. In effect, we are assessing a number of validity claims implied in the other's attempt to speak to us. Habermas argues that "in action oriented to reaching understanding, validity claims are 'always already' implicitly raised" (1979, p. 97). Furthermore, "these universal claims . . . are set in the general structure of possible communication" (Habermas, 1979, p. 97). Whenever people, irrespective of time or place, try to reach understanding, they act according to these claims. Hence "in communicative action, the validity basis of speech is presupposed" (Habermas, 1979, p. 118).

What are the validity claims Habermas identifies? The first is "the comprehensibility of the utterance" (1973, p. 18). We ask how clear and understandable are the words the other person is using. This is the claim of comprehensibility. When we hear a sentence we also try to gauge "the truth of its propositional component" (Habermas, 1973, p. 18), that is, whether or not the words used accurately represent some state of affairs in the wider world. This is the claim of truth. The extent to which the speaker sticks to the rules of talk that prevail in our community is a third feature we pay attention to. A sentence is judged partly according to "the correctness and appropriateness of its performatory component" (Habermas, 1973, p. 18). Communication is impossible without people's observing the intuitively understood norms and rules governing speech, the rules of the road of talk. In Habermas's view "all communicative actions satisfy or violate normative expectations or conventions" (1979, p. 35), and when we speak to someone, we continually judge her adherence to these. This is the claim of rightness. Finally, we need to know that the person speaking to us is sincerely interested in reaching understanding. This is the claim of "the authenticity of the speaking subject" (Habermas, 1973, p. 18). We must be able to depend on the goodwill of others in conversation and believe that they sincerely wish to make themselves understandable and to understand us in turn.

If any meaningful conversation is to occur, these four validity claims have to be satisfied. For Habermas "communicative action can continue undisturbed only as long as participants suppose that the validity claims they reciprocally raise are justified" (1979, p. 3). When two people involve themselves in communicative action – when they talk to each other with the intention of reaching common understandings – they rely on the fact that the four claims could be demonstrated if either of them requested this. Each person assumes that, if necessary, the other could show how she is trying to satisfy these claims. So in any genuine speech, "there is a common conviction that any validity claims raised . . . could be vindicated because the sentences, propositions, expressed intentions and utterances satisfy corresponding adequacy conditions" (Habermas, 1979, p. 4).

Learning to recognize when, or how far, these validity claims are being met is an unending adult learning project, one crucial to democratic life. If we haven't learned to distinguish between propagandizing and a genuine statement of deeply held views, or to discern those times when apparent truthfulness masks coercive intent, then our ability to defeat subtle demagoguery within the public sphere is severely curtailed. It is in everyday communicative action that adults learn to recognize the kinds of sophistry and manipulation that, on a larger scale, diminish the public sphere. The chair of a community gathering who, in giving the "sense of the meeting," carefully slants his summary to highlight his preferred view; the adult education facilitator who sums up the main points of a discussion and gives an account that some in the room barely recognize; the spouse or lover in a supposedly open

conversation who skillfully manipulates the outcome so that the blame for any marital stress or interpersonal tension always rests on the other's shoulders – all these communicative actions are violating one or another of the validity claims Habermas identifies as endemic to communicative action. In learning how to detect when these things are happening and how to bring these dynamics to people's attention, adults prepare themselves for conversations in the public sphere. They show that they are learning communicative competence.

One of Habermas's ideas that has drawn criticism is his emphasis on the giving of reasons as a universal feature of speech. To him "even the most fleeting speech act offers, the most conventional yes/no responses, *rely* on potential reasons" (1996, p. 19). If asked, we could supply the reasons why we propose something, or respond to another's proposal, in the ways we do. Reasons, therefore, "are the primary currency used in a discursive exchange that redeems criticizable validity claims" (Habermas, 1996, p. 35). The reasons given for various proposals or assertions can, of course, be false, wrong, exploitative, or immoral. But the giving of reasons is universal. We may appeal to authority (do this because I tell you to) or supernatural powers (do this because the rain god will be displeased if you don't), but we always cite reasons to justify our beliefs or actions to ourselves and others. If a speaker is following the appropriate communicative procedures, then he or she assumes the responsibility for giving grounds and justifications for the validity claims implicit in whatever is said. Habermas summarizes the responsibilities entailed by communicative action as follows: "the speaker, in a cognitively testable way, assumes with a truth claim, obligations to provide certain grounds, with a rightness claim, obligations to provide justification, and with a truthfulness claim, obligations to provide trustworthy" (1979, p. 65).

Nowhere is this giving of reasons more important than in deliberations within a democratic public sphere. To Habermas a speech community is also a democratic community, and the rules that govern communicative action are the same as those informing the democratic process. If learning to participate in communicative action is a universal adult learning project, then learning democratic process is its political counterpart. The standards and rules we learn to judge the rightness of our participation in a conversational community are very similar to those we adopt when assessing whether or not a democratic decision has true legitimacy. In both instances "participating actors must conduct themselves cooperatively and attempt to reach an agreement about their plans (in the horizon of the shared lifeworld) on the basis of common (or sufficiently overlapping) situation interpretations" (Habermas, 1992b, p. 79). In pursuing agreement as citizens or as "ordinary speakers, adults apply communicative rationality; the rationally motivating force of achieving understanding" (Habermas, 1992b, p. 80). Communicative rationality is centered on the fulfillment of validity claims and on being able to

explain how one's assertions and proposals are comprehensible, sincere, truthful, and appropriately expressed. Communicative rationality thus "provides a standard for evaluating systematically distorted forms of communication and of life" (Habermas, 1992b, p. 50). The same criteria of validity that we apply to judge the effectiveness of our communicative efforts can be adapted to assess the legitimacy of our social, political, and economic institutions. After all, these institutions are determined by our communicative efforts, and if participants within them do not act understandably, sincerely, truthfully, and appropriately, then they can easily become instruments of ideological manipulation and domination. For Habermas, then, "those aspects of validity that undergird speech are also imported to the forms of life reproduced through communicative action" (1996, p. 4). The most important of these forms is the democratic political process.

A Discourse Theory of Democracy

In a rare (and welcome) burst of lyricism concerning the limits of communicative rationality, Habermas acknowledges that "communicative reason is of course a rocking hull – but it does not go under in the sea of contingencies, even if shuddering in high seas is the only mode in which it 'copes' with these contingencies" (1992b, p. 144). Perhaps the most turbulent waves – the tsunami of communicative action – are produced when people try to work with the inherently contradictory and uncontrollable political arrangement we call democracy. Nonetheless, from *Theory and Practice* (1973) to *The Postnational Constellation* (2001), Habermas is consistent in his argument that the rules of discourse represented by communicative reason are also the basis of democratic process (adult educators will also recognize these as the basis of liberal models of adult discussion groups). These rules are present "on every occasion when we strive to ensure that (a) all relevant voices are heard, (b) the best of all available arguments, given the present state of our knowledge are accepted, and (c) only the non-coercive coercion of the better argument determines the affirmations and negations of the participants" (Habermas, 1992a, p. 260). Taken together, they constitute an ideal which citizens can use to judge how well political deliberations are going and adult educators can use to judge whether or not adult learning groups are adhering to the democratic traditions of the field.

Of course the problem with this ideal is that judgments as to which are the relevant voices to be heard, how relevance itself is to be determined, how we decide which are the best arguments, and who estimates exactly what is the present state of our knowledge are all highly contentious. They could easily become the property of an elite cadre of communication specialists whom we look to when trying to assess how well we're communicating. If we're not careful we end up privileging the very experts Habermas is

trying to restrain. Not surprisingly, Habermas is quick to recognize this danger. In an interview in *Justification and Application* (1993), he voices his regret at having described the conditions under which unlimited communication occurs as the ideal speech situation, calling it "a term whose concretistic connotations are misleading" (p. 164). He acknowledges that as well as being the medium through which democracy can be learned, "language is also a medium of domination and social power" that "serves to legitimate relationships of organized force" (Habermas, 1988, p. 172). He continually points to the ways in which ideology works "to conceal the asymmetrical distribution of chances for the legitimate satisfaction of needs" (Habermas, 1975, p. 27), particularly the chances different people have to join a deliberative speech community. If a society maintains itself by subtly discrediting or marginalizing certain voices, "communication between participants is then systematically distorted or blocked" (Habermas, 1975, p. 27). However, Habermas does not believe that this possibility inevitably renders rules of discourse useless. To reject these rules because they can be co-opted and manipulated by dominant groups is to throw the baby of communicative reason out with the bathwater of potentially distorted communication.

For Habermas the ideal standards of conversation, embedded as they are in the universal processes of speech, offer the best hope of keeping democratic forces alive. We can use these standards to determine whether a speech community (of, say, elected representatives) is reaching its decisions in a fair and morally defensible way. In an ideal speech community "all motives except that of the cooperative search for truth are excluded" (Habermas, 1975, p. 108). The members of such a community are all those affected by the matters being discussed. Deliberations are conducted around "a common interest ascertained without deception" (Habermas, 1975, p. 108) in which "the constraint-free consensus permits only what all can want" (p. 108). A genuine attempt to adhere to these rules, while recognizing that people will always fall short of them, is what grants legitimacy to adult educational processes and to the broader workings of democracy. A democratic decision – whether this be about the curriculum of a graduate adult education course or the way in which wealth should be distributed among the population – has legitimacy only if it is reached after an attempt to follow the rules of discourse.

From a discourse theory standpoint, the fact that a decision represents the will of the majority is no guarantee of its legitimacy. What is crucial is the way this majority decision is reached, particularly whether or not it has "an internal relation to the competitive quest for truth" (Habermas, 1992a, p. 256). If the standards already discussed are observed, then Habermas believes we can call a decision reasonable – reasonable because it represents "the rationally motivated, although fallible, result of a discussion which was prematurely ended under the pressure of the need for a decision" (1992a., p. 256).

Between Facts and Norms (1996) is the book in which Habermas's discourse theory of deliberative democracy is most fully laid out, though its elements are addressed much earlier in books such as *Toward a Rational Society* (1970). Habermas argues in the former work that "according to discourse theory the success of deliberative politics depends . . . on the institutionalization of the corresponding procedures and conditions of communication, as well as on the interplay of institutionalized deliberative processes with informally developed public opinions" (1996, p. 298). The rules of discourse implied in the simplest speech acts provide a model for the formal workings of democratic process and for debate about these within the public sphere.

In its simplest form democratic decision making represents "a consensus arrived at in discussion free from domination" (Habermas, 1970, p. 7). However, as societies grow ever larger and more complex, a domination-free consensus arrived at through town meetings or other inclusive community conversations becomes increasingly impossible to achieve. In the 21st century, Western societies are "pluralistic societies in which comprehensive worldviews and collectively binding ethics have disintegrated" (Habermas, 1996, p. 448). Legislative procedures become increasingly concentrated in elite circles and distanced from the everyday lives of citizens. Existing laws, and the ways these are made, can also be changed at any moment by lawmakers.

In this situation, where the populace is often deeply alienated from legislation, how can the laws that are made have any validity? It is Habermas's contention that "the democratic procedures for the production of law evidently forms [*sic*] the only postmetaphysical source of legitimacy" (1996, p. 448). These democratic procedures themselves arise out of communicative action. From the viewpoint of discourse theory, "the discourse principle acquires the legal shape of a democratic principle" (Habermas, 1996, p. 458) because it works "to legally institutionalize those communicative propositions and procedures of a political opinion and will formation" (p. 458). The only laws that have a chance of being perceived by the populace as legitimate are those that are clearly the result of democratic deliberations. If political actors follow the validity claims that Habermas sees as endemic to human speech, then citizens will regard the decisions they make as rational, that is, as being in the best interests of those they affect. Thus, "discourse theory explains the legitimacy of law by means of procedures and communicative presuppositions that, once they are legally institutionalized, ground the supposition that the processes of making and applying law lead to rational outcomes" (Habermas, 1996, p. 414).

This is a weighty role for democracy. In Habermas's words "the *democratic process* bears the entire burden of legitimation" (1996, p. 450) where the law is concerned. Citizens act under "the promise that democratic processes of law making justify the presumption that enacted norms are rationally acceptable" (Habermas, 1996, p. 33), and people carry the expectation that democratically decided laws are fair, contingent, and revisable. This

foregrounding of democratic process as the guarantor of legislative legitimacy reveals Habermas's deep democratic sensibilities yet again. More importantly, though, it raises significant questions for adult education. If people are to judge whether or not "democratic processes of law making justify the presumption that enacted norms are rationally acceptable" (Habermas, 1996, p. 33), then they need to learn ways of recognizing when democratic processes are being conscientiously followed. This is not just a matter of learning democratic theory. People need to experience the contradictions and tensions of democracy and to learn how to navigate through these while also learning the uncomfortable ontological truth that they are often unnavigable. Learning democracy is a matter of learning how to live with ambiguity and contingency as much as it is learning how to apply deliberative decision-making procedures. As such, it connects directly to the development of post-conventional judgment that Habermas identifies in *Moral Consciousness and Communicative Action* (1990) as an adult learning project.

Habermas's work on learning explores three avenues through which adults can learn democratic procedures and dispositions. First, societies can institutionalize evolutionary learning processes so that knowledge of democratic practices can be handed down from generation to generation. In *Communication and the Evolution of Society* (1979), Habermas argues that organized learning processes are successful if they result in "the production and utilization of technically and practically useful knowledge" (p. 173). Democratically speaking, this means that adult education must give plenty of opportunities for people to learn both the technical aspects of democratic procedures and the typical, predictable diversions and blockages that arise when working within these. As far as formal adult education is concerned, this means that the negotiation of curriculum and of classroom process among the learning community should constitute the norm rather than the exotic exception. The kinds of negotiations over purposes and activities that are the common conversational currency in community action groups would become prominent in adult education programs. If this happened, then adult education as part of civil society could constitute a minilaboratory in which people could learn and practice democratic dispositions that could then be transferred into the public sphere.

Second, given that communicative action is inherently democratic, adults learn about democratic process as part and parcel of their everyday conversations. Seeing things from another point of view, taking different perspectives, suspending judgment about something contentious till we hear what the other person has to say about it – these are all communicative acts we engage in during conversations about apparently nonpolitical matters. In discussion groups within both liberal and radical adult education, many of these everyday communicative behaviors are explicitly identified as the ones around which discussion should be organized. Bridges (1988) urges discussion participants to learn how to build a moral culture

for discussion. Burbules (1993) sketches out the necessary communicative virtues adults need to learn if they are to talk across differences, and Brookfield and Preskill (1999) outline dispositions of mutuality and reciprocity that must be necessarily be learned if democratic discussion is to occur. Eduard Lindeman is the American adult educator who has argued most prominently for democratic discussion as the quintessential adult educational method. In papers such as "The Place of Discussion in the Learning Process," "Group Work and Democracy," and "Democratic Discussion and the People's Voice" (all in Brookfield, 1987) and in books such as *The Meaning of Adult Education* (1926/1961) and *The Democratic Way of Life* (Smith & Lindeman, 1951), Lindeman's vision of democracy and his emphasis on the need for adult citizens to learn a number of democratic disciplines through discussion participation has distinctly Habermasian overtones.

Finally, Habermas's work on the development of moral consciousness offers clues towards a third, somewhat contradictory approach to the project of learning democracy. As discussed earlier in this article, Habermas sees the development of postconventional judgment, and the consequent tolerance of multiplicity and contextuality this entails, as something that is paradoxically learned when people are removed from their experiential context (see Habermas 1990, pp. 161–162). A separation from immediate experience allows adults to reflect back on this experience – usually in conversation with others – in a way, and with a critical edge, that is difficult in daily life. This is the essence of adult critical reflection.

Critical reflection, in Habermas's view, is chiefly an adult phenomenon. He believes we cannot talk about critically reflective learning until uncritical, unreflective learning has occurred, usually at earlier stages of life. In his opinion "we are not able to reflect back on internalized norms until we have first learned to follow them blindly through coercion imposed from without" (Habermas, 1988, p. 170). So critical reflection in adulthood depends on an uncritical assimilation of norms in childhood and adolescence. One cannot reflect in a vacuum; there must always be something to reflect about. Learning about oppression, or ideological domination, for example, is not just a theoretical exercise. It has true meaning only when we have lived through the consequences of domination or felt the cracks in the smooth façade of the administered life. Until adult life grants us enough diverse experiences to provide the comparative data for critical reflection, we are unable to judge the accuracy or benevolence of rules and perspectives learned in childhood. Reflection, therefore, "is condemned to operate after the fact" (Habermas, 1988, p. 170). However, this does not render it irrelevant, since "operating in retrospect, it unleashes retroactive power" (Habermas, 1988, p. 170). This is the retroactive power of criticality, the capacity to "become critically aware of the meaning of . . . the sequence of identifications and alienation" (Habermas, 1988, p. 183) that comprises our life histories.

Conclusion

For many educators Habermas remains the only show in town where critical theory is concerned. In this article I have tried to illuminate the reasons for his prominence. Although his body of work is intimidatingly wide, certain themes close to adult educators' concerns repeatedly emerge. There is the belief that adult learning is the engine of social change and that understanding its dynamics is as important as understanding mechanisms of production and exploitation. There is the contention that critical reflection is a learning process observable mostly in adulthood and a consequent emphasis on the possibility of adults' reflecting back on ideological norms and behaviors internalized uncritically in childhood. Along with this is the stress on the way standards of conversation derived from communicative action can provide a methodological ideal against which dialogically inclined adult educators can gauge their effectiveness. Finally, there is the connection constantly returned to between the behaviors and dispositions of communicative action and the democratic process. Drawing on both Marxist and pragmatic traditions, Habermas reaches the same conclusion as Lindeman regarding the workings of democracy: that it must be understood as a lifelong learning process in which learning to live with contingency and contradiction is of equal importance to learning a set of procedural arrangements.

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10

Myths of Paulo Freire

Kathleen Weiler

> I am now more than seventy, and at the end of century, in whose final moment I hope to take part – maybe giving an interview to a television channel, or drinking cachaca or a good wine – I am sure I will be committed, as much as I am today, to a bohemian pedagogy of happiness, in the way that I am, tropical. This will be a pedagogy of laughter, of questioning, of curiosity, of seeing the future through the present, a pedagogy that believes in the possibility of the transformation of the world, that believes in history as a possibility.[1]

It seems almost incontestable that Paulo Freire is the most widely known educational theorist now living. Educators throughout the world acknowledge Freire's stature, even if they might disagree with his politics. *Pedagogy of the Oppressed*, which was published in English in 1971 and has sold over 300,000 copies, according to the most recent English edition, is a key text for theorists concerned with literacy, adult education, and the political analysis of education.[2] Freire has been an inspiration to progressive educators in settings throughout the world – in schools and universities, labor unions, church groups, adult literacy programs, battered women's shelters, and community organizations; wherever people have attempted to organize and theorize oppositional practices and collectivities. Freire's inspirational style and personal charisma, along with his steadfast stance against repressive power, have made him a symbol of human strength and integrity. Like many others, I have been inspired by his writings and his life. In an intellectual and political climate in which the values of selfishness and competition, of "the market," have come to dominate official educational discourse,

Source: *Educational Theory*, 46(3) (1996): 353–371.

Freire's example seems even more important. But although Freire is frequently invoked in the work of progressive educators, in fact there are few critical discussions available of either his life or work. The main sources for biographical information about Freire's life are his own brief comments in the "talking books" of the 1980s and early 1990s and his recent account in *Pedagogy of Hope*.[3] There is as yet no detailed biography placing Freire's life in historical context, and the works examining his thought have been uneven.[4] The publication of five new books on Freire, then, is a welcome beginning to the rethinking of Freire and his place in educational thought and practice.

The books under review here include two collections of essays, both published by Routledge and coedited by Peter McLaren (one with Peter Leonard, one with Colin Lankshear); Moacir Gadotti's primer; John Elias's Catholic reading; and Paul Taylor's close and critical analysis of Freire's actual texts.[5] None of these books is hostile to Freire's ultimate political position, which can always be located somewhere on the Left, in support of ideas of democracy, freedom, and human possibility. The best of them employ a critical stance; the most problematic are written with the reverence of disciples. A reading of these five books illustrates the point that there are a number of different "Freires" called forth in educational discourse; they highlight the ways in which Freire has been used as a kind of icon or sign by educational writers on the Left to support a variety of progressive projects. But the political need for Freire and respect for him as a person should not, I think, mean an uncritical acceptance of his every statement or the romanticization of his past practice. Freire's own pedagogy calls for a profoundly critical way of being in the world. The canonization of Freire, his use as a symbol without an active and critical engagement with his thought, seems to me a betrayal of the ideals he is calling for in his best work. The following discussion of these five texts and of the various ways Freire has been deployed as sign or myth in them is presented in the spirit of a Freirean critique, a respectful but critical reading.

The two collections edited by McLaren with Leonard and Lankshear, respectively, present a wide-ranging discussion of Freire and his impact on Left educational thought. A number of these essays use a general reference to Freire to stand in for a conception of progressive political education and then move to discuss their own concerns, as in Marilyn Frankenstein and Arthur Powell's excellent and stimulating discussion of ethnomathematics, Marguerite and Michael Rivage-Seul's discussion of the philosophy for children project in Guatemala, or Lankshear's "Functional Literacy from a Freirean Point of View." Other essays engage Freire's thought in a wider context, such as Carlos Alberto Torres's useful essay on the Latin American and African political contexts in which Freire's thought developed, Adrianna Puiggros's reflections on Freirean pedagogy in the light of higher education in Argentina, or Tomas da Silva and McLaren's thoughtful reading of Freire in

the context of contemporary epistemological debates, "Decentering Pedagogy: Critical Literacy, Resistance, and the Politics of Memory." My own essay, "Freire and a Feminist Pedagogy of Difference," is included in McLaren and Lankshear's *Politics of Liberation*.

The three single-authored books all purport to present critical readings of Freire. Elias presents an analysis of Freire's thought from a liberal Catholic perspective. Although this book was published in 1994, it focuses almost exclusively on Freire's early works and contains few references to Freire's publications after the mid-1980s. Elias's discussion of Freire's life is brief and sometimes confusing, particularly compared to the much more detailed accounts of Torres and Taylor. For example, although Elias notes that Freire returned to Brazil in 1980, he does not discuss Freire's work during the subsequent fifteen years. He also makes factual errors, as in his statement that Freire "is presently a Minister of Education in Rio de Janeiro," which I assume refers to Freire's brief tenure as Secretary of Education in São Paulo between 1989 and 1991. This kind of confusion is disconcerting in a book that claims to be "the first full length treatment of Freire's thought in English to appear since the mid 1970s." Large sections of Elias's book are familiar expositions of Freire's classic texts; its contribution lies in its focus on the religious aspects of Freire's thought. Elias argues that Freire sees human beings

> essentially defined by their relationship to God, who has given them the power of reflective and free choice. Humans are best understood as beings of relationships, first of all to God, and secondarily to their fellow humans. . . . For Freire, humans paradoxically must struggle to become what they already are by virtue of the God-given natures they possess (*RPF*, p. 50).

Elias is at his best, I think, when he considers both the strengths and weaknesses of the prophetic, religious, charismatic quality of Freire's writings. As he points out, "Prophets and charismatic persons are given to dramatic assertions, to putting things in black and white terms, to uttering condemnations of sin and evil, and to presenting idealized visions of a future" (*RPF*, p. 83).

In *Reading Paulo Freire*, Gadotti (Freire's former chief of staff at the Ministry of Education in São Paulo) presents what is essentially a work of hagiography. As a close associate of Freire's, Gadotti writes from an insider's position. Along with Freire, Gadotti was one of the founders in 1980 of the Brazilian *Partido dos Trabalhadores* or Workers' Party. Subsequently, he was the chair of the Educational Commission for the Workers' Party and in 1989 became the chief of the Educational Cabinet when Freire was appointed Secretary of Education of the city of São Paulo. According to Gadotti, this book, which was originally published in Brazil in 1988, was intended as an introduction to Freire's thought for high school students and prospective teachers. Perhaps because it is intended as a kind of primer, the book could easily be read by students with a junior high school reading level. Whether

this makes it a useful text for educators struggling to understand the context and logic of Freire's ideas is another question, since Gadotti tends to simplify complex ideas while describing Freire's life in a tone of adulation and hyperbole. The introduction by McLaren and Henry Giroux, in which Freire is described as a "proud but humble warrior of the spirit," who presents his pedagogy with "the wisdom of an ancient sage and the unfailing passion of the social revolutionary," does nothing to mitigate these problems (*RPF*, p. xvi). On the other hand, although Gadotti's account of Freire's early years is quite similar to others, he does provide a more detailed discussion of Freire's work in São Paulo. The book ends with the by now familiar dialogue between Freire and the author, in which Freire repeats his inspirational message of optimism and love. As usual, this exchange is uplifting and a pleasure to read as a testimony to Freire's humanity.

Paul Taylor's careful study of Freire's actual texts is perhaps the most thoughtful and rewarding of all of these books. Taylor describes his approach as a "reading" of Freire, a striking contrast to Gadotti's reverential account of the life of a prophet. Taylor provides a detailed discussion of the European thinkers who influenced Freire's early work, and traces the underlying assumptions of both his theoretical works and the codifications that are the basis of his literacy practice. He points out that since Freire's return to Brazil in 1980, virtually all of his new published work is co-authored. Taylor is critical of Freire on a number of grounds. In particular he argues that the abstract quality of Freire's writings constitutes a serious intellectual and political problem. Taylor points out that Freire's use of broad generalizations and his lack of specific analyses allow him to make inspirational pronouncements without having to address the complexities of the local situations in which people find themselves. But at the same time he is sympathetic to Freire's ultimate political goals, and he makes the point that Freire's reliance on abstractions can be a strength as well as a weakness, because these idealistic statements can be appropriated to justify and support concrete political praxis.

Creating the Revolutionary Life of "Paulo Freire"

All authors create a fictional self, whether implicitly or by creating a first person voice and drawing upon personal experience. But when authors themselves present a "self" in terms of history or politics, this self becomes particularly significant and open to critique. Since Freire often, particularly in his "spoken books," refers to his own life and experience as support for his ideas, he in a sense calls them to the reader's attention as evidence of authenticity or truth. In the case of Freire's own history, it is often difficult even to establish the facts of his life, not to mention the meaning of these "facts." As yet there is no detailed biography placing Freire within the context of

Brazil and the various revolutionary movements with which he has worked. The details of his early history and accomplishments are confused and contradictory partly because of his own rewriting and reinventing of himself. A large part of the myth of the revolutionary Freire rests on these narratives as he has presented them in interviews and autobiographical fragments. The problem of distinguishing self-creation from possible alternative readings is highlighted as we try to capture the life of "Paulo Freire" in the books under review here.

One of the ways "Freire" is called forth is as the originator of a revolutionary pedagogy based on his own life experience. Freire frequently presents the events of his life in a way that helps to support this representation. The biographical details of Freire's childhood and youth are almost always based upon his own accounts: his Catholic mother; the fall of his middle-class family into poverty during the depression; his own difficulties with formal schooling – in part, he explains, because of hunger. Freire thus constructs the story of his youth to emphasize his own empathy with the oppressed. When commentators on Freire rely almost exclusively on his own self-presentation, they both accept a narrative of the self as a source of factual truth, but they also face the danger of ignoring the wider context in which he has lived: the political and economic development of Brazilian society; the debates over the meaning of literacy and the tensions among a number of radical literacy movements in Brazil in the 1950s and early 1960s; the splits within the Catholic church; and the intersection of gender, race, and class in Freire's own history and in Brazilian society in general. Of the authors considered here, only Taylor and Torres, in his essay in *Paulo Freire: A Critical Encounter*, provide extensive discussions of the social and historical context of Freire's life; others accept Freire's narratives as unexamined truth.

Freire often writes as though he were directly involved with teaching and central to the invention of a totally new form of pedagogy framed in the context of a public, political movement. Both Taylor and Torres suggest a somewhat different history. For example, although Freire has always acknowledged the importance of his first wife, Elza, the extent of her influence on Freire's pedagogy remains unexplored.[6] They met when Freire, then 21, tutored Elza, then a nursery school teacher, for her exam to become a school principal. Freire has stated elsewhere that "it was she who led me to pedagogy."[7] Taylor says that it was Elza who encouraged Freire to teach, first privately, then in a secondary school, and who involved him in the Catholic Action Movement. In interviews and public presentations, Freire has consistently acknowledged the importance of his family and his relationships with both Elza and his second wife, Ana Maria. Freire has spoken frequently of his grief when Elza died of a heart condition and of his joy in his later marriage to Ana Maria Freire. In these comments, Freire presents himself as a man for whom personal relationships and love are a central part of

his life, a stance that is consistent with his pedagogy, particularly his recent framing of a pedagogy of joy and hope. But the acknowledgment of the importance of these relationships also makes striking his own lack of theoretical concern with the intersection of the public and private or of the way in which these relationships were also supports for his public life or sources for his thought.

In his early manhood, Freire was influenced by a number of other educational experiments and theories. Again, of the books under review here, Taylor provides the most detailed discussion of these influences. Taylor notes the presence of émigré French professors such as Lucien Febvre at São Paulo University and their influence on Brazilian social theorists, including Freire. He also discusses the influence on Freire of what the French call *l'éducation nouvelle*, which includes such figures as Celestin Freinet and Edouard Claparéde, and of the Jena Plan, proposed by the Swedish educator Peter Peterson. In the French *nouvelle pédagogie*, the teacher was to encourage questioning on the part of students, who were encouraged to be active and responsible for their own education. The Jena Plan, which was similar, was based on *Stammgruppe* or Learning Circles. Taylor points out that the famous Freirean Culture Circles had their origins in these theoretical models as well as in the informal learning groups of labor and peasant movements in Latin America, Europe, and the United States (*TPF*, p. 22). Drawing primarily on Emanuel de Kadt's *Catholic Radicals in Brazil*, Taylor notes the growth of the Catholic Left in postwar Brazil and Freire's close association with Dom Helder Camara, Bishop of Recife, and with the Basic Church Communities (*Communidades Eclesiales de Base*) which tried to relate Bible study to local and political questions. For example, according to Taylor, "the word *Conscientizacão* emerged from a discussion group within the Higher Institute of Brazilian Studies where it was popularized particularly by Dom Helder Camara" (*TPF*, p. 52).

The period between 1944 and 1954 has always been obscure in Freire's own accounts of his life. The authors of the books under review here provide conflicting accounts of this period. Taylor comments, "one has the impression that those experiences between 1944 and 1959, about which little has ever been said, are almost 'lost years' for Freire" (*TPF*, p. 13). In these years Freire practiced briefly as a lawyer, taught Portuguese in high school, and worked in adult education. But the most significant period in these years seems to have been Freire's time with the organization Social Service of Industry (SESI) in Recife. Freire has mentioned this as a deeply significant time for the development of his thought. In one interview, he calls SESI a "private industrial institute" and says he became involved with it through the Catholic church (*TPF*, p. 22). In another, he describes SESI as "a social service institution that provided services to urban workers and fishermen" that provided him with a "re-encounter" with the poor.[8] Puiggros, on the other hand, describes his work with SESI as comprising "part of a program

aimed at extending a hegemony of modern culture" (*CE*, p. 158). She notes that SESI operated during the popular nationalist government of Getulio Vargas and continued until 1954 (the year of Vargas's suicide), aimed at increasing the basic literacy of peasants as well as training skilled urban workers to meet the needs of business. Although Gadotti gives a more detailed account, the simple and adulatory presentation (and possibly a weak translation) leave the reader mystified about key issues. A central piece of the myth of Paulo Freire the revolutionary educator is this early involvement with literacy programs, but the lack of specific information about SESI and Freire's activities in these years leaves a confused picture of the extent of Freire's actual participation in literacy work.[9] Was he a teacher, an administrator, or a publicist?

In 1959, Freire completed his doctoral thesis and was given a teaching position at the University of Recife. In early 1961, the liberal Goulart government encouraged the development of literacy programs in Brazil; literacy was a requirement for suffrage, and thus these literacy campaigns were deeply political. In 1961, Freire was asked by the Mayor of Recife to develop a literacy program for the city. In that same year, he was made director of the newly created Cultural Extension Service at the University of Recife, where his work was supported by United States Agency for International Development. This campaign gained a great deal of publicity, and as a result in 1963 Freire was asked to work with the national literacy program, the Movement for Basic Education or MEB. In 1963 the MEB prepared a literacy campaign called *Vivir e lutar* (To Live is to Struggle), which consisted of thirty lessons using photographs of the life experiences of peasants as a basic text. Although Torres sees *Vivir e lutar* as reflecting Freire's influence, Elias notes that "from 1962 onward, a certain amount of give-and-take occurred, especially in the Northeast, among the various literacy programs" (*RPF*, pp. 5–6). The development of both political analysis and literary methods seem to have been a product of ongoing and collective work. Although some of the campaigns in the Northeast such as that in the State of Sergipe seem to have been strikingly successful, it is not clear how successful the wider national literacy program was. But however successful or problematic his practice, Freire was widely publicized as a liberal and even radical reformer. In the aftermath of the military coup that overthrew Goulart, Freire was labeled pro-Communist and anti-American, was arrested and held for seventy days, and eventually fled into exile.

Freire spent several years in Chile after he was forced to leave Brazil. Then in the early 1970s, after a year at the Graduate School of Education at Harvard, he moved to Geneva where he worked with the World Council of Churches until his return to Brazil in 1980. During his association with the World Council of Churches, Freire acted as a consultant to a number of literacy campaigns and participated in countless workshops and conferences in both Europe and the United States. It was in this period that the myth of

"Freire the revolutionary" was in a sense created, not only through the success of his books, but also through his charismatic personal appearances. The one site where Freire was actually directly involved in a literacy campaign was in Guinea-Bissau, and it is here that criticisms of his literacy work are strongest. It seems clear from *Pedagogy in Process*, Freire's own 1978 account of this work, that he was deeply influenced by his contact with African revolutionaries such as Amalcar Cabral and Franz Fanon, and that he became enamored with the image of the charismatic revolutionary leader.[10] A number of authors note the change in Freire's thinking after his involvement with Africa. Because in Guinea-Bissau Freire was engaged in a concrete revolutionary situation in a culture not his own, he was forced to take direct political positions rather than put forth the kind of generalized inspirational calls typical of his other writings. This laid him open to criticisms, both of his celebration of the "revolutionary leader" and his advocacy of the use of Portuguese as the language of literacy instruction. There is also a great deal of evidence that this literacy campaign was largely a failure. Torres notes that "by 1980, reports from Guinea-Bissau began to acknowledge that the goals of literacy for national reconstruction had failed to materialize: of the 26,000 students involved in literacy training practically none became functionally literate" (*CE*, p. 133).

The contradictions in presentations of Freire's practice are again illustrated in the accounts of his work as Secretary of Education of the City of São Paulo between 1989 and 1991 in the administration of Luiza Erundina and the Workers Party. It is difficult to find accounts of this period that provide specific details. *Pedagogy of the City*, which is primarily a collection of interviews with Freire conducted in the early months of 1989, provides the best account of Freire's goals in São Paulo. In these interviews, Freire is scathing in his condemnation of the abandonment of poor children by earlier administrations and by Brazilian business elites, what Freire calls "the reactionary powers within this country."[11] He points to the deteriorated condition of school buildings, the lack of basic school supplies, the acceptance of large numbers of children who never attend school and others who are said to "drop out," but who, Freire argues, are actually forced out by poverty or expulsion.[12] He also points to the question of class language, to the need to support teachers and provide ongoing teacher education, and to the need for a curriculum that will create access to the dominant knowledge but also be grounded in students' own life experiences.

While Freire's discussion of the problems facing the schools of São Paulo is incisive and powerful, it is more difficult to discover the actual history of his time as Secretary of Education. Gadotti's book was published in Portuguese in 1988, before Freire actually took office, but in the English version, published in 1994, Gadotti presents Freire's work in São Paulo as an unqualified success. Taylor is more cautious. An example of the difficulties of evaluating

Freire's practice from his own self-presentation is the 1989 discussion between Freire and Torres in *Politics of Education: Paths from Freire*, in which Freire discusses his goals as he begins his tenure as Secretary of Education (*PL*, p. 102).[13] In this interview, Torres notes the difficulties facing Freire, noting "the size of São Paulo, and its seemingly insurmountable problems of abandoned children living in the streets, growing poverty and urban violence, fiscal constraints, particularly due to Brazil's growing external debt, and the peculiarities of post-dictatorship Brazilian politics and electoral struggle" (*PL*, p. 105). Torres asks Freire what kind of "pedagogy of the oppressed" he intends to implement in such a situation. Freire's response illustrates well both the appeal of his rhetoric and the difficulty of grasping what exactly he is proposing:

> Today, I am Secretary of Education for the city of Sao Paulo, with much more clarity, with much more political and pedagogical understanding, I hope, than when I was thirty or thirty-five years old. I see things more clearly now and I feel more radical, although never sectarian, in the face of my country's reality. I have a more lucid vision of what we must do to change schooling from the public schooling we have now, into a school that is happy, into a school that is rigorous, into a school that works democratically. A school in which teachers and students know together and in which the teacher teaches, but while teaching does not domesticate the student who, upon learning, will end up also teaching the teacher. If you were to ask me, "Are you attempting to put into practice the concepts you described in your book?" of course I am, but in a manner in keeping with the times. It is one thing to write down concepts in books, but it is another to embody those concepts in praxis. Those things are showing themselves to be very challenging, but they continue to give me a sense of joy and satisfaction (*PL*, p. 105).

This response, while admirable as a general statement of a humane education, leaves many questions unaddressed: What were the obstacles facing Freire? What specifically did he propose? How can schools that are "happy, rigorous, and democratic" be created in the brutal conditions of urban Brazil? While these questions are to some extent addressed in *Pedagogy of the City*, the actual accomplishments of Freire's administration or its impact are still unclear. In November, 1992, the Workers Party lost the municipal election, and it is also not clear what effect this defeat had on Freire's attempted reforms.

The Thought of "Paulo Freire"

If "Paulo Freire" is in part created through mythic representations of his life, the process of inventing Freire is even more striking in terms of his thought. Because of the eclectic theoretical influences on his thought as well as his

tendency to broad generalization, Freire can be interpreted and used in a variety of ways. Although Freire's basic ideas have remained in essence much the same, he has framed them somewhat differently depending on the context of their articulation or the intellectual currents of the time. While retaining a core of beliefs, he has shifted from the Catholic humanism of his earliest writings to a period of Marxist influence, particularly during his time in Chile and Africa, and most recently to more practical concerns with state educational policy and reform during and after his time as Minister of Education for São Paulo. Between the publication in 1978 of *Pedagogy in Process*, his account of the literacy campaign in Guinea-Bissau, and his recent book of reminiscences, *Pedagogy of Hope*, Freire has only published transcriptions of seminars or dialogues with other educators who are sympathetic to him, all co-authored works.[14] The early debate over the meaning of Freire in the 1970s was framed as a tension between Catholicism and Marxism. For many, Freire was quintessentially a Marxist humanist, and he continues to be appropriated in this way. McLaren and Leonard, in the introduction to *Paulo Freire: A Critical Encounter*, for example, define Freire in just this light: "[Freire's] humanist philosophy, echoing the humanist Marx, centers on the ontological vocation of humans to become more fully human. To become more fully human involves discursive struggle over meaning: human subjects are, as in Marx, rooted in historical struggle" (*CE*, p. 3). Although Freire himself does not label himself as a Marxist, this reading of his work can certainly be supported by his own statements, particularly in the past fifteen years. On the other hand, Freire has been criticized by more "structural" Marxists for his failure to take economic and material forces into account. In Robert Mackie's 1980 collection *Literacy and Revolution*, for example, several authors attacked him for his idealism and failure to acknowledge the power of the material "base."[15] Of the books under review here, Taylor makes a similar criticism, that although Freire uses terms such as "praxis," he fails to provide an analysis of the specific economic forces shaping social sites; thus exactly what form praxis is to take remains obscure.

While Freire is often read as a Marxist humanist, it is also possible to read him in the light of the tradition of liberation theology, particularly by emphasizing his early works. As we have seen, his early literacy work in Brazil emerged from his activities in the Catholic Action Movement. He seems to have been deeply influenced by the French Catholic philosophy of personalism, and his early work often cites Mounier's *Be Not Afraid*, a text that stresses Catholic collectivism.[16] Freire's continued use of a language of love, hope, faith, and humility certainly can be read as part of a Christian tradition. Taylor argues that Freire's "language of the Christian faith is more than the mere clothes for dressing and presentation: it is actually the skeleton or underpinning of his philosophy and social analysis" (*TPF*, p. 56). Freire's emergence from the same Catholic milieu that led to the Medellin

conference of 1968 has frequently been noted. Elias, who provides the most comprehensive discussion of Freire as a Catholic thinker of the books reviewed here, argues that Freire, like the liberation theologians, looks to the Gospels as the source of social action. He quotes Freire from a speech delivered in Rome in 1970: "I am not yet completely a Catholic. I just keep trying to be one more completely day after day. . . . I just feel passionately, corporately, physically, with all my being, that my stance is a Christian one because it is 100 percent revolutionary and human and liberating, and hence committed and utopian" (*PF*, p. 81). But although Elias is sympathetic with Freire's Catholicism, he also criticizes Freire for failing to address the issue of original sin or the existence of evil in the world. For Elias, Freire's vision, although deeply influenced by the Gospels, is flawed because it "lacks some of the realism of the Catholic tradition with its strong insistence upon original sin and human corruptibility" (*PF*, p. 57). Thus, just as Freire is appropriated as a Marxist but also criticized for being an inadequate Marxist, he also can be read as a Catholic or criticized as a mistaken Catholic.

Most recently, Freire has been appropriated into the debate over the political implications of postmodernism. Although his work clearly emerges from the modernist and humanist tradition, he is now called forth by writers deeply influenced by postmodern sources. As a humanist, Freire accepts the vision of human beings as capable of reflection and action in the world to change history.[17] As a modernist, he emphasizes his belief in the possibility of a progressive politics of hope. This modernist call for struggle for social justice and the possibility of progressive change rests, as many critics have noted, on his use of binary categories such as oppressor and oppressed, and on a metanarrative of human liberation. Giroux, in his essay in the McLaren and Leonard collection, argues that this dualism needs to be understood within the historical circumstances from which it emerged, that the use of such stark binarisms were themselves a tactical move: "Forged in the heat of life and death struggles, Freire's recourse to binarisms . . . raged bravely against the dominant languages and configurations of power that refused to address their own politics by appealing to the imperatives of politeness, objectivity and neutrality" (*PF*, p. 183). But Freire also has been criticized for this tendency to divide the world into oppositional categories, what Taylor calls "a world of polarities which comprises teachers and the taught, the oppressed and the oppressors, the necrophilic and the biophilic, light and dark, subjects and objects, liberators and the liberated."[18] Taylor goes on to argue that although it is heuristically useful, this approach "induces an overall simplicity that actually impedes the way in which we give meaning to experience. Freire relies heavily on this device, but the clarity of his argument allows us to see accurately only at the poles of the inter-arching continua which he has constructed; it allows little insight into the central canopy of everyday life where most people live" (*TPF*, p. 54).

Perhaps the most subtle and extensive attempt to use Freire as a way out of the political paralysis to which postmodernist theory often seems to lead can be found in the essays of Peter McLaren. McLaren argues that Freire's work

> captures the spirit of hope and the courage of one who remains in an unwavering struggle against injustice. In this light, Freire's work could become, for contemporary social theorists, both a modernist reminder that people still suffer pain, oppression, and abandonment and a postmodernist strategy for destabilizing totalizing regimes of signification. . . . It is a politics whose sensibility animates a responsibility to others, and it does so by not dispensing entirely with the concept of totality. Freire works from the metanarrative of liberation and human freedom without allowing such a narrative to become the imposed totality of a categorical utopia (*CE*, p. 210).

While McLaren's defense of the value of Freire the Utopian modernist seems to me powerful and important, his claim that Freire's thought contains a "postmodernist strategy for destabilizing totalizing regimes of signification" is less persuasive. What do the profound dualism of Freire's thought, his emphases on the subject, on "authentic" insight, mean in the context of the postmodernist emphasis on ambiguity and the decentering of grand narratives?

The complexities of the debate over how Freire should be read reflects one of the most striking qualities of Freire's thought: his tendency toward inspirational but decontextualized generalizations. His pronouncements frequently invoke universal themes such as justice, love, and freedom – terms that can be appropriated by writers from a number of different traditions. When commentators want to appropriate Freire, they frequently "fill in" for Freire, elaborating and explaining what he "really" means, or taking his generalizations as specifics. This can lead to claims for his work that are closer to wishes than they are supported by his actual writings. Cornel West, for example, in his introduction to McLaren and Leonard's collection, writes of *Pedagogy of the Oppressed*, "Freire's genius is to explicate in this text and exemplify in his life the dynamics of this process of how ordinary people can and do make history in how they think, feel, act and love" (*CE*, p. xiii). In actuality, Freire rarely discusses specific ordinary people; in all of his work he refers to general categories of "the oppressed," "peasants," "workers," and "intellectuals." The texture and complexity of the lives of ordinary (or extraordinary for that matter) people are not evoked. In this passage, these lives are "filled in" by West, who assumes that the abstraction "the oppressed" captures the specificity of actual lives. Numerous similar examples can be found in the work of other commentators. McLaren, a thoughtful and sympathetic reader of Freire, comments,

> Certainly Freire stresses universal goals, such as human rights and self-determination, but he does so in the knowledge that such rights and determinations are always provisional, contextual, and the result of a

> material struggle over meaning and that they should not be situated transcendentally within a project of liberation but engaged in their historical specificity. One could perhaps invoke on behalf of Freire the term "contingent universalities" (*PI*., p. 211).

In fact, Freire's work is open to criticism precisely for a lack of "historical specificity." Although Freire frequently repeats the need to consider the historical specificity of the local, particularly in his later dialogues, in fact he almost never gives any specific local examples; and when he does, they are often themselves decontextualized figures – a "peasant" or a "student." The claim of location itself is too often an abstract generalization without specificity. In the passage quoted above, McLaren, who is well aware of these problems, introduces the phrase contingent universalities "on behalf of Freire," to try to reconcile the contradiction between Freire's grand but abstract claims of specificity.

This approach of presenting expositions "on behalf of Freire," of reinventing Freire, is employed by a number of writers in the McLaren and Leonard and McLaren and Lankshear collections. When commentators articulate this process, as McLaren does in the passage quoted in the previous paragraph, it seems to me a positive use of Freire, since it acknowledges that what is being claimed is a gloss, a reading. Ira Shor employs this approach in his essay, acknowledging that he is building upon Freire, not trying to copy him: "In the liberating classroom suggested by Freire's ideas, teachers pose problems derived from student life, social issues, and academic subjects, in a mutually created dialogue" (*CE*, p. 25). While claims such as these about "liberating classrooms" have themselves been criticized as regimes of truth, what I think is powerful here is Shor's use of the phrase "suggested by Freire's ideas," which acknowledges the influence of Freire's general perspective but does not attribute more to him than is justified by his texts. Other writers use similar phrases. Tomaz Tadeu da Silva and McLaren, in their essay "Decentering Pedagogy," present what they term

> a poststructuralist and postcolonialist rereading of Freire that while to a certain extent "reinventing" Freire's work in light of perspectives selectively culled from contemporary strands of critical social theory, attempts to remain faithful to the main contours of the Freirean problematic (*CE*, p. 48).

Puiggros, in her call for a form of dialogical education, begins, "Extending Freire's position beyond what is contained in his texts. . . ." thus acknowledging from the outset that she is using Freire and his general call for dialogue to reflect upon and create a more specific analysis (*PI*., p. 171). The use of terms such as "reinventing," "extending," "suggested by," "on behalf of," encourages a critical distance and allows commentators to embrace Freirean goals while acknowledging the shortcomings of Freire's actual practice or mystical philosophy.

While a number of the writers in *A Critical Encounter* and *Politics of Liberation* implicitly acknowledge these shortcomings in his thought, their overall stance is closer to reverential than critical. Other texts, however, take a more cautious approach, particularly to Freire's pedagogy. One major criticism that continues to be made of Freire as well as other theorists associated with both critical and feminist pedagogy is his failure to consider the power of the liberatory teacher, the desire of the teacher to be "the one who knows" and the ways in which teachers are implicated in the truth that is uncovered through the process of pedagogy. Although Freire is quite clear about where he stands politically, at the same time he claims that the pedagogy he supports will allow learners to "read the word and the world" as subjects without considering the complexity of the pedagogical encounter. Critics, most frequently those hostile to Left, have pointed to the dangers of manipulation in Freirean pedagogy.[19] More recently, feminist critics have applied the Foucauldian concept of "regime of truth" to Freirean and other critical pedagogies.[20] This argument rests on the idea that "truth" is called forth by the discourse itself. In the case of Freirean pedagogy, the concept of the revolutionary or liberatory educator is all too frequently called forth in an iconic fashion.[21]

Of the books under review here, Taylor provides by far the most extensive and critical discussion of the iconic quality of Freire's thought in his analysis of the codifications used in Freire's literacy campaigns. Taylor defines Freirean problematizing education as intending to interrogate

> what is given, bringing into question known structures, and examining conventional or taken-for granted "explanations" of reality. It discovers and then reacts to the possibility of "contradiction," identifying ways in which things can be said, done, or exist differently (*TPF*, p. 73).

Taylor goes on to argue that although this is a laudable goal, exactly how this is to be achieved by the Freirean literacy method is in fact very problematic. Taylor argues that a close examination of the sequence of the images used in the Freirean codifications reveals a subtext of "correct" answers that are already in the mind of the educator. In his analysis of the codifications, Taylor that although they are open to a variety of interpretations, Freire clearly has in mind one kind of conclusion – of human agency, the power of culture, the empowerment of literacy. Taylor argues that the codifications create a discursive system with an internal logic that leads the reader to one interpretation. In other words, while any one image might be open to any number of interpretations, the *sequence* as well as the questioning of the Freirean teacher has a particular logic and leads to one particular meaning. The codifications are a sign system – an argument, a particular way of making meaning – and the "reading of the word and the world" that Freire calls for is created by the structure of this sequence. Taylor notes that in the Freirean literacy campaigns the codifications were meant to be gone through in about two days, after which the techniques of reading, using the sixteen or

seventeen generative words, would begin. Taylor points out that these word lists, while supposedly garnered from "the people," are selected by the literacy workers and inevitably reflect their own criteria of selection. He points out, for example, that the key words are all nouns; because there are no verbs, there is no way of asserting action or relationships. Moreover, "not one of the lists includes words relating to personal or family relationships: there is no mention of wife, husband, children, parents or friends, no mention of family or community" (*TPF*, p. 77).

Michel Foucault states that all discourses are regimes of truth, in the sense that they contain and call forth truth and falsehood. The problem with the Freirean method, as Taylor points out, is not that it is a regime of truth, but that this dynamic is not only unacknowledged but in a sense denied through Freire's insistence on the reader as subject, not object, the "reader of the word and the world." Taylor argues, and I think correctly, that a much clearer statement of the political beliefs and goals of the educator would be both more honest and more effective. A direct statement of belief can give learners more power, not less, because they can then agree, disagree, or contest the educator's truth. Although this goal – one of dialogue – is what Freire claims is his own, Taylor's analysis of the codifications is very useful in illuminating the contradictions between Freire's theoretical claims and the effects of his practice.

Another area in which Freire is open to criticism is his failure to address patriarchal privilege or sexist oppression. In the past these criticisms have been based on Freire's failure to consider exploring the specificities of oppression and to implicitly assume that "the oppressed" are male peasants or workers. Of the books under review here, neither Elias nor Gadotti is concerned with this issue. In fact, Gadotti himself uses the generic male pronoun to stand in for all people, a serious issue for a text published in 1994. Although this "he-man language" was universal in the late 1960s, when *Pedagogy of the Oppressed* was written, it has been the focus of extensive criticism since then. Most universities and scholarly journals have guidelines for the use of non-sexist language and Freire himself is now careful to use the terms "women and men" or "human beings" in his writings and public presentations. That Gadotti's usage of the male pronoun is more than a convention is indicated by other points in his text. For example, Gadotti mentions Freire's love of the tango, the beautiful music of Buenos Aires. Gadotti describes the tango as the music of the urban underclass, the "children of immigrants" of Latin America. He continues,

> When we understand the tango as the bottled-up expression of machismo, of suffering in the face of deception, of the need to reflect the dignity of someone who has suffered misery, in short as the manifestation of the crisis of urban civilization, it becomes easier to understand why Freire likes tangos (*RPF*, p. 137).

The identification of "machismo" and "the crisis of urban civilization" in this passage makes very clear that the urban worker referred to in Gadotti's generalized use of "he" is in fact a male worker, and that the use of sexist language throughout this text is the reflection of sexist thinking. It is no wonder that Gadotti does not explore Freire's treatment of gender.

Other authors are more sensitive to this issue and more critical. Bell hooks, who presents a generous and sympathetic reading of Freire in the context of her own practice, nonetheless notes Freire's "blind spot" in matters of gender. Taylor, in his analysis of the Freirean literacy method, also notes the male bias of Freire's analysis of literacy:

> It is one of the paradoxes of literacy, but one ignored totally by Freire, that many non-literate or semi-literate women are more literate than their male counterparts. However, it is the male definition of literacy which is validated, forged as it is in the public economy of the workplace and tempered as it is with cultural and social patriarchy. Women's literacy is devalued because it belongs to the home, to the care of children and to the maintenance of private life (*TPE*, p. 138).

Da Silva and McLaren, in their discussion of Freire and what they call "the politics of memory," also note the problematic quality of his "phallocentric paradigm of liberation in which freedom and the experience of patriarchal manhood are conflated" (*CE*, p. 70). Both bell hooks and da Silva and McLaren argue that this "blind spot" should not lead us to discount the power of Freire's political stance.

Jeanne Brady, in her essay in the McLaren and Lankshear collection, is more critical. She notes Freire's failure to conceptualize women's oppression or subjectivity

> not only in the gendered language that populates his early works such as *Pedagogy of the Oppressed*, but also in his notion of reproduction as being exclusively linked to the project of economic reconstruction, especially in *Pedagogy in Process*. By focusing on reproduction around agriculture, Freire ignores the complexity of reproduction for women around the issue of women's work, namely, health care, birthing, and family matters (*PL*, p. 145).[22]

Perhaps the most troubling evidence of the continued assumptions of patriarchal privilege in Freire's thought come from Freire's own recent texts. In the Forward to McLaren and Leonard's *Paulo Freire: A Critical Encounter*, Freire addresses unnamed "feminist critics" of his work:

> I also appreciate the attempts by feminist critics and educators to rethink my work through their own specific struggles. Since the 1970s I have learned much from feminism and have come to define my work as feminist, seeing feminism closely connected to the process of self-reflexivity and political action for human freedom. As the chapters in this volume

> artist, it is important to appreciate the multiplicity of modes of oppression suffered by women and people of color in the United States and elsewhere across the globe; it is equally important to discount claims to a unitary experience of oppression not only among women, but with respect to all oppressed peoples. I have always challenged the essentialism reflected in claims of a unitary experience of class and gender, inasmuch as it is assumed that suffering is a seamless web always cut from the same cloth. Oppression must always be understood in its multiple and contradictory instances, just as liberation must be grounded in the particularity of suffering and struggle in concrete, historical experiences, without resorting to transcendental guarantees (*CE*, p. xi).

In this passage, Freire typically makes a number of generalizations about the need to be specific. But he does not provide us with any examples of either what he means by feminism or which essays in this volume he is referring to, since the collection includes only one essay by a woman, bell hooks, who is very sympathetic to Freire. Although da Silva and McLaren thoughtfully discuss feminist debates around essentialism and are clearly familiar with feminist theory, the other essays in this collection are striking in the absence of discussions of the specificity of gender or, with the exception of bell hooks, of race.

In the one instance in these books where Freire responds directly to feminist criticisms of his work, he takes quite a different tone from his statement in the Forward to the McLaren and Leonard collection. In his interview with Donaldo Macedo in this same volume, Freire is asked to reply to his feminist critics. The interview is prefaced by a statement by Macedo that although there is not enough space for Freire to respond to the "pertinent issues" raised by the essays in this collection, "What we would like to do is to address a recurring challenge to Freirean pedagogy concerning its treatment of gender" (*CE*, p. 169). This is itself an interesting choice, since this collection of essays does not in fact include any sustained feminist challenge to Freire. And although Macedo's initial framing of this exchange begins, "Some educators, particularly North American feminists" have criticized Freire, in the subsequent interview Freire never refers to any specific criticism; nor does he cite here (or in any other source with which I am familiar) a single feminist theorist, in or outside of education.[23]

In his interview with Macedo, Freire consistently refers to "the feminists," as though there were a single movement or voice, or else he uses anonymous examples, very much like his calling forth of "a peasant" in *Pedagogy of the Oppressed*. In the interview with Macedo, he gives this example of feminist criticism:

> I received not long ago a letter from a young woman who recently came across *Pedagogy of the Oppressed* for the first time, criticizing my *machista* language. This letter was very insulting and somewhat vulgar but I was not upset by it. I was not upset by her letter because, most certainly, she

> has only read *Pedagogy of the Oppressed* and evaluated my language as if this book were written last year. That is, she did not contextualize *Pedagogy of the Oppressed* in its historical context (CE, p. 171).

As is very frequently the case with Freire, he here identifies the feminist critique of his work as a question of sexist language. This question of pronouns, of course, is important but relatively simple to redress, and in his later work Freire has been careful to use "he or she" – in other words to acknowledge that men and women are both human beings and not the same (man). Since Freire has been sensitive to this issue for many years, recent feminist criticism has not focused on his past use of sexist language. But emphasizing this point and having it stand for feminist critique allows Freire to ignore more fundamental questions about his conceptualization of liberation and the oppressed in terms of male experience, or the failure to address the specificity of oppressions in actual history and discourse. Even more disturbing in this passage is the introduction of the anonymous "young woman" to stand in for "the feminists," a young woman who writes a "very insulting and somewhat vulgar" letter. We know nothing of this "young woman" (not even how he knows she is young) and nothing of the content of the letter. She is a rhetorical device that can be used to support the idea of the out of bounds (insulting, vulgar) feminist attack, and the calm and condescending response of Freire ("I was not upset by it.")

It is clear as this interview unfolds that Freire still does not consider that there might be a more profound feminist critique of his thought. He consistently presents the idea of patriarchy as practices that can be changed; he never considers the need to analyze the underlying patriarchal assumptions of the European intellectual tradition from which his own thought has emerged. He subsumes gender within class, as in his discussion in this interview of the need to transform the world:

> I believed that this word *transformation* implied a bit of interest in class more so than individual or sex interest. In other words, liberation should take place for both men and women and not just for men or for women or along color or ethnic lines (CE, p. 172).

Again in this passage Freire assumes that class interest can be separated from "sex interest," failing to understand the ways in which class and sex (not to mention race) are intertwined, or that a concern with class exploitation is precisely structured by both racism and sexism. He goes on in this interview to instruct feminists in "correct pedagogical practice":

> For me the correct pedagogical practice is for feminists to understand the different levels of male oppression, while at the same time creating pedagogical structures in which men will have to confront their oppressive position. I believe that it is not enough for women to liberate themselves

> from the oppression of men who are in turn oppressed by the society as a whole, but that together they simultaneously move toward cutting the chains of oppression. Obviously, both these oppressed men and women need to understand their different positions in the oppressive structures so that together they can develop effective strategies and cease to be oppressed (*CF*, p. 174).

While Freire's call here for the need for simultaneous political strategies against overlapping oppressions echoes other progressive thinkers, this statement again illustrates the "blind spot" in his thinking. First is Freire's assumption that he can name "correct pedagogical practice" for women, that their main concern should be to "understand the different levels of male oppression," rather than examine and understand the levels of women's oppression – the different forms of oppression and privilege of black and white women, for example, or the differences between working class and bourgeois women, or the different positionings and interests of lesbian, bisexual, and heterosexual women. For Freire, the most important focus for women instead should be to understand men, and their second goal should be to "help" men confront their own sexism. In both cases, the historical actors are men, and women's role is to understand and help these men improve their own weakness. As Freire goes on to say, what is important is "to rectify the sexist behavior of men." He warns against the feminist preoccupation with women's struggle:

> If the oppressed women choose to fight exclusively against the oppressed men when they are both in the category of oppressed, they may rupture the oppressor-oppressed relations specific to both women and men. If this is done, the struggle will only be partial and perhaps tactically incorrect (*CF*, p. 174).

While this question of what Cameron McCarthy has called the "nonsynchrony of oppression" is a major concern in feminist thinkers, it seems to me that the tone of Freire's comments reflects not so much a desire to engage sexism as one of a number of intersecting and overlapping forms of oppression, but rather a wish that women would keep quiet and stop complaining, since the "real" struggle which their parochialism threatens does not concern sexism, or male privilege.

Freire's tendencies to smooth over and discount the significance of patriarchy, to overgeneralize and to construct his own "Paulo Freire" can be seen in his claim in this interview with Macedo that he, too, is a woman – a claim that Freire has frequently made in public lectures and workshops. He comments here that he first said this at the University of London sometime in the 1970s:

> I said: "I too am a woman." That is to say, this affirmation was not sexual but was an eminently political statement. What I would like to make very clear, even if my feminist friends do not agree, is that the concept of the gender struggle is political and not sexual. I do not want to have an

> antagonistic relationship with women. If that is the case, I deserve it and I accept it. I do recognize the sexual differences which positions [*sic*] both men and women in different oppressive locations, but for me, the fundamental issue is the political vision of sex, and not the sexist vision of sex. What is at stake is liberation and the creation of liberatory structures which is the overriding issue for both men and women (*CE*, p. 175).

When pushed by Macedo, who comments, "But Paulo, you must recognize that there are various levels of liberation," Freire falls back into idealistic abstractions: "For me the problem is the following: What is the strategy of the struggle of the oppressed? It is the Utopia of liberty that severs the chains of oppression. This should be dream of the struggle for liberation that never reaches a plenitude" (*CE*, p. 175). Once again Freire calls forth broad and almost mystical abstractions which may be inspirational, but certainly do not engage with the issue of male privilege or the specific complexities of overlapping oppressions. Who can argue with a "dream of liberation that never reaches a plenitude?"

Conclusion

Paulo Freire is a man, a theorist, and a political figure. "Paulo Freire" all too often is a sign, called forth to justify or stand in for the hopes of educators and theorists struggling to create a progressive praxis in a brutal world. The problem with this, as I think a discussion of these texts demonstrates, is that "Freire" is too often invoked without looking closely enough at his actual practice, his words, or the context in which they were written. "Freire" can be used in this way because of his personal charisma and stance on the side of progressive political movements, but also because of the abstract and sometimes mystical nature of his writings. In his actions in the world, Freire stands with the oppressed, in whatever setting he finds himself, and his public engagement encourages his use as a symbol of opposition or resistance to oppression. This use is valuable and important. As Peter McLaren comments,

> Suffering, and the historical memories of those who have suffered under the heels of the power elite, become, for Freire, the reference points that ground his revolutionary text. The task of liberating others from their suffering may not emerge from some transcendental fiat, yet it nevertheless compels us to affirm our humanity in solidarity with victims (*PL*, p. 203).

The downside of this, of course, is that the conflicts that emerge from the specificity of oppression, the internal contradictions of political projects, or the ambiguities of history cannot be addressed in Freirean "high language." And when these conflicts are not articulated, they can grow and lead to the deflection of energies inward or to a sense of hopelessness or failure on the

part of Freirean educators in whose practice the categories of oppressor and oppressed are not so clear.

These criticisms are important. It is not enough to "reinvent" Freire, as do writers such as McLaren, hooks, Shor, and Puiggros, without considering the potential dangers of his thought. But despite the need to read Freire with a critical eye and to explore in more detail the "blind spots" of his work, it is also important, as the writers in these five texts all emphasize, to capture the passion in Freire, his humanity, his compassion, and his instinctive siding with those who are suffering. It is difficult to articulate these qualities in an age of spiritual impoverishment, but there is no doubt that one of Freire's great appeals is the way in which this spiritual quality shines through his writings and speaks to deep longings and desires in people. As Taylor comments,

> Freire can be easily dismissed for comfortable idealism, utopianism, otherworldly mysticism and irrelevance. Yet beneath that, beneath the Banking system which he has diverted into a Cooperative Banking system, there is a pedagogy of contradiction, which is contradictory because it creates another reality, a critical, practical awareness, an "I know what I am in this world-ness" that presages action. It is disturbing, deranging, uncompromising and irreverent (*TPF*, p. 149).

Ultimately, it is Freire's stance against the values of the cruel and meanspirited age in which we live, and his affirmation of the possibility of a "bohemian pedagogy of happiness," that have led to the creation and embracing of "Paulo Freire" by educators throughout the world.

Notes

1. Paulo Freire, as quoted in Moacir Gadotti, *Reading Paulo Freire: His Life and Work* (Albany: State University of New York Press, 1994), 159–60.
2. Paulo Freire, *Pedagogy of the Oppressed*, trans. Myra B. Ramos (New York: Continuum, 1971).
3. Paulo Freire, *Pedagogy of Hope*, trans. Robert Barr (New York: Continuum, 1994).
4. Until recently, most English-speaking students of Freire have relied on Dennis Collins's brief *Paulo Freire: His Life Works and Thought* (New York: Paulist Press, 1977) or Cynthia Brown's even briefer account of the Brazilian literacy campaign, *Literacy in Thirty Hours: Paulo Freire's Process in North East Brazil* (London: Readers and Writers Cooperative, 1975).
5. Peter McLaren and Peter Leonard, *Paulo Freire: A Critical Encounter* (New York: Routledge, 1993); Peter McLaren and Colin Lankshear, *Politics of Liberation: Paths from Freire* (New York: Routledge, 1994); Gadotti, *Reading Paulo Freire*; João Elias, *Paulo Freire: Pedagogue of Revolution* (Melbourne, Fla.: Krieger Publishing Company, 1994); and Paul Taylor, *The Texts of Paulo Freire* (New York: Open University Press, 1993). These book will be referred to as *CE*, *PL*, *RPF*, *PF*, and *TPF*, respectively, with page numbers in the text for all subsequent citations.

6. Freire discusses this in Paulo Freire and Ira Shor, *A Pedagogy of Liberation* (South Hadley, Mass.: Bergin and Garvey, 1987), 29.
7. Freire, *The Politics of Education* (South Hadley, Mass.: Bergin and Garvey, 1985), 175.
8. Paulo Freire, *Pedagogy of the City* (New York: Continuum, 1993), 100.
9. Freire's account of his work at SESI in his recent book *Pedagogy of Hope* includes a number of anecdotes from this period, but does not make clear the nature of his work or the ultimate goals of the organization.
10. Paolo Freire, *Pedagogy in Process: The Letters from Guinea Bissau*, trans. Carmen Hunter (New York: Continuum, 1970).
11. Freire, *Pedagogy of the City*, 45.
12. It is interesting to compare the conditions Freire describes with those described in U.S. cities by Jonathan Kozol, *Savage Inequalities* (New York: Crown Publishers, 1991).
13. According to Torres, Freire "instituted drastic changes in municipal education, including a comprehensive curriculum reform, new models of school management through the implementation of school councils – compromising teachers, principals, parents and government officials – and a movement for literacy training. MOVA-São Paulo, built on participative planning and delivery with support from non-governmental organizations and social movements," 102.
14. Paulo Freire and Donaldo Macedo, *Literacy: Reading the Word and the World* (South Hadley, Mass.: Bergin and Garvey, 1987); Freire and Shor, *Pedagogy of Liberation*; Paulo Freire and Myles Horton, *We Make the Road by Walking* (Philadelphia: Temple University Press, 1990); Paulo Freire and Antonio Faundez, *Learning to Question: A Pedagogy of Liberation* (New York: Continuum, 1989); and Miguel Escobar, Alfredo Fernandez, and Gilberto Guevara-Niebla with Paulo Freire, *Paulo Freire on Higher Education* (Albany: State University of New York Press, 1994). An exception is Freire, *Politics of Education*, which is primarily a collection of previously published reviews and articles.
15. Robert Mackie, ed., *Literacy and Revolution* (London: Pluto Press, 1980).
16. Mounier, *Be Not Afraid* (London: Rodcliff, 1951).
17. See Collins, *Paulo Freire: His Life and Thought* for a discussion of the humanistic qualities of Freire's early work. Collins points out that Freire's conception of "man" is consistent with both Greek philosophy and the Christian tradition.
18. A number of other critics have made this point. See, for example, Ofelia Shutte, *Cultural Identity and Social Liberation in Latin American Thought* (Albany: State University of New York Press, 1993). Daniel Shipani also makes this argument that Freire sees the world as "a moralistic picture of good and evil depicted in terms of the struggle between the oppressed and the oppressors." Daniel Shipani, *Conscientisation and Creativity* (London: University Press of America, 1984), 23.
19. Probably the best know of these was Peter Berger's critical review, "The False Consciousness of Consciousness Raising," *Worldview* (January 1975): 33–38.
20. See Jennifer Gore, *The Struggle for Pedagogies* (New York: Routledge, 1993 (for a detailed critique of the disciplinary quality of critical pedagogies in general as regimes of truth.
21. A visual example of the iconic use of Freirean pedagogy can be seen in the use of photographs as evidence in Gadotti's *Reading Paulo Freire*. In one photograph, a group of about twenty people is sitting on the ground of a barren plain. All of the men are Black, most dressed in tribal clothing, although four men are wearing Western style shirts. One of these four men *is* speaking; next to him is the only woman in the group, a White woman who is also wearing Western clothing. The caption reads: "This Photo was sent to Paulo Freire in 1986 by one of his readers, an educator who applied his ideas in approximately 80 classes with the nomads [*sic*] people of the desert of

Kenya." Gadotti, *Reading Paulo Freire*, xxi. What are we to make of this image? Who is the "educator who applied his ideas?" What are these people speaking of? What is the relation of modernity and traditional culture? What are the dynamics of race and gender? I mention this photograph because it seems to capture visually one of the major problems in Freire's own thought and the way he frequently has been used: its meaning is expressed as an unproblematic icon. As readers, we are invited to read this image in one way, as evidence of a liberatory and revolutionary pedagogy. We are not invited to consider other possible readings or to reflect upon the process in which meaning is constructed.

22. In my own essay in the McLaren and Lankshear collection, I make a similar criticism of Freire's implicit assumptions in *Pedagogy of the Oppressed* that the oppressed and the illiterate, the potential revolutionary class, as men.
23. The circumstance of the production of this text are somewhat unclear. There is some evidence that this is a transcript of an exchange between Macedo and Freire that actually took place in the summer of 1991, when Freire was in Cambridge, Massachusetts, participating in a conference at Lesley College. If so, it was before Freire could have read any of the essays in this collection. Macedo's introductory statement here, which includes quotations from an essay I wrote, could not have been a part of an interview conducted in 1991, since the passages quoted were not even written at that time. By framing the interview with reference to a later critique, Macedo provides a more sophisticated meaning to Freire's statements in this interview, and implies that Freire has read feminist analysis of his work, when it is not at all clear that this is the case.

11

Learning Considered Within a Cultural Context: Confucian and Socratic Approaches

Roger G. Tweed and Darrin R. Lehman

Culture provides tools, habits, and assumptions that pervasively influence human thought and behavior, and the task of learning does not escape this influence (Brislin, Bochner, & Lonner, 1975; Bruner, 1996; Cole, 1996). Although students' academic roles and behaviors are culturally influenced, students and educators alike may underappreciate such influences affecting any given student. Treatment of students of Asian descent in Western educational institutions has at times been far from exemplary (Samuelowicz, 1987; Wollenburg, 1978/1995), and this poor treatment may result in part from a lack of understanding of distinct conceptions of learning. Thus, increased understanding and appreciation of these conceptions can potentially lead to institutional changes that improve education for all.

An issue regarding cultural labels must first be addressed. The term *Western* is problematic as a cultural label (see Lillard, 1998) because literally it denotes the entire Western hemisphere – many more people than usually implied by the term. An alternative is *European American*, but this excludes Canadians, Australians, and all culturally Western people of non-European ethnicity. Thus, we use the shorthand term *culturally Western*, with the proviso that this references culturally Western English-speaking individuals (e.g., American, Australian, Canadian) of any ethnic group. The term *culturally Chinese* is used to reference culturally Chinese individuals of any ethnic

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group. For brevity, we treat cultural group membership as a simple either-or dichotomy, but by no means does this deny the reality of underlying continuities of cultural difference (see, e.g., Ryder, Alden, & Paulhus, 2000) or the important notion that bicultural people have more than one cultural lens available (Hong, Morris, Chiu, & Benet-Martinez, 2000). Any framework, such as our Confucian–Socratic one, that describes cultural differences inevitably must oversimplify in some ways the rich cultural interplay.

In this article, we compare and contrast ideals for learning that are culturally more Chinese (Confucian) with those that are culturally more Western (Socratic), though admittedly examples of each can be seen in both cultural contexts. Confucian aspects of learning have been discussed by others (e.g., Biggs, 1996; Lee, 1996; Reagan, 1996), but the addition of a Socratic foil (Scollon, 1999) is useful. Using these ancient exemplars, we construct a framework for organizing previous findings and for generating hypotheses regarding culturally Chinese and culturally Western learners in the modern context. Although our discussion focuses primarily on learning in North American postsecondary institutions, the framework is more widely applicable.

Nisbett, Peng, Choi, and Norenzayan (2001; see also Peng & Nisbett, 1999) have presented their rather important "ancient Greek versus ancient Chinese" framework related to modern cultural differences, but they referenced Taoist rather than Confucian elements. Taoism has been described as a severe critic of Confucianism (Chan, 1963, p. 136). Whereas Confucius was humanistic and sought to achieve societal harmony by encouraging virtuous activity, Lao Tzu, a central figure in Taoism, was something of a mystic who praised nonconformity and inaction. Nisbett et al. emphasized the holistic orientation of Taoist thought and offered compelling evidence that this type of thinking occurs more frequently among people influenced by Chinese culture than among those influenced by Western culture. Our framework, in contrast, spotlights Confucius and focuses specifically on approaches to learning rather than on everyday patterns of (holistic) cognition.

Caveats

It is possible for misinterpretation and even offense to result from the current discussion. Hypotheses of culture-influenced learning styles attracted much controversy when the discussion focused on African American students (see, e.g., Frisby, 1993; Richardson, 1993). Controversy based on mutual understanding can lead to intellectual advances but, if based on misunderstanding, can produce severe negative consequences. To guard against this possibility, some general issues deserve comment.

First, we do not assert that culturally Chinese or culturally Western learners form homogeneous groups. Much heterogeneity exists within each of these populations, so there will be many individual exceptions to these

patterns of learning. Recognizing diversity, however, need not preclude sensitivity to mean differences between cultural groups (Geertz, 1973; Miller, 1997) – differences that not only are intriguing but, when comprehended, can promote understanding and respect between individuals of different groups. Similarly, aspects of the framework may generalize to other East Asian cultures, but important exceptions exist. For example, some research suggests that much child education in Japan diverges from the Confucian approach (Lewis, 1995; Rohlen & LeTendre, 1995; White, 1987). Cultural psychologists face the difficult task of trying to advance understanding of cultural uniqueness while not forgetting that cultures in many ways are more similar than different. There is always the risk that cultural psychologists' findings will be abused. Does this mean that they should abandon their efforts? We believe not because an understanding of culturally distinct values may promote learning from ways unlike one's own and also because differences between cultures may highlight important but previously unrecognized differences within cultures.

Second, genetic influences on learning approaches are neither assumed nor implied in this discussion. Others (e.g., Rushton, 1997) have tried to examine the relations between race and cognitive variables, but such examinations are politically explosive, extraordinarily difficult, and of questionable utility. Inevitably, culture and genetics are naturally confounded: For example, the people most influenced by Chinese culture tend to be of Chinese ancestry. The possibility of genetic contributions to cognitive differences is not explored here.

Third, we are not attempting to evaluate cultures. Our goal is description, not comparative judgment. There may be a time for such evaluation, but that is not the current objective. Our tentative assumption is that in some contexts, the Confucian approach to learning is more adaptive and, in other contexts, the Socratic approach is. If this assumption is correct, then, in this increasingly multicultural world, students ideally will be able to competently exhibit a range of both Confucian and Socratic learning behaviors. Such flexibility will allow students to function more effectively across different learning contexts.

Fourth, we do not directly address ability differences between cultural groups. Rather, our discussion focuses on mean differences between cultural groups in conceptions of and approaches to learning. Admittedly, habitual patterns of behavior eventually may lead to ability differences (Berry, 1976; Sinha, Mishra, & Berry, 1996), but our objective is to address cultural differences in beliefs and associated behavioral tendencies, not differences in ability.

Finally, our Confucian–Socratic framework serves a descriptive function and does not presume historical causation between Confucius or Socrates and modern students in the East or West. Historical patterns of causation are difficult to draw even over short periods of time but are nearly impossible to draw conclusively between Confucius, Socrates, and the modern world. We move next to brief descriptions of Socrates and Confucius.

Socrates

Socrates (469–399 B.C.E.), thought by many to be the father of Western philosophy, wrote nothing that survives today. The main records of Socratic dialogue come from Plato. In these dialogues, Socrates tended to question his own and others' beliefs, evaluated others' knowledge, esteemed self-generated knowledge, began teaching by implanting doubt, and sought knowledge for which he had good reasons.

Tendency to Question

Socrates frequently questioned others' beliefs and his own beliefs, and he was proud of this tendency. He claimed that no greater good had ever happened to the state than his service of questioning others and exhorting those proved ignorant by his questioning (Plato, 399 B.C.E./1937, hereinafter cited by the common title *The Apology*). He recognized the limits of others' knowledge but also of his own knowledge; he asserted that he actually knew very little (see, e.g., Plato, 399 B.C.E./1956, hereinafter cited by the common title *Meno*). Socrates felt that his questioning of his own beliefs made him superior to others because he at least recognized his own ignorance (*The Apology*).

Tendency to Evaluate

Socrates, however, did not express simple, unthinking skepticism. Rather, he carefully evaluated knowledge. He evaluated others' knowledge by asking successively deeper and more probing questions, finding most people in these sessions to be foolish and ignorant, the most foolish being men of highest repute in society. He exposed the foolishness of these respected men by engaging in repeated questioning, which became known as the Socratic method. People sometimes followed Socrates to these displays and took pleasure in watching him humble these proud men. Socrates reported that some of the wealthy young people of Athens began to imitate him, using the Socratic questioning method to reveal the ignorance of other people claiming to be knowledgeable (*The Apology*). The elite, not surprisingly, resented Socrates, and he was sentenced to death after being accused of impiety and of corrupting the city's youth. Socrates refused to give up his tendency to evaluate others' knowledge even on threat of death or for an offer of mercy conditional on him changing his ways.

Esteem for Self-Generated Knowledge

Socrates held self-generated knowledge in great esteem. He had many students, but he told the court of Athens that he was not responsible for any of his students' beliefs because he never taught them anything (*The Apology*).

An extended example of Socrates' teaching technique is recorded in *Meno:* Socrates demonstrated his ability to guide even an uneducated slave boy to produce complex geometric principles. Socrates perceived himself to have taught the boy nothing but merely to have asked the right questions. This self-generated knowledge, even if in response to prodding, is the type of knowledge most valued by Socrates, in contrast to beliefs that have been accepted from others. The nature of this pursuit of truth is individualistic: Each person has to find truth in him- or herself. Socrates did not mean to imply that truth is different for each person but that, in the ideal learning context, truth is neither prescribed by authority figures nor socially negotiated. Rather, it is found by the self.

Focus on Error to Evoke Doubt

In the Platonic dialogues, Socrates tended to begin with a focus on error to evoke doubt (Jacobsen, 1999; Press, 1999; Scott-Kakures, Castagnetto, Benson, & Hurley, 1993). Socrates would pose a question (typically, a request for a definition of a term such as *beauty, courage,* or *virtue*) that was answered incorrectly by his dialogue partner. Socrates then focused on exposing the error in the person's answer. In *Meno,* after making the slave boy doubt his initial answers to a question of geometry, Socrates commented that the boy had moved toward realizing the answer because doubt is the first step in attaining knowledge.

Search for Knowledge, Not True Belief

Socrates believed that learning should lead to knowledge, not to merely true belief. According to Socrates, knowledge goes beyond mere accuracy in beliefs; knowledge includes possessing rational justification for those beliefs. True beliefs, in contrast, are right opinions held without knowing the rational justification for those opinions. Socrates said that poets and politicians often possess true belief but lack the more important possession: knowledge.

Confucius

Confucius (551–479 B.C.E.), like Socrates, left few if any writings, but his students recorded many of his ideas in the *Analects* (Confucius, 479 B.C.E./1979; hereinafter cited by book and chapter number only). The *Analects* provide insight into an approach to teaching and learning that markedly contrasts with that endorsed by Socrates. Confucius served as a teacher who educated men with an eye to putting them into civil service positions. He believed the role of civil administrator held importance for improving society.

Confucius valued effortful learning, behavioral reform, pragmatic learning, acquisition of essential knowledge, and respectful learning.

Effortful Learning

For Confucius, learning is closely tied to hard work. He spoke of effort much more than of ability (see, e.g., 18:1). He expected nothing less than a student's best effort (7:25, 14:7, 15:6), and he willingly taught anyone who wanted to learn, regardless of their ability (7:7). He looked down on those who pursued quick results and who wanted to avoid extended effort (14:44). He believed that practice and single-minded effort are instrumental to attaining success (15:6, 15:32, 17:2).

Behavioral Reform

For Confucius, a primary goal of learning is behavioral reform by means of a deep internal transformation of the student (2:18, 4:15, 7:3, 7:25, 7:28, 17:23). Confucius (4:15, 6:3, 7:25, 17:23) and his followers (see, e.g., "The Great Learning," 1893/1971) taught that behavioral reform is a central goal of education because virtuous behavior can ensure individual success and societal harmony. Socrates also discussed virtue, but his conception seemed at times to be less pragmatic and more focused on apprehension of truth than on direct behavioral reform.

Pragmatic Learning

Confucius had a pragmatic orientation to learning; the idea of learning merely for the sake of learning was foreign to him (Lee, 1996). An acceptable goal of learning, in addition to personal reform, is to competently conduct oneself within a civil service job (13:5), a role Confucius viewed as important for reforming society. Confucius believed that there are activities that go deeper into learning than merely storing up knowledge, but a parallelism in the text suggests that these activities relate not to higher thinking skills, as many educators might assume, but to self-improvement, including becoming more virtuous and more skilled (7:3). He also told his students that if they corrected themselves and avoided error, they would be able to procure a civil service career (2:18, 13:13, 15:32). The pragmatic orientation appears frequently in his writings even though, no doubt, Confucius hoped students would find pleasure in learning as well. Confucius summed up his practical orientation when he asked,

> If a man who knows the three hundred Odes by heart fails when given administrative responsibilities and proves incapable of exercising his

> own initiative when sent to foreign states, then what use are the Odes to him, however many he may have learned? (13:5)

Acquisition of Essential Knowledge

Confucius urged his students to learn the essentials and assured them that if they did, they would rarely miss the mark (4:23). They were not merely to parrot the words of authorities (13:23) but truly to understand and be reformed by the knowledge contained in those words. Confucius also claimed not to be creating ideas. He said, "I transmit, but I don't innovate; I am truthful in what I say and devoted to antiquity" (7:1). Thus, even this great scholar viewed his role as one of acquiring and transferring knowledge rather than expressing personal hypotheses. Excessive focus on generating ideas goes against the Confucian ideal of the modest, slow-to-speak individual focused on learning from respected others (1:14, 12:3, 12:20, 14:44, 15:31). Innovation is acceptable in certain contexts, but the tendency to innovate or criticize without extensive preparatory knowledge is a fault, according to Confucius (7:28, 16:2).

Confucius asserted that he desired his students to sift his teachings and criticize his statements (2:9, 11:4), but more frequently, he seemed to value an acquisition-focused approach to learning. The priority he gave to acquisition of essentials expressed itself in his comparison of the value of thinking and learning. He said,

> I once spent all day thinking without taking food and all night thinking without going to bed, but I found that I gained nothing from it. It would have been better for me to have spent the time in learning. (15:31; see also 2:11)

This acquisition of essentials is central to Confucius' conception of learning. Interestingly, Socrates likewise had taken the time to acquire the essentials of his cultural context (e.g., he could quote Homer's poetry verbatim, and he knew well the positions of his opponents), yet he promoted a completely different approach to learning in the earlier dialogues, those thought to be most representative of the true Socrates.

Respectful Learning

Confucius expected learners to respect and obey authority figures (1:6, 3:19, 4:18; 14:43–44), and this contrasts with Socrates' habit of publicly humiliating authority figures. Confucius (479 B.C.E./1947) is reported to have said that "to honor those higher than ourselves is the highest expression of the sense of justice" (p. 332). Confucius believed that virtue is

achieved primarily by observing and learning from people who provide models of virtue (5:3), so students were encouraged to find someone better than themselves and imitate that person (4:17). Confucius' own respectfulness was frequently expressed in his emphasis on learning from the past. He often cited concrete historical cases from which his students could learn. He praised the virtues of the Zhou dynasty, and in a sense, the records of the Zhou time period provided the textbooks on which he relied.

For Confucius, unlike Socrates, learning is not focused mainly on questioning, evaluating, and generating knowledge because truth is not found primarily in the self. Instead, truth and the associated good character traits are learned mainly from the collective, in particular, learned from individuals whom the collective recognizes as exemplars and from the ancients whom the collective recognizes as even greater exemplars (4:17, 7:1). The epistemology underlying this approach presumes that most of the important truths are already known and available to those who submit to a worthy master; thus, one needs to engage in the task of attending to recognized masters to progress (5:3, 14:44). Confucius to some extent expected his students to sift his teachings and find things out for themselves, but unlike Socrates, Confucius did not encourage an educative task focused mainly on searching individualistically for truth.

Deep and Surface Approaches to Learning

Most research comparing culturally Chinese and culturally Western learners has examined surface and deep approaches to learning, the distinction having roots in Marton and Saljo's (1976) qualitative research conducted in the West. These researchers had students read written passages and then asked them to describe what they did while reading the passages. From these descriptions, Marton and Saljo distinguished two broad types of responses that indicated either a surface or a deep approach to the task. In the former, students reported trying to memorize the phrases or words used by the author. In the latter, students reported trying to understand the main points or trying to infer the main meaning of the argument. Deep-oriented students tended to outperform surface-oriented students on recall of the main argument from the passage.

Some Western instructors believe that culturally Chinese students tend to take a shallow approach to learning. For example, over 30% of Australian instructors surveyed by Samuelowicz (1987) felt that Asian students wanted to rote learn and did not want to think. Other observers have characterized Asian learning as passive (see Barker, Child, Gallois, Jones, & Callan, 1991). Pratt and Wong (1999) reported that Western instructors in Hong Kong sometimes disparaged Chinese approaches to learning as overly instrumental

and accused culturally Chinese learners of being unwilling to think deeply. Biggs (1996) suggested that negative evaluations of Asian approaches to learning are typical for Western instructors.

However, Westerners frequently misperceive culturally Chinese study methods. Although many Western educators assume that students engaged in memorization are not interested in deep understanding (Pratt & Wong, 1999), Marton, Dall'Alba, and Kun (1996) argued that culturally Chinese students often use memorization not as an end in itself but as a path to understanding. Likewise, Kember (1996) argued that culturally Chinese students often combine strategies for memorization with strategies for understanding. In an interview study of conceptions of learning, the majority of Chinese educators spontaneously described memorization and understanding as related (Marton et al., 1996). They saw memorization as a path to understanding and vice versa. One of the Chinese teachers said, "In the process of repetition, it is not a simple repetition. Because each time I repeat, I would have some new idea of understanding, that is to say I can understand better" (Marton et al., 1996, p. 81). Culturally Chinese students, then, may engage in strategies that appear to be surface oriented but actually are deep oriented according to the Marton and Saljo (1976) definition of deep processing.

Some of the deep versus surface studies have used Biggs's (1987) Study Process Questionnaire (SPQ). Biggs, an expert in Chinese learning styles, translated the SPQ into Cantonese and expected to find Chinese students high on the surface subscale and low on the deep subscale. He found the opposite (Biggs, 1987). Others (Kember & Gow, 1991) also have detected SPQ patterns suggesting that culturally Chinese students take a deeper approach to learning than culturally Western students. Some problems, however, make the SPQ data difficult to interpret. For example, most of the studies have compared groups using different translations of the SPQ, thus raising comparability issues. Furthermore, Hong Kong universities are more selective than Australian universities, which makes comparison of the student populations problematic (Biggs, 1992). One study (Volet, Renshaw, & Tietzel, 1994), which compared students in the same context using the same form of the SPQ, produced results opposite to those of Biggs (1987).

Another problem is that SPQ data may underestimate the extent to which culturally Chinese students take a deep approach to learning. This is owing to Western cultural assumptions injected into the SPQ scale. The belief that education should be its own end and that education loses meaning if pursued for an external purpose is a Western notion promoted by John Dewey (1916). This notion is represented in the deep items of the SPQ: Four of its items ask whether the respondent finds pleasure in the act of studying or feels a need to know truth (e.g., "I find that studying gives me a feeling of deep personal satisfaction"). The scale construction assumes that deep

learning is intrinsically motivated. A more instrumental conception of learning, viewing learning as a means to an end, which we argue is part of the Confucian conception of learning, is represented in the surface items of the SPQ (e.g., "I chose my present courses largely with a view to the job situation when I graduate rather than because of how much they interest me"). Yet these intrinsic versus instrumental conceptions are not part of Marton and Saljo's (1976) original conceptualization of deep- versus surface-level processing. The processing orientation paradigm of Marton and Saljo has produced important findings but was not originally intended for cross-cultural research. In contrast, our Confucian–Socratic framework, which we turn to next, was constructed with cross-cultural research in mind.

Confucian versus Socratic Learning Today

The Confucian versus Socratic framework provides a conceptual home for consideration of Chinese-influenced and Western-influenced approaches to learning. In the modern context, Confucian-oriented learning as defined within our framework involves effort-focused conceptions of learning, pragmatic orientations to learning, and acceptance of behavioral reform as an academic goal. Socratic-oriented learning as defined within our framework involves overt and private questioning, expression of personal hypotheses, and a desire for self-directed tasks. In the ancient world, examples of Socratic and Confucian learning could be seen in both the East and the West. For example, Aristotle preached the value of acquiring the fundamentals. Likewise, in the modern world, Socratic and Confucian ideals for learning can be seen in both the East and the West. Nonetheless, the framework highlights differences in general tendency between some cultural (but not necessarily ethnic) groups.

Effort-Focused Conception of Learning

The Confucian–Socratic framework suggests that culturally Chinese students tend to view effort as more central to the learning process than do culturally Western students. This difference has been explored and supported in some contexts. In one study, Chinese students in Australia reported putting greater effort into academic pursuits than did Anglo Australians or other Westerners (Rosenthal & Feldman, 1991; see also Sue & Zane, 1985). Heine et al. (2001) developed a six-item Utility of Effort Scale that asks students to report the extent to which success in a variety of domains depends on effort as opposed to inherent ability. They found that both Asian American and Japanese post-secondary students reported stronger beliefs in the utility of effort than did Western postsecondary students. Similarly,

Chinese grade-school students in China tend to attribute academic success to effort (Hau & Salili, 1991), whereas American children tend to attribute academic success to less controllable factors such as possessing inherent ability or having a good teacher (Stevenson, Chen, & Lee, 1993; Stevenson & Stigler, 1992).

Some evidence suggests that people who believe that effort leads to success also tend to hold an implicit incremental (as opposed to entity) theory (see, e.g., Dweck, Chiu, & Hong, 1995; Levy & Dweck, 1998). According to Dweck's model, incremental theorists assume that one can change important aspects of the self such as one's ability to perform intellectual tasks. Because of the assumption that ability level can change, incremental theorists conclude that achievement is determined more by effort and strategy than by inherent ability. This belief in the malleability of fundamental abilities coheres with Confucius's doctrine that humans are by nature similar (17:2) and that success is within reach of all who work to learn certain fundamentals (4:23).

In contrast, entity theorists, in Dweck's model, perceive the self as unchangeable. They assume that fixed, stable, and global traits provide the best explanations for behavior. In the intellectual domain, entity theorists attribute performance largely to inherent ability rather than to effort and strategy. Advantages of holding an implicit incremental rather than an entity theory become evident when students encounter the inevitable academic experience of disappointment with their performance. Entity theorists tend to believe that poor performance reflects unchangeably low ability (Levy & Dweck, 1998), a form of characterological self-blame (Janoff-Bulman, 1979, 1992). Characterological self-blame, which predicts poor outcomes in different domains (Janoff-Bulman, 1979), in this context predicts increased anxiety, reduced task pleasure, reduced perseverance, and reduced performance (Levy & Dweck 1998).

Incremental theorists, in contrast, tend to attribute disappointing performance to insufficient effort or a badly chosen strategy (Levy & Dweck, 1998), a form of behavioral self-blame (Janoff-Bulman, 1979). As both effort and strategy can be controlled, this attribution gives the incremental theorist hope of improved performance. In keeping with this hopeful attribution pattern, incremental theorists persevere longer and perform better after failure than do entity theorists (Levy & Dweck, 1998). These implicit theories seem to have causal power (i.e., not simply correlated third variables) as suggested by studies in which the theories were manipulated and then behavior of participants was assessed (Chiu, Hong, & Dweck, 1997; Levy, Stroessner, & Dweck, 1999).

The utility of effort and incremental dimensions, though empirically associated in the West (see, e.g., Dweck et al., 1995; Levy & Dweck, 1998), can be logically separated. Beliefs about the mutability of ability are different from, though positively associated in the West with, beliefs about whether

effort determines success in the academic environment. People can believe that effort will lead to success even if intellectual ability is not changeable. Effort could have its effect not by leading to improved ability but by overpowering the effects of ability deficits. Alternatively, ability could be presumed to be similar across persons and, for that reason, relatively unimportant in determining success.

It is not clear why these dimensions have produced positive associations. We conjecture that Westerners (being especially likely to make trait attributions; see Choi, Nisbett, & Norenzayan, 1999, for a review), who believe that effort leads to success, assume that the effects are mediated by improvements in ability. In other words, effortful practice leads to improved ability, which in turn leads to success. Belief in this sequence, which preserves the Western assumption of the potency of traits but allows for utility of effort, can occur only if ability is subject to change, and thus, people believing in the utility of effort score in the incremental direction.

Cultural differences also may distinguish the dimensions of incremental orientation and belief in the utility of effort. Null findings between East and West have been observed on the incremental dimension (Chiu et al., 1997; Heine et al., 2001) despite the evidence that cultures differ on beliefs in the utility of effort. It is interesting to note that research in the West has focused more on beliefs about a trait (e.g., beliefs about intelligence) than on beliefs about a strategy (e.g., beliefs in the utility of effort), yet some of the significant causal effects may be more closely tied to beliefs about the strategy, beliefs that seem to differ across East and West.

Pragmatic Outcome versus Truth as End Goal

The Confucian–Socratic framework predicts that culturally Chinese learners are more likely to focus on practical outcomes of education than are culturally Western learners. Several researchers (e.g., Salili, 1996; Sue & Okazaki, 1990; Winter, 1996) have suggested that culturally Chinese students are more likely than culturally Western students to view education as a means to an end. This practical orientation toward education may intensify when ethnic Chinese immigrate to Western countries because education can provide a path to higher status jobs when discrimination and other barriers block certain routes (Sue & Okazaki, 1990). Historical precedent laid the groundwork for this practical view of education in China; as early as 2,500 years ago, education was a path to a secure job in Chinese government (Lee, 1996). A practical orientation to education accords with the tendency toward practicality evidenced in other aspects of Chinese culture (Wink, Gao, Jones, & Chao, 1997) and contrasts with the Western philosophical orientation derived from Dewey (1916) that learning should be its own end and that education loses meaning if focused on an extrinsic goal.

Some research suggests that in the West, students striving for external goals such as high marks or pleasing others often report less intrinsic motivation toward learning and mastery. Yet, in Chinese contexts, extrinsic motivation tends to co-occur with intrinsic motivation (Salili, Chiu, & Lai, 2001; Volet & Renshaw, 1996). That is, among culturally Chinese students, external goals such as performance or social recognition are positively correlated with mastery goals. These findings are important because they suggest that a concern for pragmatic outcomes of education need not preclude striving for learning-related goals. Students concerned with getting high marks, getting a job, and acquiring status may seem to Westerners to be uninterested in learning, but these findings cast doubt on that interpretation for a substantial portion of students.

Behavioral Reform

The Confucian versus Socratic framework suggests that culturally Chinese students are more likely than culturally Western students to believe that behavioral reform deserves a significant role in educational discourse. This concurs with Triandis's (1996) statements that individuals in collectivist cultures tend to give "more weight to norms than to attitudes as determinants of behavior" (p. 409; see also Domino & Hannah, 1987; Heine, Lehman, Okugawa, & Campbell, 1992). In contrast, people in individualistic cultures prefer for behavior to be guided by attitudes (Triandis, 1996) and tend to be less comfortable with prolonged written or spoken discourse regarding morality (Bellah, Madsen, Sullivan, Swidler, & Tipton, 1985; Li, 1996). Even Triandis's phrasing, avoiding the use of the term morality, may reflect his sensitivity to a Western academic audience uncomfortable with discussion of moral constraints on behavior. Collectivist cultures, on the other hand, promote salience of moral rules, and Chinese culture in particular encourages moral exhortations not only by teachers and students (Li, 1996) but by political leaders, judges, and others in society (see, e.g., Coates, 1968).

Overtly Questioning versus Postponing Questioning

The Confucian versus Socratic framework suggests that culturally Western learners attach greater importance early in the learning process to questioning and evaluating material presented by an instructor. Questioning the ideas of others, whether in school or elsewhere, asserts one's independence and thereby fulfills the cultural ideal of individualism. Doubt shows that one is independent from others not only in the domains of values and relationships, domains for which individualism often has been discussed (Kagitcibasi, 1997), but even in the domain of cognition. From this individualistic

perspective, the ideal type of thinking is that which doubts and evaluates others' thinking and generates new ideas. Chomsky, an example of this individualism, has called for all people, students or not, to be skeptical and to question authorities (see, e.g., Chomsky, 1997), and he has juxtaposed questioning of authorities to what he called "irrational attitudes of submission to authority" (Achbar, Wintonick, & Symansky, 1992). According to Chomsky (1968), exposing lies promoted by government and other authorities is a major responsibility of intellectuals. Chomsky (1992) seemed to imply that students engaged in absorptive learning are not really learning at all (p. 171). Interestingly, Chomsky (1997) has reported that students from Asian backgrounds find his classes particularly difficult.

On the other hand, the late George P. Grant (1995/1998) lamented the fact that people feel a need to express their will as fully as possible, not only in their behavior but also in their thinking, and thus have difficulty showing reverence for others' important ideas. More in line with Grant than Chomsky, Chinese students in Australia who watched videotapes of a student interacting with an instructor perceived submissive behavior as more respectful than assertive behavior, a response in line with our framework. Australian students and instructors did not make this differentiation, and in fact, instructors rated submissive, polite behavior as unlikely to help the student succeed (Gallois, Barker, Jones, & Callan, 1992). Overt doubt has the potential to disrupt social harmony by challenging the power distance some students expect between themselves and their instructor. Hofstede's (1984) cross-cultural analysis indicated that a number of East Asian cultures encourage acceptance of power distance, defined as "the extent to which the less powerful person in a society accepts inequality in power and considers it as normal" (p. 390; see also Triandis & Gelfand, 1998). Students who are sensitized to perceive and accept power distance are more likely to withhold questions that threaten such power distance. Tutorial leaders sometimes expect questions and challenges from students, and this may set particularly difficult demands for students holding high power distance value systems. In keeping with this aspect of tutorials, in an Australian study, serious difficulty with tutorial participation was four times as likely to be self-reported among a predominantly Asian group of international students as among local students (Mullins, Quintrell, & Hancock, 1995; see also Barker et al., 1991). In an observational study, Duncan and Paulhus (1999) found that Asian Canadian students were much less likely to speak out during class in a variety of faculties than were European Canadian students. Some of these effects could be due to language difficulty rather than culture, but Duncan and Paulhus (1998) found that 96% of Asian Canadian students reported shyness in class, compared with only 38% of European Canadian students, an effect size hard to attribute solely to language difficulty when considering the fact that many of the students of Asian descent were born and raised in Canada and thus have spoken English their entire lives.

Pratt and Wong (1999) interviewed students and instructors in Hong Kong and reported that Chinese respondents more so than Western respondents tended to treat texts and instructors as highly authoritative sources of knowledge and to assume that the first steps of learning consist of understanding the knowledge presented by these sources. Often, the Western instructors assumed instead that the basics are self-evident or transitory and, as a result, that acquisition of the basics is less important. Pratt and Wong suggested that culturally Chinese learners tend to perceive learning as a sequential four-stage process: (a) memorizing, (b) understanding, (c) applying, and (d) questioning or modifying. The location of criticism at the end of the learning process contrasts with Western encouragements of learners' questioning and evaluating throughout the learning process.

Expressing Personal Hypotheses versus Acquiring Essential Knowledge

The Confucian versus Socratic framework also suggests that culturally Western students tend to attach higher importance in the academic context to expressing personal hypotheses than do culturally Chinese learners. As with doubting and evaluating the ideas of others, considering personal hypotheses asserts one's independence in the cognitive domain and thus fulfills an individualistic cultural ideal. This ideal concurs with an increasing Western educational expectation that students should value their personal hypotheses (see, e.g., Bruffee, 1993). Students taking a Confucian approach are more likely to strive to demonstrate that they have acquired, have been changed by, and can work with essential knowledge (see Cai, 1999; Pratt & Wong, 1999).

Confucian acquisition of essentials should not be confused with passive learning or mere absorption. The belief that acquisition is somehow passive has a long history and can be traced at least as far back as Descartes (Gilbert, 1991). Both Socratic and Confucian learners, however, can be construed as active. The Socratic learner must actively work to find knowledge within the self; the Confucian learner must actively work to acquire, understand, and apply essential concepts coming mainly from outside the self. In this sense, Confucian acquisition of essentials occurs not through passive absorption but through constructing within the self the knowledge that the collective considers essential.

Desire for Self-Directed versus Structured Tasks

The framework also suggests that culturally Western students tend to feel a greater need for self-direction in academic tasks. Socrates' doctrine that knowledge already resides within students suggests that able learners can

progress even without a guide. Confucius, on the other hand, assumed that students need a competent teacher to guide them (5:3) and believed students would better spend their time by acquiring ideas from authorities than by seeking ideas individualistically (15:31).

Many educators in the West have praised freedom of choice for students, believing that it leads to higher intrinsic motivation and better learning (see, e.g., Dewey, 1916). Research in the West has supported the notion that free choice leads to higher intrinsic motivation in the form of greater perseverance following free choice and, conversely, that a sense of feeling controlled reduces intrinsic motivation (Deci & Ryan, 1985). Recent research, however, suggests that these findings do not always generalize across cultures. Iyengar and Lepper (1999) found that, as expected, personal choice enhanced motivation for Anglo American children, but for Asian American children, peak motivation was observed not when they freely chose their activities but when their activities were chosen for them by trusted peers or trusted authority figures. Also, in Pratt and Wong's (1999) study in Hong Kong, Chinese faculty and students expected instructors to provide more structure than did Western instructors teaching at the same location.

Impact of Confucian Approaches in a Culturally Western Context

In the West, in some educational contexts, the Confucian approach may provide advantages, for example, if grades are based on an ability to acquire, reexpress, and apply foundational knowledge to familiar and new situations. In other contexts, however, a Confucian approach may be a disadvantage, for example, if a task requires willingness to question authorities or if faculty conclude that students adhering to a Confucian approach are less capable because they do not speak up in class or because they ask for greater structure from instructors. In these particular contexts, a Socratic orientation would probably be more adaptive. Yet Western instructors may underestimate the extent to which their own academic tasks are Confucian oriented. Ability to solve unfamiliar problems in most sciences requires thorough acquisition of fundamentals and a practiced ability to apply those fundamentals. One cannot develop, for example, a new biomedical technique unless one understands the fundamentals of the science.

Impact of Socratic Approaches in a Culturally Chinese Context

We have focused on the Western educational context, yet the consequences of these approaches to learning in the East deserve mention. Anecdotal evidence suggests that some Confucian approaches have ongoing relevance to

modern education in the People's Republic of China (PRC). Some published reports of Confucian educational practices dominating education in the PRC can be found in guidebooks, such as Hu and Grove's (1999) *Encountering the Chinese: A Guide for Americans*, and in more popular narratives, such as Mark Salzman's (1988) *Iron and Silk*, a narrative of his experience teaching in the PRC. Clearly, Confucian approaches to learning that persist in Chinese cultural contexts do so because they are adaptive in those contexts. The Socratic approach has potential downsides that may be especially salient in the Chinese context. These include insensitivity to the social consequences of public criticism possibly resulting in disruption of the learning environment, an adversarial orientation that can distract from the pursuit of truth, and a lack of appreciation for others' ideas leading to difficulty understanding and benefiting from those ideas. Yang (1986), in a publication by the Central Institute of Educational Research in Beijing, China, argued that the Socratic method leads to confusion because students fail to read widely or observe before they engage in argument. According to this Eastern perspective, the Socratic method can lead to argument by the uninformed, to a pooling of ignorance, and to poor rather than good thinking. Of course, situations vary widely within every culture, so there are also times in culturally Chinese contexts when a Socratic orientation provides advantages, such as when instructors want to be questioned (even Confucius wanted his students to doubt his word at times; see, e.g., 2:9).

Development of a Flexible Approach to Learning

Evidence suggests that bicultural people can switch the cultural frame within which they operate depending on cues in the situation (Hong et al., 2000). Students who can likewise flex their learning approach in response to cues in the academic environment may hold an advantage. These students would be in a sense academically bicultural and could operate adaptively within environments requiring Confucian or Socratic approaches. The value of both the Confucian and Socratic orientations in learning was nicely articulated by Perkins (1992) even though he was not talking about university education and did not use these same labels for the orientations. Educators in line with Perkins would encourage both thoughtful acquisition (Confucian) and inquiry (Socratic) such that students acquire knowledge and thinking skills that become fully understood, active, and elicited in many domains beyond the academic context.

An inflexible Confucian approach to learning clearly could have some disadvantages, but with respect to some Western contexts, we also have concerns about teaching based on a caricature of the Socratic orientation. We support teaching that inspires inquiry and sound thinking. We believe, however, that some of what passes for instruction in critical thinking is not in

fact modeling a superior or even Socratic approach to thinking. Rather, it is modeling an extreme Western and somewhat distorted Socratic value system in which criticism receives more emphasis than thinking, doubt is seen as morally superior to belief, and efforts to understand are at risk owing to premature criticism and rejection of others' ideas. We believe there is a place for teaching students how to criticize, but we also feel that many students in university lack the ability to argue competently in support of rather than against intellectual positions or the ability to appreciate great thoughts and great thinkers. The study of developmental phases in the ability to argue has received some attention (see, e.g., Kitchener & King, 1981), but the study of appreciative thinking may also prove valuable in future research. Our ideas about appreciative thinking are still in early development, but we believe that a useful definition of appreciative thinking will include a feeling of respect and possibly even awe or reverence for great ideas. Appreciative thinking, like critical thinking, may be associated with academic success.

Several additional avenues for future research seem worthy of pursuit. First, the nature and feasibility of academic biculturalism could profitably be explored. What distinguishes students who can display both Socratic and Confucian approaches to learning? Second, researchers could examine the utility of the present framework as an educational tool in both cross-cultural and unicultural environments. In informal discussions, our students have expressed appreciation that learning about the dimensions has helped them understand why they have struggled with certain academic tasks in the past and has helped them see how they could do better in the future. Teaching the framework to students may help even those in unicultural environments realize their own approach to learning and thus assist them in becoming more flexible learners. Third, researchers could explore the interaction between Taoist (see, e.g., Nisbett et al., 2001; Peng & Nisbett, 1999) and Confucian influences in Chinese culture. What situational factors, for example, moderate which of these two at times contradictory influences is evident in cognition and behavior? Possibly, social contexts such as being in a classroom or writing a paper to be read by an instructor increase the potency of harmony-oriented Confucian tendencies and diminish otherwise potent Taoist influences. Possibly, Taoist influences are more potent when questions regarding epistemology, truth, and knowledge are addressed in less socially constrained contexts, as suggested by the work of Peng and Nisbett (1999). Finally, researchers with a cross-cultural psychology orientation may seek to unpack the cultural variables underlying differences in learning orientations. Here, unpacking culture could involve separating the effects of cultural variables such as collectivism, power distance (Hofstede, 1983), moral discipline, and Confucian work dynamism (Chinese Culture Connection, 1987) on student approaches to learning.

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12

Habituated Reason: Aristotle and the 'Paradox of Moral Education'

Kristján Kristjánsson

I. Introduction

A powerful, if as yet somewhat philosophically undiscerning and underdeveloped, movement has recently swept across the field of moral education: *character education*, representing a back-to-basics kind of morality and pedagogy. The proponents of character education emphasise the need for the inculcation of a set of universal basic virtues of action and reaction, and that those virtues need to be transmitted via a plurality of methods, including – especially at the early stages – direct habituation, where the relevant virtues are made to seep into students' personalities like dye into wool. Moral education must therefore necessarily proceed through extrinsically activated osmosis, but not only through the development of the students' own skills of critical reasoning, as had long been the dominant orthodoxy; this orthodoxy has, according to the character-education camp, failed to live up to its promise (Damon, 2002; Kristjánsson, 2002b).

Character education is not without its critics. Among the objections lodged against it is that it is dangerously undemocratic in its relative neglect of the development of reasoning and critical independence in students (McLaughlin and Halstead, 1999; for some possible rejoinders, see Kristjánsson, 2002b). Such an objection cannot fail to evoke a feeling of déjà vu, reminiscent as it is of the time, during the 1950s–1970s, when two opposing movements bestrode the field of moral education – behaviourism

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and the cognitive-developmental approach – and advocates of the latter accused the former of roughly similar defects of anti-intellectualism. This was the time when the eminent philosopher of education R.S. Peters coined the phrase 'the paradox of moral education' to describe the inevitable need for both – and yet the apparently inevitable opposition between – habituation and intellectual training (Peters, 1981: Ch 3; cf. Curren, 2000: 205–12).

The 'paradox of moral education' is still very much alive, and my aim in this article is both to gauge its pertinence and to prompt a new look at it. Let me first note that, when set in the context of current debates, this alleged paradox involves two distinct, if inter-related, paradoxes: a psychological paradox and a moral/political paradox. The *psychological paradox* is this: How can it be true at the same time that it is the aim of moral education to develop persons who conduct themselves by their intellects (rationally, intelligently and critically) *and* that this can be best achieved through inculcating in them from an early age certain ready-made habits of action and feeling? The underlying concern here is, obviously, how making young students into walking bundles of habit can avoid stultifying their psychological powers of critical reflection at a later stage. Is habituated reason psychologically possible? The *moral/political paradox*, on the other hand, is this: How can it be true at the same time that the aim of moral education is to create individuals who, moved by their own conception of the good, cherish and assiduously apply their own unencumbered autonomy *and* that this can best be achieved through means that necessarily involve an extrinsic motivation? Is heteronomously formed autonomy morally possible and justifiable?

Peters deserves credit for his insistence that these paradoxes – or, as he understood it, 'the paradox of moral education' – are resolvable. After all, his exploration was written in the heyday of Kohlbergianism, when exclusive emphasis was still put on reason over habit, form over content, in moral coaching. On this fraught matter, Peters made, as always, a judicious, fair-minded case, with his often-cited remark that children 'can and must enter the palace of Reason through the courtyard of Habit and Tradition' (1981: 52). It must be admitted, however, that Peters's resolution of the paradox is somewhat elliptical; he alludes primarily back to Aristotle's account of the harmonious integration of early habituation and subsequent critical reason. Indeed, this is the defence still offered by most contemporary advocates of character education when pressed on the alleged paradoxes I discuss above: 'the Philosopher' considered them resolvable, so why should we worry about them? In other words, the advocates' proclivity to make *argumentum ad verecundiam* references to Aristotle is considerably stronger than their readiness to explain in detail what bearing Aristotle's treatment of the issue actually has on contemporary debates about moral education.

The fundamental question I want to pose here is exactly how and to what extent Aristotle really addressed and solved the paradoxes of moral education. The trouble is that much of what Aristotle himself says on the topic is

no less elliptical than Peters's memorable soundbite about the courtyard and the palace, and, moreover, open to a number of conflicting interpretations. It is, for example, as Dunne correctly observes, remarkable how little Aristotle has to say about just what kind of process his all-important early moral habituation is (Dunne, 1999: 58). My starting point in prompting a new look at the paradoxes is to seek guidance in recent Aristotelian scholarship; this can, I believe, provide a window on the salient moral and educational issues at stake. Much of this scholarship is primarily exegetical, and substantive issues sometimes become obscured under the thicket of exegesis. However, as my eventual aim is to say something relevant about moral education rather than about Aristotle, throughout this article I try to turn the relevant textual debates to practical account. Aristotle's position must not be viewed as a relic of ancient history, but as food for current educational thought.

I address the paradoxes of moral education in several stages. In Section II, I provide a gloss on Aristotle's account of moral development and moral education to establish what he said and did not say about those issues, and how much of what he said lends itself to different interpretations. In Section III, I explore a number of such interpretations, which relate to the psychological paradox. In Section IV, I address Aristotle's contribution to the resolution of the moral/political paradox. Much of the material from the preceding section remains salient there, as a potential resolution of the psychological paradox will go a long way toward solving the moral/political one as well. Finally, in Section V, I draw together the lessons of the previous sections to show what we can learn from Aristotle about the paradoxes of moral education.

II. What Aristotle Did and Did Not Say about Moral Development and Moral Education

Nowhere does Aristotle produce a clear-cut, comprehensive account of moral development, let alone a meticulously worked-out stage-theory similar to that of, for instance, Kohlberg. When he explicitly mentions such development, what he says tends to indicate a black-and-white picture where the animal-like, morally immature child is contrasted with the morally mature adult. Nevertheless, Aristotle devotes considerable space in various places in the *Nicomachean Ethics* to describing people at different levels of moral excellence. If we exclude the levels of the subhuman (bestial) and the superhuman (heroic), those include the levels of 'the many', 'the soft', 'the resistant', the 'incontinent', 'the continent' and 'the virtuous'.

Those progressive levels of moral excellence correspond to different developmental conditions of an agent's soul. Every person's soul has a rational part (reason) and a non-rational part. The non-rational part is again divided into two sub-parts: one, plant-like and shared with other living things,

which is naturally unresponsive to reason and need not be further explored here; the other comprising our appetites, desires and emotions, which is potentially responsive to reason and that can, to varying degrees, 'share in reason' (Aristotle, 1985: 30–2 [1102a–3a]). The degree to which this second part shares (or does not share) in reason determines a person's standing in the order of moral excellence. Reaching the final level is a tall order. At that level are the truly virtuous persons who are 'the sort to find nothing pleasant that conflicts with reason' (1985: 196 [1152a]). Their appetites, desires and emotions are so constituted (reason-infused) – or, as Hursthouse puts it, have through a process of moral education become so 'amended, developed, complicated and enriched' (1988: 214) – as to allow the virtuous to constantly feel and desire in the right (medial) way, according to Aristotle's well-known theory of the mean of action and reaction: a mean flanked in each case by the relative extremes of excess and deficiency. Most importantly, the virtuous have developed their own intellectual virtue of *phronesis* which helps them hit the medial target in each particular case (see later).

It seems reasonable to suppose that Aristotle considers the above-mentioned levels to be diachronic and developmental rather than just synchronic (as mere rankings of worse to better states of character). Morally virtuous agents must then pass through those levels in a sequential order before they reach the goal of complete (human) moral excellence, while some – perhaps most – people stagnate at some lower level in the order if they ever manage to leave behind the animal-like level of 'the many' in the first place. This supposition is shared, at least implicitly, by various interpreters (Burnyeat, 1980: 70; Curzer, 2002: 154; Sherman, 1989: 161). This would also tally with Aristotle's general view of human development, according to which the child is regarded as an unfinished substance that is growing to completion as an adult and whose progression to its complete 'form' of humanity is a progression with distinct, but differentially paced, phases, each with its own *telos* (see further in Tress, 1997). Nevertheless, we must not understand those levels to constitute strict developmental stages of the Kohlbergian kind. Some children, endowed with a soft nature by birth, might jump more or less straight to the level of 'the soft'; the highest level might only be partly reached by many predominantly good persons, as there are degrees of virtue that fall short of full virtue, and so forth.

A discerning reader might ask how becoming moral and becoming 'responsive to reason' are connected. Might a person's soul not gradually become responsive to the *wrong kind* of reason and thus develop from pre-morality to immorality? Aristotle does leave room for such a process; this is, for instance, the sense in which adults at the level of 'the many' are inferior to children at the same level. He talks disdainfully of the 'most vulgar' who have developed 'their conception of the good' as that of mere gratification (1985: 7 [1095b]). Since those differ from children in having a distinct

conception on which they work, they must be responsive to some kind of reason, if obviously not the right one. However, in most cases where Aristotle speaks of responsiveness to reason, he is referring to what we would nowadays prefer to call responsiveness to moral considerations. This can be explained by the fact that Aristotle takes for granted the rationality of a prudential outlook, according to which the reasonableness of morality must ultimately appeal to prudential considerations; namely, to the agent's own interests. To possess *good* prudential reasons is to be moral. Many moderns find this difficult to swallow: Does not an overriding concern for oneself exclude moral considerations? Not at all, in Aristotle's view. For him, it is an empirical fact that the virtues are essential to *our own good*: they help us fulfil what is central to us. Applying the virtues is therefore necessary to securing our own interest. But the virtues require precisely that we pursue *the good of others* in the ways required by morality. This is best brought out in Aristotle's discussion of true self-love as involving love of others and leading (potentially) to costly sacrifices, even death, as one sacrifices one's life for others and thereby 'does something great and fine' for oneself (1985: 252–6 [1168a–9b]; see further in Irwin, 1995). Thus, becoming more and more responsive to (the *right kind of*) reason constitutes in itself moral progress.

While some light may now have been shed on the potential progress of moral excellence, according to Aristotle, little has yet been said about the actual process by and through which it is driven. As we will find out presently, Aristotle's account of this process leaves many questions unanswered. Again I traverse extensive territory at a somewhat brisk pace, but the key words here can, in any case, be neatly summed up by borrowing a phrase from a famous British politician: 'education, education and education'. We progress through the order of moral excellence only if we are educated to do so. Not just any kind of education will do, however, for, while virtues of thought (of the rational part of the soul) arise and grow mostly through (systematic verbal) *teaching*, virtues of character result from habit (*ethos*); hence the name: 'ethical' (Aristotle, 1985: 33 [1103a]). And education through the instillation of habit (in the non-rational part of the soul) is called *habituation*. This takes time, as those who have just learnt a virtue through habituation 'do not yet know it, though they string the [correct] words together: for it must grow into them' (1985: 180 [1147a]). Although those moral learners are therefore, at the beginning, not able to understand, through reason, why the moral virtues of character are important, as they would be able to understand that 2 + 2 = 4, it would be wrong to say that those virtues are imposed on them as alterations of their nature; learners do not undergo a *metamorphosis* in acquiring them any more than a house does when we put a roof on it. The process from a person's 'first nature', at the lowest level, to his 'second nature', at the highest, involves a qualitative change of character; yet, it is not a forced process in the sense of going against nature, since children have in them the natural potential of actualizing this second nature. Thus, virtues

'arise in us neither by nature nor against nature'; that is, we would not acquire them naturally unless someone inculcated them in us, but, equally importantly, we are so constituted by nature as to be 'able to acquire them, and reach our complete perfection through habit' (1985: 33–4 [1103a]). It also matters who habituates us; before the age of seven, this process is best situated in the home since it can, then, be stimulated by the child's inborn 'natural affection and disposition to obey' (Aristotle, 1941: 1110 [1180b]).

Aristotle then poses the important rhetorical question of what it means to say that to become virtuous we must first do virtuous actions. 'For if we do what is grammatical or musical, we must already be grammarians or musicians.' In the same way, when we do what is just and temperate, must we not already be just and temperate? Aristotle seems to want to say here that children who act out of habituation alone are not really yet virtuous, for they have only learnt what is virtuous, not why it is virtuous. (This is, however, not an uncontroversial reading; see Section III.) Virtuous persons not only perform the right actions, but also perform them for the right reasons and from the right motives: knowing them, taking intrinsic pleasure in them and deciding on them for themselves. At this early stage, however, moral learners do not need to understand the reason, the 'why'; they only need the 'that' (the correct belief). Yet 'no one has even a prospect of becoming good' – in the true sense of doing things 'in the way' in which virtuous persons do them – without first being made to go through the correct motions, for, as Euenus says, '[h]abit . . . is longtime training, my friend, and in the end training is nature for human beings' (Aristotle, 1985: 39–40, 6, 198 [1105a, 1095b, 1152a]). Before full virtue, we thus necessarily need habituated virtue.

In order to take the step from habituated virtue to full virtue, we must learn to choose those right actions and emotions from 'a firm and unchanging state' of character (1985: 40 [1105a]) – that is, after having submitted them to the arbitrament of our own moral deliberation. Then, and only then, can the pumpkin of moral education turn into a coach. For that end, we need practical wisdom: *phronesis*. Aristotle's *phronesis* is an intellectual virtue that serves the moral virtues, for, while the latter make 'the goal correct', *phronesis* 'makes what promotes the goal [correct]' (1985: 168 [1144a]). This intellectual virtue helps the moral virtues find their right ends and the suitable means to their ends. More specifically, *phronesis* 'is a state grasping the truth, involving reason, concerned with action about what is good or bad for a human being' (1985: 154 [1140b]). We cannot be 'fully good' without *phronesis*, nor can we possess *phronesis* without virtue of character (1985: 171 [1144b]). *Phronesis* stripped of the latter degenerates into a mere cunning capacity: what Aristotle calls 'cleverness'. Cleverness involves the capacity to act or react in such a way as to 'promote whatever goal is assumed and to achieve it'. In the case where 'the goal is fine, cleverness is praiseworthy, and if the goal is base, cleverness is unscrupulousness';

hence, both the *phronimoi* (persons exhibiting *phronesis*) and the unscrupulous can be called clever (1985: 154, 168–9 [1140b, 1144a–4b]).

To take stock at the end of this summary of what Aristotle actually said about moral development and moral education, let me recall the 'psychological paradox' of moral education introduced in Section I: How can it be true at the same time that it is the aim of moral education to develop people who conduct themselves by their intellects (or, in Aristotle's sense, possess and apply their own *phronesis*) *and* that this can be achieved best through inculcating in them from an early age certain ready-made habits of action and feeling? Apart from being so meagre didactically that a moral educator without other resources would starve on it, Aristotle's account of habituation bristles with problems of interpretation: How can students acquire *phronesis* if they have thus far experienced only externally guided habituation? How can they learn that an action or emotion is virtuous simply by being habituated into doing or feeling it? Why does *phronesis* necessarily require an earlier state of non-rational habituated virtue?

These searching questions have given us a taste of the challenges that Aristotle's account – or, for that matter, the Aristotle-inspired contemporary character-education account – faces with regard to the psychological paradox of moral education. We clearly need to pay closer attention to the nuts and bolts of the process of moral habituation if we are to deflect those challenges, let alone resolve the underlying paradox. And here we are greatly aided by the efforts of a number of Aristotelian scholars.

III. Conflicting Interpretations of Aristotle's Account

Moral theorists may have to learn to live with a certain amount of theoretical messiness; practitioners such as moral educators, however, need to be able to sort out the mess before they put theories into practice. Various attempts have been made to sort out some of the mess – or, perhaps better, fill some of the lacunae – in Aristotle's account of moral education. One of the issues that has exercised Aristotelian scholars in this respect is the nature of the habituation process, in particular the extent to which it taps into learners' reasoning abilities and the extent to which it is a purely mechanical conditioning process. On this issue, there is already a staggering disparity of interpretation.

Burnyeat (1980), for example, argues that for Aristotle there is no use reasoning with someone who lacks the appropriate starting points (the 'that'). From this it follows that for a long time moral development must be less than a fully rational process – and indeed, even for morally mature individuals, many of their moral responses will by necessity continue to be derived from sources other than reflective reason. However, moral learners would hardly be on the way to the desirable state of understanding the 'why' of

morality if they were not in the process of forming reasonable and reflective ideas about the nature of the virtues. So the practice of moral learning must involve some cognitive powers into which moral educators can gradually tap. Burnyeat seems to envisage the habituation period as a combination of two essentially different processes: first, a non-rational one where conditioning is the only means of instruction; and then, subsequently, a rational one where learners continue to be conditioned but where the conditioning is accompanied by description and explanation, leading gradually to the formation of their own *phronesis*.

Curzer (2002) locks horns with Burnyeat on this count. He claims that Burnyeat gives false colour to Aristotle's texts by invoking a second stage of habituation where teaching (through description and explanation) accompanies commands and exhortations. Aristotle is, by contrast, quite adamant that no teaching and argument works with learners until the habituation process has been completed. Instead of smuggling some teaching (in Aristotle's sense) into habituation, we should accept the fact that, for Aristotle, habituation is simply a matter of mechanical, mindless inhibition.

Finally, Sherman's reading is different from both those of Burnyeat and Curzer. She argues forcefully against a mechanical interpretation, claiming that, for Aristotle, habituation requires *from the very beginning* the exercise of judgement and reason by the moral learner. The mechanical interpretation 'ultimately makes mysterious the transition between childhood and moral maturity. It leaves unexplained how the child with merely "habituated" virtue can ever develop the capacities requisite for practical reason', the very capacities that support full virtue. The critical nature of full virtue must be reflected in the educational process if there ever is to be full virtue. Through habituation, the child is not manipulated (for such manipulations would never lead to full virtue), but rather gradually brought to more critical discriminations with the guidance of an outside instructor. The rehearsals required for acquiring the virtues 'must involve the employment of critical capacities, such as attending to a goal, recognizing mistakes and learning from them, understanding instructions, following tips and cues', and so forth. Thus, habituation constitutes a 'critical practice': a gradual process of moral sensitization (Sherman, 1989: 153–99).

Now, who of these three writers is right and who is wrong? As far as the nature of the conditioning involved in habituation is concerned, Sherman's non-mechanical reading surely hits the mark in the minimal sense in which being trained to avoid certain actions as base and to pursue others as noble must contain within itself an element of heightened discrimination; otherwise, it could not involve an understanding of them *as* base or *as* noble or of other future actions *as* similar to those already avoided or pursued (cf. Dunne, 1999: 59). A primary effect of habituation is that we gradually learn to *perceive* things correctly through more nuanced patterns of seeing; we become more and more responsible for how things 'appear' to us as experience gives

us an eye (Aristotle, 1985: 69, 166 [1114b, 1143b]; cf. Sherman, 1997: 254–62). Notwithstanding the centrality of such training of recognitional capacities during the habituation period, heightened discriminations are not necessarily tantamount to more critical discriminations. Unreflective artisans also 'gain an eye' as their technical, instrumental thinking develops, but they may still direct their actions towards a given end more or less mechanically: that is, without operating according to their own critical conception of what that end should be. Furthermore, in a practical sense, most moral educators will be tempted to give voice to reasons when making exhortations: 'Now you should not do that, you will hurt your sister.' But we are still in the realm of the 'that'; such quasi-explanations do not necessarily move learners to consider 'why' they should not hurt others.

All in all, one must concede to Curzer that there is not a single passage in Aristotle's corpus that clearly indicates that he considered habituation to be a truly *critical* practice. So in a crucial sense the psychological paradox of the mysterious connection between habituation and *phronesis* still remains. Sherman does well in suggesting how Aristotle might have tried to resolve the paradox, as does Curren when he proposes the solution of picturing 'training in the habits of virtue as also including a training in the practice of giving adequate reasons for what one does and respecting the adequate reasons that others give' (2000: 212). But, as Curren acknowledges for his own proposal (and the same would go for Sherman's solution), this is 'not a straightforwardly Aristotelian view to the extent that it rejects the idea that reason emerges later' (2000: 212).

It is well to note at this juncture that the divergence of opinion explored above is set against the background of considerable convergence on at least one point. All three interpreters seem to take it for granted (although Sherman's later work may in her case suggest otherwise: 1997: Ch. 6) that the intellectual virtue of practical wisdom, *phronesis* – regardless of precisely how and when it develops – signifies the agent's discernment of the courses of action/reaction that best accord with the specifically human *telos* of *eudaimonia*. With the development of *phronesis*, a qualitative transition from the mere 'that' of ethics to the 'why' takes place. In other words, the new *phronimoi* perfect and perhaps partly revise their perceptions of the 'that' in light of their grasp of the explanatory first principles of ethics, thus reaching the final stage of moral development: a stage necessary for full moral maturity, although admittedly 'the origin' (here allegedly the grasp of the 'that') 'seems to be more than half the whole' (Aristotle, 1985: 18 [1098b]).

To get a purchase on this consensual view, Irwin's well-known account of Aristotle's 'first principles' provides a case in point. According to Irwin, we cannot understand Aristotle's ethics or politics without recourse to his other non-ethical works, works that lay down the first principles of human nature on which the moral and political conclusions ultimately depend (1990: 348–55). The picture that emerges is of Aristotle as a *foundationalist* (more

specifically, a moral *naturalist* who bases his normative claims on facts about human nature: about what actually makes people thrive) and a moral *generalist* for whom certain things are always noble and right. This does not mean that all moral action is unproblematically codifiable in light of an all-embracing ethical theory; such a theory would be impossible to fathom for an imperfect being. Because of the endless variety of novel circumstances that we may be caught up in, we need perceptual awareness – that is, dynamic appreciation of the uniqueness of each particular situation – to guide us to the right course of action, just as a law needs to be constantly rectified and interpreted to take into account new situations. Morality, like law, is thus contingently, but not necessarily, uncodifiable (Irwin, 2000; Kristjánsson, 2005).

Recently, the received wisdom about Aristotle's foundationalism and generalism has been comprehensively challenged by theorists who understand Aristotle's *phronesis* as much more open-ended and flexible: as situational appreciation rather than the application and interpretation ('fine-graining') of a theory. This challenge has been warmly welcomed and eagerly accommodated by various practitioners, such as (moral and other) educators, many of whom refuse to understand their work as involving the mere application of theory to particular cases but rather as some sort of intuitive artistry (Dunne, 1993). I need to devote some space to this challenge here, as it suggests, by implication, a possible solution to the psychological paradox of moral education, for if there is no essential gap between the 'that' and the 'why' of ethics, between habituated virtue and critical virtue, then the alleged paradox more or less dissolves. Nussbaum (1990) is often taken as an example of a particularist, anti-theorist interpreter of Aristotle, but as she has since written a forceful defence of the need for moral theory (Nussbaum, 2000), her current position on this issue is somewhat moot. I instead base my exploration on the writings of McDowell and Vasiliou.

McDowell was the forerunner in a series of particularist readings of Aristotle that took off in the late 1970s and have since generated considerable debate. In a more recent article, McDowell (1996) pulls his various resources together. The fundamental point is this: 'If the content of a correct conception of doing well is fixed by proper upbringing, that renders it superfluous to credit that role to an autonomous operation of the practical intellect' (1996: 19). On McDowell's interpretation, someone who has been properly brought up, in the Aristotelian model, has been habituated into seeing the appropriate actions or emotions as worthwhile in the specific way that is expressed by bringing them under the rubric of the concept of the noble. Rather than furnishing us with a universal 'blueprint', from which noble (re)actions can be systematically worked out, in this contrasting picture there is nothing for the *phronimos*'s grasp of the content of the universal to be 'except a capacity to read the details of the situation in the light of a way of valuing actions into which proper upbringing has habituated one'

(1996: 23). The content of the universal is not isolable, even in principle, from this learnt capacity. There is no subsequent grounding of the universal from the outside either; the content of a conception of human well-being is 'fixed once and for all' in the minds of well-brought-up people without the need for further foundation. If there is any moral development in individuals after their parents send them morally habituated into the world, it merely consists of the training of the imparted conceptual apparatus, as when hunters gradually train their eyes to see the prey better, while the prey remains the same (1996: 21–33). McDowell here almost reads Aristotle as if the latter were a late-Wittgensteinian: habituated persons have learnt a language game involving the concept of the noble. What they later add themselves is increased mastery of the game as they engage in the practices of applying the term to particular instances; the concept becomes more discriminatory of subtle shades and nuances through sustained use, without the need for any definition or independent grounding (Hursthouse, 2004).

While strongly influenced by McDowell's reading, Vasiliou (1996) considers the transition from the 'that' to the 'why' of ethics even less significant and renders Aristotle even more of an anti-generalist and anti-theorist than does McDowell. Vasiliou makes heavy weather of a cryptic, and perhaps incomplete, passage in Aristotle, which reads thus (notably in Irwin's translation): 'For the origin we begin from is the belief that something is true, and if this is apparent enough to us, we will not, at this stage, need the reason why it is true in addition' (Aristotle, 1985: 6 [1095b]). Vasiliou claims that Irwin (and like-minded theorists) have inserted the clause 'at this stage', which has no equivalent in the Greek, to serve their own agenda of implying that, at some later stage, the grounding theory of human well-being will appear to the learner and offer that person a blueprint for ethical behaviour. So far is this from being the case, Vasiliou argues, that exactly the opposite holds: Aristotle is here making the point that the person who has acquired the 'that' of ethics through proper upbringing (habituation) will not now or ever after need the 'why' in addition. If you have the 'that', you can gradually recognize on your own, case by case, what doing well is. It is precisely because those who possess the 'that' sufficiently can identify particular actions as being just or courageous, for example, that they must already have a grasp of the 'why'. The Aristotelian 'first principles' in ethics are thus not grounding principles but rather are 'viewing particular actions as counting as just, virtuous, etc., here and now' (Vasiliou, 1996: 777). There is nothing substantially to be added and, hence, no psychological paradox to worry about, in the sense that I have given it in this article. Vasiliou does, like McDowell, leave some room for post-habituation moral development, but that development is limited to a further categorization of moral concepts along the original lines firmly fixed by the 'that' (Vasiliou, 1996: 776–90).

I have argued in some detail elsewhere that the particularist interpretations of Aristotle misfire, and it is not my intention to cover old ground

here (Kristjánsson, 2005). To rehearse briefly some salient points, however, it is, firstly, extremely difficult to ignore the fact that in the *Nicomachean Ethics*, Aristotle proposes a fully fledged *moral theory* about 'happiness' (*eudaimonia*) as the ultimate good and unconditional end of human beings, for the sake of which we do all other things (1985: 1–5 [1094a–5a]). That, rather than the notion of the noble or the just, provides the Aristotelian 'first principle' of ethics, and all of Aristotle's scholarly endeavour is precisely aimed at unravelling such first principles (Reeve, 1992: 29). How could the *phronimos* be a real *phronimos* without having gained access to such a theory and having started to apply it critically and systematically in practice? Secondly, Aristotle provides us with an array of ethical rules about the proper medial states of actions and emotions, and, although he admits that they hold only 'usually' (or for the most part) and not universally but rather have to be applied in each case with contextual sensitivity to the relevant circumstances, those are nonetheless general rules of thumb that 'indicate the truth roughly and in outline' (1985: 4 [1094b]). This much, as least, is acknowledged by the semi-particularist Hursthouse (2004), although she refuses to understand those ethical generalisations as truly action-guiding. But, thirdly, that refusal is puzzling, given Aristotle's frequent discussions of practical moral dilemmas and his readiness to guide us there in the right directions (Aristotle, 1985: 240–1 [1164b–5a]). Although 'it is not easy to define [such] matters exactly', he says, we 'must try to offer help' (1985: 36, 241 [1104a, 1164b]; see further in Kristjánsson, 2002a: 71). The particularist readings of Aristotle must be viewed as yet one more instantiation of the popular anti-foundationalism tendency in modern moral philosophy: the tendency to tone down any grand doctrines and, more specifically, to justify moral norms from within rather than from the outside (for example, with reference to human nature). I believe, however, that Aristotle would consider this tendency philosophically disabling rather than enabling.

If the particularist attempt to debunk the psychological paradox of moral education fails, what are we then to make of Aristotle's contribution to its resolution according to a generalist interpretation of his writings? Let us return to the three rhetorical questions raised at the end of Section II:

(1) How can students acquire *phronesis* if they have thus far experienced only externally guided habituation? Well, they have of course experienced more than that. They have been brought up in a home where they have experienced mutual 'natural affection' with parents and siblings. They have mingled with the right kind of people, interacted with the right kind of friends, listened to the right kind of music to train their emotions (Aristotle, 1941: 1308–16 [1339a–42b]), and so on. Not all these things are necessarily describable as involving an extrinsic motivation. Moreover, as already noted, habituation – while not essentially a critical practice – does include the training of perceptual capacities that help students to see things aright.

(2) How can students learn that an action or emotion is virtuous simply by being habituated into doing or feeling it? They do not learn about virtue only in that way, for the task of acquiring practical wisdom (*phronesis*) still lies ahead. If the generalists are (at least generally!) right, then the *Nicomachean Ethics* should be understood as laying the theoretical foundations of morality: the systematic moral knowledge of its first principles (the ultimate end of human life: the nature of a good character, etc.). This knowledge, imparted through verbal teaching, constitutes the universal part of *phronesis*. Habituation, which produces sound habits and accurate perceptions, provides the discernment of particulars. *Phronesis* thus constitutes the eventual fusion of the appetitive part of the soul with the deliberative part of the intellect, and these two strands do not braid into a single skein until systematic moral teaching has been added to the habituation process (cf. Curren, 2000: 201–4).

(3) Why does *phronesis* necessarily require an earlier state of non-rational habituated virtue? We simply know, from experience, that habituation is a precondition for the usefulness of moral teaching. We also know for a fact that a successful fusion of habituation and intellectual training leads to the agent's own *phronesis*, just as we know that the novices who are originally pushed into the skating ring eventually learn to skate for themselves. This is the rub of the matter. How, exactly, this happens is tied up with various mental and bodily states and processes, the details of which must be given by the empirical sciences. As with many other factual questions, such as how, precisely, ignorance is resolved 'so that the incontinent person recovers his knowledge', we must hear the answer 'from the natural scientists' (Aristotle, 1985: 181 [1147b]; cf. Hardie, 1980: 110–14). Or, to put the words of the devout empiricist Aristotle into modern language: Moral philosophy *qua* practical enterprise must in the end be answerable to empirical research in moral psychology. We must hear the detailed answer about the resolution of the psychological paradox of moral education from developmental psychologists, rather than moral philosophers.

Rather than supplying practical answers to such questions as how, precisely, habituated reason can (psychologically) be made to develop into critical reason, the *Nicomachean Ethics* gives us, in broad theoretical outline, the story of the necessary fusion of habituation and teaching. Addressing the relevant practicalities would require a shift from moral philosophy to empirical science. But Aristotle was also an empirical scientist, so why did he not provide us with those details too? There are two possible answers to that question. First, it is 'those with experience in each area who judge the products correctly and who comprehend the method or way of completing them, and what fits with what; for if we lack experience, we must be satisfied with noticing that the product is well or badly made' (1985: 297 [1181a]). Perhaps Aristotle did not consider himself expert enough on the didactics of

moral upbringing to write a manual for it. Another possible explanation lies in the fact that large portions of Aristotle's writings on education have undoubtedly been lost. Answers to questions of moral didactics might have been expected to be forthcoming in the practical treatise that deals with earthbound issues of legislation and schooling, namely the *Politics*. Notably, however, the *Politics* is a mere fragment, and only a part (about the use of music to train moral emotions) remains of the section on the education of character. Perhaps Aristotle wrote, or intended to write, there a description of moral didactics (notice also a reference to his work on child-rearing, in Aristotle, 1941: 1302 [1335b]).

To sum up, Aristotle's view of the psychological paradox of moral education is that it does admit of a resolution – that much we know from experience and can explain in broad theoretical outline – but a precise account of this resolution has to await the exploration of empirical scientists.

IV. The Moral/Political Paradox

How can it be true at the same time that the aim of moral education is to create individuals who, moved by their own conception of the good, cherish and assiduously apply their own unencumbered autonomy *and* that this can best be achieved through means that necessarily involve an extrinsic motivation? Is heteronomously formed autonomy morally possible and justifiable? This was the moral/political paradox of moral education presented in Section I. Note that, even if we take Aristotle on trust and acknowledge that there is a scientific solution at hand for the psychological paradox, we might still consider something seriously amiss morally and politically with the notion of heteronomously guided autonomy. It is at least a common conception in modernity that in order to gain full autonomy or to 'own' a moral voice that *is authentically yours*, you must *liberate yourself* from the original sources of your core values: the agents (for instance, parents) and institutions (such as schools) that habituated and socialised you. As Curren neatly fleshes out this consideration, he mentions: (a) the fear of *indoctrination*: that the manipulation inherent in the habituation process prevents the unfettered employment of autonomy; (b) the possibility of *foreclosed options* – that in suppressing alternative conceptions of the good, moral habituation restricts future life options; and (c) the threat of *force*: that habituation necessarily involves force and is, thus, morally and politically suspect (Curren, 2000: 206).

Now, it may seem far-fetched to seek a solution to such typically modern concerns from a philosopher who obviously did not possess the concept of autonomy in its modern sense. Nevertheless, attempts have been made to alleviate those very concerns with reference to Aristotle's conception of (political) freedom. Let me briefly note those attempts. A common recourse

is to point out that the worries about the heteronomous undermining of autonomy typically stem from liberal thinkers, steeped in the tradition of 'negative' freedom. Aristotle, by contrast, is said to have held a 'positive' conception of freedom – or, more specifically, a sub-conception of such freedom sometimes dubbed 'communitarian' or 'republican' freedom, according to which real freedom does not consist in bare immunity from external restraints, but rather in active participation in a communal enterprise (Johnson, 2002; Long, 1996: 795; MacIntyre, 1981: 149). This form of positive liberty is sometimes caricatured by its opponents as implying a Rousseauean (or, for that matter, Orwellian) 'forced-to-be-free' scenario, according to which you can be truly free even when are you forced to do things against your will as long as those things are 'in your own best interests'. There are, however, more sympathetic ways in which to understand and express the basic insights of 'communitarian freedom', such as the observation that an agent can hardly be said to enhance his or her freedom by achieving radical independence from others and that, far from diminishing the freedom of children by educating them, to give an example, you enlarge their humanity and increase their freedom. For those fundamentally averse to positive conceptions of freedom, someone might conceive of a way of accommodating Aristotle's notion of freedom within a pure but permissive negative model, according to which the habituation process would, for example, inevitably involve some restriction of freedom. But that restriction would be eclipsed by the gain in overall negative freedom through the far-outweighing freedoms from the conditions of ignorance and moral immaturity: conditions that may also be considered negative barriers to a person's freedom provided that another agent could be held responsible for them (for such a permissive negative conception of freedom, see, e.g., Kristjánsson, 1996).

The problem with both those strategies is twofold. Firstly, Aristotle did not hold freedom to be the highest political value; he was not a modern liberal. If only for that reason, both the outlined strategies to resolve the moral/political paradox – by claiming that 'forcing' children to become autonomous is sufficiently justified simply because it increases their overall positive, or their overall negative, freedom – would seem foreign to him. Secondly, and more importantly, Aristotle did not have at his disposal anything resembling the modern concept of freedom, let alone two distinct conceptions of positive and negative freedom. For him, being free basically meant not being a slave (Long, 1996: 788): a restrictive notion of the term 'freedom' that we can find in many ancient and mediaeval languages. For example, the modern Icelandic word 'frjáls' (free) is derived from 'fri-hals' in Old Norse, which literally means 'having a free neck', that is, not being chained like a slave (Kristjánsson, 1996: 9). All in all, strategies to resolve the moral/psychological paradox through some fiddling with the concept of freedom are, if nothing else, hopelessly un-Aristotelian.

Aristotle was, of course, a tireless advocate of regulated upbringing and compulsory public education (see Curren, 2000 for a clear overview). For him, the development of moral and intellectual virtues is not a private affair or achievement but fundamentally a public one. To be and to remain fully virtuous, one needs to live in a society with a correct constitution, and under such a constitution the legislators should be particularly concerned with the education of the young. No matter how morally alert one's parents and teachers are, 'it is hard for someone to be trained correctly for virtue from his youth if he has not been brought up under correct laws' (Aristotle, 1985: 293 [1179b]). Conversely, the 'best laws, though sanctioned by every citizen of the state, will be of no avail unless the young are trained by habit and education in the spirit of the constitution' (Aristotle, 1941: 1251 [1310a]). The core idea of the *Politics* is to underline those truths and put them into practice. Aristotle was not as concerned as we are today by the whiff of paternalism; he would have readily admitted that bringing a person up to become a *phronimos* might have to involve some exercise of force – except perhaps in the case of those most gentle and malleable by nature – and he would also have been ready to morally justify that exercise. Aristotle's justification, and his potential approach to the moral/political paradox of moral education, may be set in sharp relief by comparing it with the corresponding modern discursive tradition.

The modern discourse on this issue in moral and educational circles is predominantly a liberal one, where the ideals of individual freedom and autonomy stubbornly stay on the top of the agenda. How is heteronomously motivated autonomy morally possible and justified? The tone for the liberal resolution of this paradox was set in a famous article by Dworkin (1972), where he argues that parental paternalism may be thought of as a wager by the parent on the child's subsequent recognition of the wisdom of the restrictions. The possibility thus lies in the fact that the child will understand the reasons for the use of force at a later stage; the justification rests on what could be called 'future-oriented' (or 'subsequent', 'anticipated') consent. The underlying assumption is that paternalism of this kind is not the same as indoctrination, for indoctrination would disable children from ever seriously questioning the ground of parental values and from so much as entertaining the possibility that other values might be preferable (Peters, 1981: 163).

There are various problems attached to the notion of autonomy manifested through subsequent consent, problems of which many liberal thinkers are keenly aware. For instance, consent may be rather easily manipulated, and many of the techniques that a moral educator will use in the habituation process are not the sort of techniques into whose acceptability learners can gain insight and consent to later through retrospective critical appraisal: techniques such as the educator's facial expressions, gestures and tones of voice (Buss, 2005: 233). Richmond, while sticking to the liberal agenda

concerning autonomy as the overriding educational goal, considers the demand of subsequent consent both unfeasible and redundant. What matters, instead, is the character of the learning process with which individual learners are engaged: whether it is harmful or beneficial in promoting or suppressing the development of autonomy. And that can be determined according to established educational criteria prior to any consent given by the learner (Richmond, 1998: 243–7).

While I agree with Richmond about the redundancy of subsequent consent, I do observe an underlying dilemma here. Does the justification of paternalism in moral habituation lie in the process or in the outcome? If it lies only in the outcome (successfully accomplished autonomy), then indoctrination and manipulation during the process are not necessarily excluded as educational options. If it lies only in the process (as non-manipulative and non-indoctrinatory), then the outcome may or may not be one of autonomy: well-brought up people might, for instance, decide to vote unreflectively like their parents in all political elections rather than exercise their own autonomy. If, as Richmond's proposal seems to imply, the justification lies in both the process and the outcome (the process must be non-manipulative and the outcome must be autonomy), then it becomes unclear why he rejects consent as a criterion of successful upbringing: after all, informed consent is a standard liberal procedure by which agents manifest their autonomy. Richmond seems unable to spring loose from the trap laid by the liberal valorisation of autonomy: for him, autonomy is such an overriding moral ideal as to make not only consent but also *any other ideal* not directly conducive to autonomy redundant. What matters is simply people's unfettered ability to choose; their consent to the methods by which they were made to become such choosers, let alone their happiness as such choosers, are irrelevant.

Compare this to Aristotle, and you will notice a number of salient things. I said in the Introduction that a solution to the psychological paradox of moral education would go a long way toward solving the moral/political paradox also. As we saw in the preceding section, the Aristotelian resolution of the psychological paradox is simply to say that, as a matter of empirical fact that is well established but needs to be explained in detail by natural scientists, habituated virtue becomes, in the end, critical virtue, however paradoxical that may seem. In the same way, Aristotle could say here to modern liberals – if he were willing to stomach their conceptual apparatus – about the *possibility* of heteronomously formed autonomy, that this was also a well-established empirical fact: this is what happens all the time! The question of whether heteronomously formed autonomy is also *morally justifiable* complicates matters, however, for two reasons. The first is that Aristotle would undoubtedly be loath to accept the liberal notion of selfhood underlying the modern ideal of autonomy. Aristotle's notion of selfhood is of a self both *derived from* and essentially *sustained through* social recognition and admiration – to that extent it is 'heteronomous' in the Kantian sense.

and the liberal sense in as much as it is inspired by the Kantian one – but at the same time it is less alienated from its counterpart social identity than the liberal self. To have a sense of selfhood, in Aristotle's view, we need to have grasped the idea of things being valued and chosen by us. But to grasp that idea, we must first have grasped the idea of things being valued and chosen by others: primarily of ourselves as being valued and chosen, or disvalued and rejected, by them. In other words, the idea of our own self as distinct from, but still essentially of the same kind as, those of others must originally derive from the possibility of evaluating our self and its existential connections as equal, superior, or inferior to theirs, and such an evaluation is dependent upon external criteria for both its formation and its sustenance. This early learning process then serves as a filter through which various character traits can become constitutive of our agency, as we gradually develop our integrity and self-respect. There is no choice between an autonomous and a heteronomous formation of a self to begin with, in the modern sense, and our self remains, until death, socially embedded (Kristjánsson, 2002a: Ch. 4).

The second reason for the Aristotelian unease with the liberal solution to the moral/political problem of moral education lies in the liberal appeal to the independent value of autonomy, an appeal that for Aristotle would ring hollow. As noted earlier, Aristotle did not have a concept of autonomy; the closest we get to it is his notion of *phronesis*: practical (and critical) wisdom. Liberals such as Richmond are at pains to emphasise that appeals to any substantive notion of the human good are fraught with difficulties; there are too many competing conceptions of the good, and within them there are too many ways in which particular goods might be pursued. Rather than impose on our children any particular conception of the good, we should instead direct our efforts at bringing them up to reason well and to choose well (Richmond, 1998: 247–9). Autonomy, as a formal rather than a substantive notion, is an independent goal of moral maturity: one that requires no further justification. For Aristotle, by contrast, as for the character-educationists of today, we can locate, among the multiplicity of conflicting human values, a set of substantive virtues that are universally honoured in any society and whose existence is based on our common human nature: the nature that we witness as 'in our travels we can see how every human being is akin . . . to a human being' (1985: 208 [1155a]). Moreover, the value of any virtue, be it of *phronesis* or autonomy, depends for Aristotle on the extent to which it is constitutive of and/or conducive to human *eudaimonia*: the ultimate good and unconditional end of human beings. It is through this thick notion of the substantive human good that Aristotle ultimately justifies *phronesis* and whatever needs to be imposed upon children to help them develop *phronesis*. No doubt, if he adopted the liberal conceptualisation, he would justify the case of heteronomously formed autonomy in exactly the same way.

V. Concluding Remarks

In this article, I have tried to sketch an Aristotelian solution to the 'paradox' (or, more correctly put, the paradoxes) of moral education, so coined by the educational philosopher R.S. Peters. I have derived my answers by distilling Aristotle's own texts and, not less importantly, the exegeses of various recent Aristotelian scholars. I have focused on Aristotle's naturalism, naturalism that sees moral objectivity as grounded in common facts about human beings and their *Lebenswelt*: that is, the world as we actually experience it. My analysis has been heavily influenced by Nussbaum's understanding of Aristotle as an 'empirical essentialist': an empiricist who saw solutions to moral problems as this-worldly and non-transcendental – as applying *to* and *in* this world as opposed to other possible worlds – but yet as non-relative in this world as they refer to our common human nature (Nussbaum, 1992; see further in Kristjánsson, 2002a: Ch. 2).

The Aristotelian answer I have offered is basically this: both the psychological paradox and the moral/political one are resolvable in practice. We know from experience that, however theoretically puzzling this may seem, habituated reason develops, if all is well, into critical reason, and heteronomously formed selfhood develops into a self that can make autonomous decisions. How this happens, in Aristotle's view – and this time I cite Peters rather than Aristotle – 'is a matter about which psychologists and practical teachers will have more to say than philosophers' (1981: 60). The moral and political justification of heteronomously formed autonomy will be found in the specifically human substantive good of *eudaimonia*. If it so happens that autonomy can be formed only in this way and autonomy is conducive to *eudaimonia*, or even constitutive of it, then heteronomously formed autonomy is morally justified. This is, at any rate, how Aristotle morally justifies *phronesis*.

I may not have quelled the unease of those who expect something grander and more other-worldly of moral philosophy than this. Yet the desire for a 'deeper' philosophical resolution of the paradoxes of moral education than Aristotle has to offer suggests, in my view, less a failure of Aristotle than the success of disclosing the stubborn resistance of many philosophers to naturalism: to dwelling among the appearances and seeking in them a foundation for morality.

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13

Cognitive Development through Social Interaction: Vygotsky and Piaget

Barbara Rogoff

> When I discuss and I sincerely seek to understand someone else, I become engaged, not just in avoiding contradicting myself, in avoiding playing on words, etc., but also in entering into an indefinite series of viewpoints other than my own. . . . It is a moving equilibrium. . . . The engagements . . . that I make by nature of cooperation lead me I don't know where. (Piaget, *Logique genetique et sociologie*)

> Under conditions of cooperation, an activity that is initially shared by those participating in it emerges as an original and fundamental foundation for the development of *individual* activity. (Rubtsov, *The Role of Cooperation in the Development of Intelligence*)

[...]What do children gain from social interaction, and under what circumstances? What aspects of social interaction contribute to children's advances? What is the significance of variations in social interaction, such as whether partners are adults or peers, the extent of their expertise, their authority or equality relative to the children, and the extent to which partners share in decision making? Are there differences in the role of social interaction depending on the age of the child?

These questions were addressed by Vygotsky and by Piaget, and they came to rather different conclusions. In this chapter, I describe the similarities and differences in mechanisms of social interactional influence on cognitive development posited by these two theorists, focusing on the importance of expertise versus equal status and the related question of the role of adults

Source: *Apprenticeship in Thinking: Cognitive Development in Social Context* (USA: Oxford University Press, 1990), pp. 69–82.

versus peers. I also address the differences in Vygotsky's and Piaget's assumptions about when in childhood social interaction can affect individual development. [. . .]

I have suggested that the day-to-day engagement of children and adults in shared activities contributes to the rapid progress of children in becoming skilled participants in the intellectual and social lives of their society. With Vygotsky, I have argued for the influential role of children's engagement with more skilled partners. But such suggestions and evidence of the structure and tuning of adult-child interaction and arrangements do not necessarily demonstrate that adult-child involvement fosters children's individual learning and development. Features of adult-child interaction and arrangements may have little relation to children's learning. It is important to examine explicitly the influence of expertise of partners, of equality of status, of shared problem solving, of the structuring of children's efforts, and of the transfer of responsibility to children over the course of development.

As we do so, however, it is important to recognize that we are examining a very limited part of the question of the role of the social world in cognitive development. [. . .] The social context includes much more than social interaction between partners. A primary aspect of the social context is at the level of society – the institutions, technologies, norms, and practices developed by and appropriated from previous generations.

In addition, children's social partners, especially their caregivers, make arrangements for children's daily routine, tasks, circumstances, and partners. Much of this is accomplished independently of social interaction between children and their partners. Consider the time spent by middle-class parents in choosing day care, schools, or summer camp; interviewing and scheduling baby sitters; arranging for playmates to visit; selecting and preparing children's food, clothing, toys, and furniture; and ferrying them to after-school activities. In other cultures, parents may arrange children's activities by assigning them to the care of a sibling, holding them responsible for certain tasks, or restricting or requiring their presence at certain events. Such arrangements for children have an impact on children's activities, but may not involve social interaction in the decisions or the work of arrangement.

Thus it is obvious and necessary to acknowledge the role of guided participation in learning and development. So much of what children are able to do requires their being embedded in their culture. They would certainly not learn English without exposure to that language, nor would they develop scripts for the events involved in eating in restaurants, playing Peekaboo, or reading books without involvement as observers or participants. Most of the skills studied in cognitive research are tied closely to the technology – the books, number system, language, logic – of the culture in which children develop and that children learn to master with the assistance of more skilled partners.

Like genes, social interaction and social arrangements are an essential aspect of child development, without which it would be impossible to conceive of a child developing. (Even the process of conception is inherently social!) The impact of social partners and of social conventions is a logical necessity that is not addressed by the bounded variables and interventions examined in correlational and experimental studies of the effects of social interaction.

Most research on the effects of a particular variable requires that other variables be held constant, but with questions of the impact of sociocultural experience, it is impossible to exert such control over the phenomenon without destroying it. As I have argued earlier, the particular actions and skills of an individual cannot be understood out of the context of the immediate practical goals being sought and the enveloping sociocultural goals into which they fit.

What of processes that appear to be very stable across wide variations in the human condition? Should they be considered as not having sociocultural involvement? No. It is a fallacy to think that sociocultural processes lead to variation and biological processes lead to universals. For example, it is obvious that variations in hair color and height have genetic bases. And it is clear that universal features of human activities and skills are founded on commonalities in the social environment that go with being human.

It is easier for us to recognize the role of sociocultural variation than that of sociocultural universals, which we tend to take for granted. Human problems and some of the constraints on their solution are held in common in all human situations. It is those that vary that capture our attention. For example, different groups vary in their solution to the problem of communicating (e.g., using English, Spanish, or sign language) or of calculating (e.g., on abacuses, calculators, or fingers). The relation to specific social experience is obvious in these differences; it is necessary to be surrounded by English speakers to learn English. It may be necessary to be exposed to some sort of language to learn the rudiments of grammar, even those aspects that may be common across languages. But, consistent with Trevarthen's idea of innate intersubjectivity, the basics of the potential for social communication, such as turn taking and attention to others' intentions, may be inborn features of being human.

Even panhuman processes are likely to rely on the support of the social world, however. There are similarities among human babies around the world, because of both our species similarities and the panhuman social environment in which babies are nurtured. Although variations in cognitive processes and in development make the role of variations in social context obvious, universals of cognition and development are based on universals of human cultural as well as biological heritage, which cannot be dissociated. They have evolved together over the history of our species.

The role of societal institutions and intellectual technologies is central to Vygotsky's theory, but barely appears in Piaget's theory (i.e., his statement

that the hypothetico-deductive thought of formal operations is based on social convention). Thus the context of the discussion of specific forms of social interaction and their impact on cognitive development differs in the two theories.

Mechanisms of Social Influence

The theories of Piaget and Vygotsky differ in the mechanisms proposed to underlie social influence, the phase of childhood seen as being open to social influence, and the ideal partner and role relations. It is to these differences that we now turn; further discussion of points of similarity and contrast is available in Tudge and Rogoff (1989). I speculate that the differences between the theories relate to differences in the phenomena the two theorists attempted to explain.

The two theories are based on different perspectives: Vygotsky focuses on the social basis of mind, while Piaget focuses on the individual as starting point. To understand cognition in social context, I believe that Vygotsky's perspective is essential; it cannot be reached by simply adding social context onto Piaget's individualist approach.

Both theories emphasize the importance of a common frame of reference, or intersubjectivity, in social interaction. However, consistent with the difference in centrality of the social and the individual in the two theories are differences in the locus of intersubjectivity. In Vygotsky's perspective, joint problem solving occurs *between* partners, whereas in Piaget's view, individuals work with independence and equality on each other's ideas.

In Vygotsky's theory, consistent with his emphasis on development as a process of learning to use the intellectual tools provided through social history, social interaction is expected to promote development through the guidance provided by interaction with people who have achieved some skill in the use of those intellectual tools. The model of most effective social interaction is thus joint problem solving with guidance by a person who is more skilled.

In Piaget's theory, children are seen as revising their ways of thinking to provide a better fit with reality when faced with discrepancies between their own ways of viewing the world and new information. Vygotsky (1987) characterized Piaget's theory as follows: 'Development is reduced to a continual *conflict between antagonistic forms of thinking*; it is reduced to the establishment of a unique compromise between these two forms of thinking at each stage in the developmental process' (p. 176). For the most part, this conflict was considered solitary, but Piaget (1926) also speculated that social interaction could bring about cognitive conflict, resulting in efforts to reestablish equilibrium. According to Piaget, social influence fosters change through the induction of cognitive conflict and the logical operations carried out by children

attempting to reconcile their differing views to achieve equilibrium in their understanding. The Piagetian model of most effective social interaction is thus cooperation between equals who attempt to understand each others' views through reciprocal consideration of their alternative views.

Piaget emphasized cooperation as the ideal form of social interaction promoting development because he believed that the social relations involved in cooperation are the same as the logical relations that children construct in regard to the physical world. He considered cooperation to be a parallel form of logic in which children discuss propositions that provoke cognitive conflict and its logical resolution, yielding equilibrium:

> Cooperation itself constitutes a system of co-operations: putting in correspondence (which is an operation) the operations of one partner with those of the others, uniting (which is another operation) the acquisition of one partner with that of others, etc.; and in case of conflicts, raising the contradictions (which presupposes an operational process) or above all differentiating the different points of view and introducing between them a reciprocity (which is an operational transformation). (Piaget, 1963/1977, p. 347)

Piaget (1977, pp. 160–2) laid out three conditions under which equilibrium is achieved in intellectual exchange. The first is that the partners have a common scale of intellectual values, allowing them to understand terms in the same sense. This involves a language and a system of ideas in which they converge, providing a key that allows each to translate into common terms the differing conceptions. The second condition is that the partners recognize a conservation of their propositions in which one does not contradict oneself, and in which the partners search for agreement on propositions or find facts that justify their difference in points of view. The third condition for equilibrium is that there is a reciprocity between partners such that the propositions of each are treated interchangeably. Piaget emphasized cognitive conflict as the working out of differences of opinion by coming to understand the other's perspective and by logically comparing the value of the two perspectives.

Vygotsky's model for the mechanism through which social interaction facilitates cognitive development resembles apprenticeship, in which a novice works closely with an expert in joint problem solving in the zone of proximal development. The novice is thereby able to participate in skills beyond those that he or she is independently capable of handling. Development builds on the internalization by the novice of the shared cognitive processes, appropriating what was carried out in collaboration to extend existing knowledge and skills.

Differences between the two theories in the model of social influence relate to important differences in the aspects of cognitive development that the theorists sought to explain. Piaget's emphasis was on children's qualitative

shifts in perspective on logico-mathematical problems, whereas Vygotsky was interested in children's development of skills and information useful for the application of culturally developed tools for thinking. The resolution of cognitive conflict may be necessary for a child to discard an existing belief to consider one that is qualitatively different, to achieve a Piagetian shift in perspective, as when children realize that the quantity of water does not change when it is poured into a container of another shape. And interaction with an expert may be necessary to provide practice in skills and access to information required to become proficient with culturally developed tools for thinking.

Variation in Social Processes May Relate to What Is Developing

The nature of guided participation may differ according to whether a situation involves children's development of understanding and skill or of a shift in perspective. For present purposes, I refer to the development of understanding and skills as the integration and organization of information and component acts into plans for action under relevant circumstances (e.g., learning to tie shoes; to associate items to remember them, or to read). Shifts of perspective, for present purposes, involve giving up an understanding of a phenomenon to take another view contrasting with the original perspective. The problems that Piaget posed to children about whether quantities change when their shape is transformed are examples of shifts in perspective for children who make the transformation from non-conservation (the quantity of water changes when it is poured into a glass of a different shape) to conservation (the quantity of water does not change despite the change in its shape).

The purpose of making these distinctions is to facilitate discussion of different interactional processes that may contribute to the development of understanding and skills or shifts in perspective. The development of understanding and skills may occur with the aid of simple explanation or demonstration, but may involve fine-tuning of communication, when describing a skill out of context or providing a simple demonstration is insufficient. For example, simply telling a child how to tie a shoe is unlikely to be helpful, but helping the child hold the loops and suggesting a mnemonic for the sequence of events ('the bunny circles around and then goes down the hole') may provide the support, over a number of sessions, to assist the child in learning the skill. Similar examples could be drawn from other domains, such as mnemonic strategies, subtraction skills, and reading skills.

For social influences to enhance changes of perspective, however, it may be necessary to have greater shared communication. To see a problem from a qualitatively different vantage point requires a person to become aware that there is another perspective and that it may offer some advantages. For

development of understanding and skills, individuals may more easily realize that there is information they do not know or tactics they could learn. But changes of perspective require dissatisfaction with one's current understanding of a problem. Social interaction may contribute to making the person aware that there are alternatives – for example, through the sort of cognitive conflict that Piaget posited to occur between peers who have different answers to the *same* question. Social interaction may then contribute to directing the individual to accept another view, through presentation of the alternatives and consideration of the merits of each.

But for such social effects to occur, some conditions must be satisfied: individuals must become aware of and interested in exploring alternatives to their own perspective, and there must be intersubjectivity between partners to explore the existence and value of the alternatives. True interest is needed to develop understanding and skills, but there is no need to give up current understandings to achieve 'conversion' – a process that may require inter-subjectivity. Understanding and skills may develop through observing or eavesdropping on actions and statements that are not intended to communicate to the observer, but mutual engagement in the exploration of possibilities may be more necessary for changes in perspective to result from social interaction.

Intersubjectivity in problem solving may also be important in fostering the development of 'inaccessible' cognitive processes that are difficult to observe or explain – as with shifts in perspective as well as some kinds of understanding and skill. Communication of such processes may require skillful explanation and analysis. It is relevant to this argument that many technologies of education are designed to make opaque processes more transparent, and that many intellectual tools serve the purpose of communicating about abstract ideas or past, future, or imaginary events. For example, blueprints and time-management charts facilitate planning by individuals, but their necessity may arise in social situations, to enable people to communicate concretely about abstract ideas and to coordinate their actions. Conventions used in diagramming, gesturing, and speaking are ways of facilitating mutual understanding by making events and ideas more concrete. Hence, learning to handle 'inaccessible' problems involving nontransparent cognitive processes may rely on social conventions necessary for shared problem solving and on learning through joint participation in a process of osmosis, rather than on explanation or demonstration.

The difficulty of communicating some ideas or of negotiating mental responsibility in social groups may lead individuals to prefer to work alone. This preference may be based on expectations of greater effectiveness of individual effort, but it may also involve concern about the effort or risk of collaborative work – even though the collaboration may be more effective than individual work. Bos (1937) describes a pair of 12-year-olds who said that it is more difficult to work together than on their own 'because it is not

so easy to grasp the other's point of view' (p. 362). From discussion of these feelings, however, each realized that the other had the same concerns, and this understanding led to an intensive and harmonious collaboration.

> It is indeed easier quietly to pursue ones [*sic*] own thoughts than to formulate them convincingly, express them verbally and moreover assimilate proposals and ideas of the partner. This love of facility probably contributes to the opposition of people to endeavour with their mental power in active co-operation to arrive at a better achievement. (Bos, 1937, p. 362)

Through collaboration, partners may develop ways to communicate about difficult problems that advance the definition or solution of the problems.

Consideration of the different tactics one might employ in assisting a child to develop understanding and skills or shifts in perspective may clarify age differences in the impact of social guidance as well as differences between adult and peer partners – issues on which Piaget and Vygotsky differed.

What Phase of Childhood Is Sensitive to Social Influence?

Piaget and Vygotsky appear to be almost in opposition on the question of the age at which social influence contributes to cognitive development. For Piaget, development moves from the individual to the social, and for Vygotsky, development moves from the social to the individual.

According to Piaget, the young child is largely impervious to social influence because egocentricity blocks the establishment of reciprocity and cooperation in considering differing points of view. Thus, according to Piaget, it is not until middle childhood that children's intellect benefits from social interaction, when logical argument between children with varying points of view becomes possible. Young children would generally find it so difficult to consider the logic of another's point of view that they would either continue to see things from their own perspective or switch to the other person's perspective without understanding the rationale and hence without actually advancing developmentally.

The three conditions that Piaget (1977) set out for the achievement of equilibrium are not possible with egocentrism. First, there is not a common scale of reference in terms of language and ideas to allow a durable exchange of ideas. Second, there is not sufficient conservation of propositions (commitment to sticking to what you have said before) to oblige children to take account of what they have said or agreed to in order to apply these propositions in subsequent propositions. And third, there is not reciprocity between the partners to allow coordination of propositions.

Piaget (1977) specified that at the stage of concrete operations (from about 7 to 11 or 12 years), children become able to cooperate and to coordinate

points of view. 'Thus the child becomes capable of discussion – and from this internalized discussion, and that conducted with oneself, which is reflection – of collaboration, of arguments that are orderly and understandable by another' (p. 157). Piaget suggests that cooperation provides an impetus to order thought in logical operations that involve a system of propositions that are free from contradiction and are reversible: 'Thinking in common promotes non-contradiction: it is much easier to contradict oneself, when one thinks for oneself (egocentrism) than when some partners are there to remember what one has said before and the propositions that one has agreed to admit' (Piaget, 1977, p. 157).

The importance of social interaction and the role of society becomes more obvious in the next stage, formal operations: 'Things are even clearer in the formal stage, which begins after 11–12 years, since hypothetico-deductive thought is above all thought supported by a language (common or mathematical) and is thus collective thought' (Piaget, 1977, pp. 158).

Vygotsky's approach contrasts with Piaget's in its assumption that from the beginning the child is a social being, involved in social exchanges that guide the development of higher cognitive processes:

> The child's rich and complex social contact leads to an early development of means of social connection. It has been clearly demonstrated that simple though unique reactions to the human voice are present in the third week of life (i.e., the presocial reactions) and that the first social reactions appear by the second month . . . . Laughter, babbling, pointing, and gesture emerge as means of social contact in the first months of the child's life. . . . However, the most important event in the development of the child's thinking and speech occur at approximately two years of age. . . . This critical moment, the moment when speech becomes intellectual and thinking verbal, is marked by two clear and objective symptoms. . . . First, the child who has attained this level of development begins to *actively expand his vocabulary* by asking the name of each new thing he encounters. Second, these efforts result in an extremely rapid increase in the child's vocabulary. (Vygotsky, 1987, pp. 110–111)

In contrast with Piaget, Vygotsky assumes that social guidance aids children in learning to communicate and to plan and remember deliberately from the first years of life. This guidance provides children with the opportunity to participate beyond their own abilities and to internalize activities practiced socially, thus advancing their capabilities for independently managing problem solving.

Newson and Newson (1975) cite Vygotsky's perspective in their argument that from earliest infancy, children are guided in development by social interaction.

> Knowledge itself originates within an interaction process (highly active on the part of the infant) between the infant himself and other, more

> mature, human individuals who already possess shared understandings with other communicating beings. Furthermore, these shared understandings are embedded in a uniquely human way of conceptualizing the world in spatial and temporal terms. In short, the child only achieves a fully articulated knowledge of his world, in a cognitive sense, as he becomes involved in social transactions with other communicating human beings. (p. 438)

> Through such dialogues-of-action, the infant becomes thoroughly familiar with the role of a skilled communicator, participating in forms of communication long before he is able to understand the full content of what is being communicated. (p. 445)

Vygotsky argued that rather than deriving explanations of psychological activity from the individual's characteristics plus secondary social influences, the unit of analysis should be social activity, in which individual functioning develops (Wertsch, 1985). Piaget's approach was the reverse – to focus on the individual as the unit of analysis, with social influence overlaid on the individual's activity, after the child becomes able to take another person's perspective. These differences in the timing and centrality of social influence may relate to Vygotsky's focus on development of understanding and skills in using cultural tools and Piaget's focus on qualitative shifts in perspective.

Peers versus Adults: Equal Status versus Expertise

The two theorists attributed varying degrees of importance to the roles of adults and peers. Piaget (1926) emphasized peer interaction, with its exploration of cognitive conflict between companions of equal status. An example is provided by two 5-year-olds quarreling over drinks of soda that had been poured into glasses of different shapes (an everyday situation resembling Piaget's conservation task). An adult had attempted to pour equal quantities for the two children, but since Valerie's glass was tall and thin, and David's was wide and flaring at the top, the quantities were not obviously equal. Valerie attempted to convince David of the fairness of the distribution:

> 'Yours is fatter and mine is thinner, that's why it looks like I have more. See, I have to squeeze my hand to get it into my cup, but not into yours. [She squeezes her fingers together and puts them into the opening of each cup to demonstrate.] It's just that mine is thinner so it looks like it has more.'

The children proceeded to quench their thirst. It is such interaction between peers, Piaget argued, that can lead children to reconsider their ideas.

In contrast, Piaget felt that children's discussions with adults are unlikely to lead to cognitive restructuring because of the unequal power relations between

adults and children. Only when children are able to discuss problems as equals are they likely to take into account new ways of thinking. Interaction with an adult, Piaget held, is essentially unequal; it is an asymmetric interaction in which the adult has the power, and this disrupts the condition of reciprocity for achieving equilibrium in thinking (Piager, 1977, p. 165). 'The child's socialization with his fellows is greater than, or at least different to, his socialization with adults alone. Where the superiority of the adult prevents discussion and co-operation, the playfellow provides the opportunity for such social conduct as will determine the true socialization of the intelligence' (Piaget, 1926 [3rd ed., 1959], p. 258). When peers have different perspectives, no such asymmetry exists: 'Criticism is born of discussion, and discussion is only possible among equals: cooperation alone will therefore accomplish what intellectual constraint [caused by unquestioning belief in the adult's omniscience] failed to bring about' (Piaget, 1952, p. 409).

According to Piaget, the effect of lessons from adults is for young children to abandon their own ideas for those presented, since their ideas are poorly formulated and exist only as an 'orientation of the spirit' that cannot compete with the views of adults. But in such cases, children agree without examining the idea, and they do not learn to verify for themselves. Not until adolescence do children learn to discuss as equals with their teachers, when they have 'conquered their internal liberty' (Piaget, 1928/1977, p. 230).

Although Piaget argued that children's interaction with adults does not promote their cognitive development, his focus was on the use of adult authority. He allowed for the possibility that adults may be able to interact with children in a cooperative fashion that permits the sort of reciprocity required for children to advance to a new level of equilibrium:

> It is despite adult authority, and not because of it, that the child learns. And also it is to the extent that the intelligent teacher has known to efface him or herself, to become an equal and not a superior, to discuss and to examine, rather than to agree and constrain morally, that the traditional school has been able to render service. (Piaget, 1928/1977, p. 231)

For Vygotsky, ideal partners are not equal, but the inequality is in skills and understanding rather than in power. For this reason, interaction with either adults or peers can bring about cognitive growth. But for cognitive development to occur in the course of interacting with a peer, the partner should be 'more capable' (Vygotsky, 1978).

Vygotsky's emphasis on interaction with more skilled partners is necessary to his theory since such interaction is conceived as the means by which children begin to use the intellectual tools of their society. Thus the partner must be someone who knows more about the tools than does the child. By the same token, Piaget focused on changes in perspective, from one view of a problem to another, based on his interest in understanding qualitative transitions in the philosophy of science and logic.

The contrast I made earlier between developing understanding and skill and shifting perspective thus seem to relate to the status and relative expertise desirable for children's partners. A similar perspective is offered by Damon (1984) and Subbotskii (personal communication, 1988), who suggest that different types of learning may be differentially facilitated by equal or by more expert partners. Focusing on the relative advantages of interaction with more expert peers (in tutoring) and equal peers (in collaboration), Damon (1984) suggests that

> peer tutoring may be used whenever students need to acquire information or skills that do not extend beyond their conceptual reach. Learning historical facts, practicing word attack skills, becoming adept at multiplication tables, even figuring out how to make use of a computer . . . draw upon features of basic understanding that the child has already developed. . . .
>
> Peer collaboration, on the other hand, . . . is an ideal technique for encouraging children to wrestle with intellectual challenges in difficult new principles. Learning to communicate accurately through written and spoken language, grasping the logic behind scientific formulas, and realizing the political rationale underlying a societal governance system can all be fostered in a collaborative peer interaction context. Such intellectual accomplishments stretch the boundaries of children's mental abilities. Consequently, they flourish best under conditions of highly motivated discovery, the free exchange of ideas, and reciprocal feedback between mutually respected equals. These are precisely the characteristics of collaborative interchanges between children. (p. 340)

Intersubjectivity: Theoretical Convergence and Differences

The theories of Piaget and Vygotsky share an emphasis on the importance of partners' understanding of each other. For Piaget, the partners must have a common language and system of ideas, and must grant reciprocity in attempting to examine and adjust for differences in their opinions. Piaget emphasized logical consideration of alternative perspectives provided by coming to understand another person's point of view.

For Vygotsky, the child is assumed to be interested in gaining from the more expert partner, who is seen as responsible for adjusting the dialogue to fit within the child's zone of proximal development, where understanding is achieved with a stretch leading to growth. Both perspectives are similar in stressing the importance of a match between partners involving shared thinking, and the importance of the child's understanding as the point of departure.

The role of shared thinking has received attention in the Vygotskian tradition in Wertsch's (1984) writings on 'intersubjectivity', building on the work of Rommetveit (1985). It also appears in the work of Perret-Clermont

and Schubauer-Leoni (1981) in the Piagetian tradition. The notion of intersubjectivity seems inherent in Piaget's view of social influences, but has been overlooked by some Piagetian scholars who focus on cognitive conflict as quarreling. Both theories and, increasingly, the literature on social influences focus on the role of intersubjectivity in social interaction (Forman and Kraker, 1985; Rogoff, 1986; Tudge and Rogoff, 1989; Youniss, 1987).

Despite the agreement between the two theories on the importance of sharing perspectives or thinking together, there is an essential difference in their conception of intersubjectivity. It relates to the contrast between them in the centrality of their focus on the social versus the individual. For Vygotsky, shared thinking provides the opportunity to participate in a joint decision-making process from which children may appropriate what they contribute for later use. For Piaget, the meeting of minds involves two separate individuals, each operating on the other's ideas, using the back-and-forth of discussion for each to advance his or her own development. This discussion is the product of two individuals considering alternatives provided socially, rather than the construction of a joint understanding between partners.

Forman (1987) discusses this distinction in collaborative problem solving in Piaget's and Vygotsky's theories. In Piaget's theory, collaborative problem solving is explained by deriving both cognitive and social processes from the same central intrapsychological process, whereas in Vygotsky's theory, the correspondence between cognitive and social processes is due to the derivation of individual cognitive processes from joint cognitive processes in social contexts.

These differing interpretations are accompanied by differences in the proposed mechanisms of cooperation. Forman (1987) contrasts intersubjectivity as a process that takes place between people from the Vygotskian perspective, with perspective taking or decentering as individual processes working on socially provided information from the Piagetian perspective.

A similar distinction also appears in the work of Rubtsov (1981), who observed that children's difficulties with the class-inclusion problem are sometimes resolved while collaborating with agemates, and these advances persist after the interaction. Rubtsov appears to agree with Piaget in focusing on parallels between the organization of joint activity and the organization of thought, but emphasizes the facilitation provided by the social arrangements and shared activity: 'The relations determining the logic of an intellectual structure consist of compact condensed forms of mutual relationships among the participants in cooperation' (p. 59).

Thus although both theories – and the research deriving from them – emphasize cooperation in cognitive activity, they differ in the extent to which the process of cognitive development is seen as occurring in this cooperative interaction. For Piaget, the cooperation provides information for the individual to use in becoming aware of differing perspectives and in resolving the differences between them. In the Vygotskian perspective, in contrast, the

individual makes use of the joint decision-making process itself to expand understanding and skill. Cognitive development from a Piagetian view is a product of the individual, perhaps sparked by having to account for differences in perspective with others, whereas cognitive development from a Vygotskian point of view involves the individual's appropriation or internalization of the social process as it is carried out externally in joint problem solving.

Piaget's view is thus a limited version of social impact on the individual's cognitive development; in taking the individual as the basic unit, it does not reach a collective perspective on the social context of cognitive development. It is important, as far as it goes, but does not make the necessary shift in perspective to encompass the social construction of meaning. To understand how individuals are embedded in the social world, it is necessary to grant that meaning is more than a construction by individuals. [. . .]

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14

Where Is the Mind? Constructivist and Sociocultural Perspectives on Mathematical Development

Paul Cobb

Two major trends can be identified in mathematics education research during the past decade. The first is the generally accepted view that students actively construct their mathematical ways of knowing as they strive to be effective by restoring coherence to the worlds of their personal experience. The theoretical arguments that underpin this position are primarily epistemological and have been advanced by von Glasersfeld (1984, 1987, 1989a). Empirical support is provided by numerous studies that document that there are significant qualitative differences in the understandings that students develop in instructional situations, and that these understandings are frequently very different from those that the teacher intends (Confrey, 1990; Hiebert & Carpenter, 1992). The acceptance of constructivism can be contrasted with a second trend that emphasizes the socially and culturally situated nature of mathematical activity. At least in the United States, this attempt to go beyond purely cognitive analyses reflects a growing disillusionment with the individualistic focus of mainstream psychology (Brown, Collins, & Duguid, 1989; Greeno, 1991; Schoenfeld, 1987). The theoretical basis for this position is inspired in large measure by the work of Vygotsky and that of activity theorists such as Davydov, Leont'ev, and Galperin (Nunes, 1992). Empirical support comes from paradigmatic studies such as those of Carraher, Carraher, and Schliemann (1985), Lave (1988), Saxe (1991), and Scribner (1984), which demonstrate that an individual's arithmetical activity

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is profoundly influenced by his or her participation in encompassing cultural practices such as completing worksheets in school, shopping in a supermarket, selling candy on the street, and packing crates in a dairy.

These constructivist and sociocultural perspectives at times appear to be in direct conflict, with adherents to each claiming hegemony for their view of what it means to know and learn mathematics (Steffe, in press; Voigt, 1992). Thus, there is currently a dispute over both whether the mind is located in the head[1] or in the individual-in-social-action, and whether mathematical learning is primarily a process of active cognitive reorganization or a process of enculturation into a community of practice (Minick, 1989). Similarly, the issue of whether social and cultural processes have primacy over individual processes, or vice versa, is the subject of intense debate (van Oers, 1990). Further, adherents to the two positions differ on the role that signs and symbols play in psychological development. Constructivists tend to characterize them as a means by which students express and communicate their mathematical thinking, whereas sociocultural theorists typically treat them as carriers of either established mathematical meanings or of a practice's intellectual heritage. In general, the attempts of the two groups of theorists to understand the other's position are confounded by their differing usage of a variety of terms, including *activity, setting, context, task, problem, goal, negotiation,* and *meaning*.

The central focus of this article will be on the assumptions that give rise to an apparent forced choice between the two perspectives. In particular, I will argue that mathematical learning should be viewed as both a process of active individual construction and a process of enculturation into the mathematical practices of wider society. The central issue is then not that of adjudicating a dispute between opposing perspectives. Instead, it is to explore ways of coordinating constructivist and sociocultural perspectives in mathematics education. The particular perspective that comes to the fore at any point in an empirical analysis can then be seen to be relative to the problems and issues at hand.

It should be noted that the apparent conflict between constructivist and sociocultural perspectives is not merely a matter of theoretical contemplation. Instead, it finds expression in tensions endemic to the act of teaching. For example, Ball (1993) observes that "current proposals for educational improvement are replete with notions of 'understanding' and 'community' – about building bridges between the experiences of the child and the knowledge of the expert" (p. 374). She then inquires,

> *How* do I create experiences for my students that connect with what they now know and care about but that also transcend the present? *How* do I value their interests and also connect them to ideas and traditions growing out of centuries of mathematical exploration and invention? (p. 375)

Ball's references to students' experiences and to valuing their interests imply a focus on their qualitatively distinct interpretations and on the personal goals that they pursue in the classroom. This, in my terms, implies a view of mathematical learning as active construction. In contrast, her reference to students' mathematical heritage suggests a view of mathematical learning as enculturation. Ball goes on to discuss three dilemmas that arise in the course of her practice as a mathematics teacher. She clarifies that these dilemmas of content, discourse, and community "arise reasonably from competing and worthwhile aims and from the uncertainties inherent in striving to attain them" (p. 373). It would therefore seem that the aims of which she speaks and thus the pedagogical dilemmas reflect the tension between mathematical learning viewed as enculturation and as individual construction.

Comparisons and Contrasts

Sociocultural and constructivist theorists both highlight the crucial role that activity plays in mathematical learning and development. However, sociocultural theorists typically link activity to participation in culturally organized practices, whereas constructivists give priority to individual students' sensory-motor and conceptual activity. Further, sociocultural theorists tend to assume from the outset that cognitive processes are subsumed by social and cultural processes. In doing so, they adhere to Vygotsky's (1979) contention that "the social dimension of consciousness is primary in fact and time. The individual dimension of consciousness is derivative and secondary" (p. 30). From this, it follows that "thought (cognition) must not be reduced to a subjectively psychological process" (Davydov, 1988, p. 16). Instead, thought should be viewed as

> something essentially "on the surface," as something located . . . on the borderline between the organism and the outside world. For thought . . . has a life only in an environment of socially constituted meanings. (Bakhurst, 1988, p. 38)

Consequently, whereas constructivists analyze thought in terms of conceptual processes located in the individual, sociocultural theorists take the individual-in-social-action as their unit of analysis (Minick, 1989). From this latter perspective, the primary issue is that of explaining how participation in social interactions and culturally organized activities influences psychological development.

Sociocultural theorists formulate this issue in a variety of different ways. For example, Vygotsky (1978) emphasized the importance of social interaction with more knowledgeable others in the zone of proximal development and the role of culturally developed sign systems as psychological tools for thinking. In contrast, Leont'ev (1981) argued that thought develops from

practical, object-oriented activity or labor. Several American theorists have elaborated constructs developed by Vygotsky and his students, and speak of cognitive apprenticeship (Brown, Collins, & Duguid, 1989; Rogoff, 1990), legitimate peripheral participation (Forman, 1992; Lave & Wenger, 1991), or the negotiation of meaning in the construction zone (Newman, Griffin, & Cole, 1989). In contrast to the constructivist's concern with individual students' conceptual reorganizations, each of these contemporary accounts locates learning in coparticipation in cultural practices. As a consequence, educational implications usually focus on the kinds of social engagements that increasingly enable students to participate in the activities of the expert rather than on the cognitive processes and conceptual structures involved (Hanks, 1991).

In contrast to sociocultural theorists' frequent references to the works of Vygotsky, Leont'ev, and Luria, constructivists usually trace their intellectual lineage to Piaget's genetic epistemology (1970, 1980), to ethnomethodology (Mehan & Wood, 1975), or to symbolic interactionism (Blumer, 1969). As this set of references indicates, it is possible to distinguish between what might be called psychological and interactionist variants of constructivism. Von Glasersfeld's development of the epistemological basis of the psychological variant incorporates both the Piagetian notions of assimilation and accommodation, and the cybernetic concept of viability. Thus, he uses the term *knowledge* in "Piaget's *adaptational* sense to refer to those sensorymotor and conceptual operations that have proved viable in the knower's experience" (1992, p. 380). Further, traditional correspondence theories of truth are dispensed with in favor of an account that relates truth to the effective or viable organization of activity: "Truths are replaced by viable models – and viability is always relative to a chosen goal" (1992, p. 384). In this model, perturbations that the cognizing subject generates relative to a purpose or goal are posited as the driving force of development. As a consequence, learning is characterized as a process of self-organization in which the subject reorganizes his or her activity to eliminate perturbations (von Glasersfeld, 1989b). As von Glasersfeld notes, his instrumentalist approach to knowledge is generally consistent with the views of contemporary neopragmatist philosophers such as Bernstein (1983), Putnam (1987), and Rorty (1978).

Although von Glasersfeld defines learning as self-organization, he acknowledges that this constructive activity occurs as the cognizing individual interacts with other members of a community. Thus, he elaborates that *knowledge* refers to "conceptual structures that epistemic agents, given the range of present experience within their tradition of thought and language, consider *viable*" (1992, p. 381). Further, he contends that "the most frequent source of perturbations for the developing cognitive subject is interaction with others" (1989b, p. 136). Bauersfeld's interactionist version of constructivism complements von Glasersfeld's psychological focus in that both view

communication as a process of mutual adaptation wherein individuals negotiate meanings by continually modifying their interpretations (Bauersfeld, 1980; Bauersfeld, Krummheuer, & Voigt, 1988). However, whereas von Glasersfeld tends to focus on individuals' construction of their ways of knowing, Bauersfeld emphasizes that "learning is characterized by the subjective reconstruction of societal means and models through negotiation of meaning in social interaction" (1988, p. 39). In accounting for this process of subjective reconstruction, he focuses on the teacher's and students' interactive constitution of the classroom microculture. Thus, he argues that

> participating in the processes of a mathematics classroom is participating in a culture of mathematizing. The many skills, which an observer can identify and will take as the main performance of the culture, form the procedural surface only. These are the bricks of the building, but the design of the house of mathematizing is processed on another level. As it is with culture, the core of what is learned through participation is *when* to do what and *how* to do it. . . . The core part of school mathematics enculturation comes into effect on the meta-level and is "learned" indirectly. (in press)

Bauersfeld's reference to indirect learning clarifies that the occurrence of perturbations is not limited to those occasions when participants in an interaction believe that communication has broken down and *explicitly negotiate* meanings. Instead, for him, communication is a process of often *implicit negotiations* in which subtle shifts and slides of meaning occur outside the participants' awareness (cf. Cobb & Yackel, in press). In taking this approach, Bauersfeld uses an interactionist metaphor and characterizes negotiation as a process of mutual adaptation in the course of which the teacher and students establish expectations for others' activity and obligations for their own activity (cf. Cobb & Bauersfeld, in press; Voigt, 1985). By way of contrast, Newman et al. (1989), speaking from the sociocultural perspective, define negotiation as a process of mutual appropriation in which the teacher and students continually coopt or use each others' contributions. Here, in line with Leont'ev's (1981) sociohistorical metaphor of appropriation, the teacher's role is characterized as that of mediating between students' personal meanings and culturally established mathematical meanings of wider society. From this point of view, one of the teacher's primary responsibilities when negotiating mathematical meaning with students is to appropriate their actions into this wider system of mathematical practices. Bauersfeld, however, takes the local classroom microculture rather than the mathematical practices institutionalized by wider society as his primary point of reference when he speaks of negotiation. This focus reflects his concern with the process by which the teacher and students constitute social norms and mathematical practices in the course of their classroom interactions. Further, whereas sociocultural theorists give priority to social and cultural process, analyses

compatible with Bauersfeld's perspective propose that individual students' mathematical activity and the classroom microculture are reflexively related (Cobb, 1989; Voigt, 1992). In this view, individual students are seen as actively contributing to the development of classroom mathematical practices, and these both enable and constrain their individual mathematical activities. Consequently, it is argued that neither an individual student's mathematical activity nor the classroom microculture can be adequately accounted for without considering the other.

It is apparent from this brief summary of the two perspectives that they address different problems and issues. A sociocultural analysis of a classroom episode might both locate it within a broader activity system that takes account of the function of schooling as a social institution and attend to the immediate interactions between the teacher and students (Axel, 1992). This dual focus is explicit in Lave and Wenger's (1991) claim that their "concept of legitimate peripheral participation provides a framework for bringing together theories of situated activity and theories about the production and reproduction of the social order" (p. 47). In general, sociocultural accounts of psychological development use the individual's participation in culturally organized practices and face-to-face interactions as primary explanatory constructs. A basic tenet underpinning this work is that it is inappropriate to single out qualitative differences in individual thinking apart from their sociocultural situation because differences in students' interpretations of school tasks reflect qualitative differences in the communities in which they participate (Bredo & McDermott, 1992).

In contrast, constructivists are typically concerned with the quality of individual interpretive activity, with the development of ways of knowing at a more micro-level, and with the participants' interactive constitution of classroom social norms and mathematical practices. The burden of explanation in constructivist accounts of development falls on models of individual students' cognitive self-organization and on analyses of the processes by which these actively cognizing individuals constitute the local social situation of their development (Cobb, Wood, & Yackel, 1993). Thus, whereas a sociocultural theorist might view classroom interactions as an instantiation of the culturally organized practices of schooling, a constructivist would see an evolving microculture that does not exist apart from the teacher's and students' attempts to coordinate their individual activities. Further, whereas a sociocultural theorist might see a student appropriating the teacher's contributions, a constructivist would see a student adapting to the actions of others in the course of ongoing negotiations. In making these differing interpretations, sociocultural theorists would tend to invoke sociohistorical metaphors such as *appropriation*, whereas constructivists would typically employ interactionist metaphors such as *accommodation* and *mutual adaptation*. Further, whereas sociocultural theorists typically stress the homogeneity of members of established communities and eschew analyses of qualitative

differences in individual thinking, constructivists tend to stress heterogeneity and to eschew analyses that single out pregiven social and cultural practices. From one perspective, the focus is on the social and cultural basis of personal experience. From the other perspective, it is on the constitution of social and cultural processes by actively interpreting individuals.

Construction in Social Practice

Against the background of these contrasts between the two perspectives, I now consider possible coordinations between them. In this section, I explore possible complementarities between Rogoff's (1990) analysis of internalization and von Glasersfeld's (in press) discussion of empirical and reflective abstraction. In a subsequent section, I elaborate my argument by focusing on potential relationships between Saxe's (1991) sociocultural analysis and Steffe, Cobb, and von Glasersfeld's (1988) constructivist analysis. My general strategy in both cases is to tease out aspects of one position that are implicit in the other.

One of the central notions in Vygotsky's account of development is internalization. For example, in his frequently cited general genetic law of cultural development, Vygotsky argued that

> any higher mental function was external and social before it was internal. It was once a social relationship between two people. . . . We can formulate the general genetic law of cultural development in the following way. Any function appears twice or on two planes. . . . It appears first between people as an interpsychological category, and then within the child as an intrapsychological category. (Vygotsky, 1960, pp. 197–198)

From the constructivist perspective, this account of internalization from the social realm to the internal cognitive realm leads to difficulties because the interpersonal relations that are to be internalized are located outside the child. Researchers can indeed identify patterns of interaction, collective schemes, and so forth when they analyze videorecordings or transcripts. However, a constructivist might follow Blumer (1969) in arguing that people respond to things in terms of the meaning they have for them rather than to constructs that researchers project into their worlds. From this point of view, the problem of explaining how relations that are real for the detached observer get into the experiential world of the child appears intractable.

Rogoff (1990), who is in many ways a follower of Vygotsky, discusses this difficulty in reference to research on social learning and socialization. She notes that, in this research, children are considered to learn by observing or participating with others. "The underlying assumption is that the external lesson [to be learned] is brought across a barrier into the mind of the child. How this is done is not specified, and remains a deep problem for these

approaches" (p. 195). In proposing a solution, Rogoff elaborates Vygotsky's notion of internalization by arguing that children are already engaged in a social activity when they actively observe and participate with others. If children are viewed as being in the social activity in this way

> with the interpersonal aspects of *their* functioning integral to the individual aspects, then what is practiced in social interaction is never on the outside of a barrier, and there is no need for a separate process of internalization. (p. 195, italics added)

Here, Rogoff circumvents the need for an internalization process by proposing that the researcher change his or her perspective and focus on what children's interpersonal activity might mean to them. In constructivist terms, this involves a shift in focus to the mathematical meanings and practices that the child considers are shared with others.

Rogoff's point that children are already active participants in the social practice implies that they engage in and contribute to the development of classroom mathematical practices from the outset. Further,

> in the process of participation in social activity, the individual already functions with shared understanding. The individual's use of this shared understanding is not the same as what was constructed jointly; it is an appropriation of the shared understanding by each individual that reflects the individual's understanding of and involvement in the activity. (Rogoff, 1990, p. 195)

Rogoff's distinction between the individual's use of a shared understanding and the shared understanding that is constructed jointly is closely related to the distinction that a constructivist might make between an individual child's understanding and the taken-as-shared meanings established by the group (Cobb, Perlwitz, & Underwood, in press; Schutz, 1962). It therefore seems reasonable to conclude from Rogoff's treatment of internalization that mathematical learning is a process of active construction that occurs when children engage in classroom mathematical practices, frequently while interacting with others. Significantly, a similar conclusion can be reached when considering von Glasersfeld's (in press) elaboration of Piaget's developmental theory.

Von Glasersfeld develops his view of learning as self-organization by clarifying the distinction that Piaget made between two types of cognitive reorganization, empirical abstraction and reflective abstraction. In doing so, he emphasizes that an empirical abstraction results in the construction of a property of a physical object, whereas the process of constructing mathematical and scientific concepts involves reflective abstraction. He illustrates the notion of empirical abstraction by describing a situation in which someone wants to drive a nail into a wall, but does not have a hammer. After

looking around, the person finds a wooden mallet and begins to use this, only to find that the nail goes into the mallet instead of into the wall. Von Glasersfeld argues that, in this scenario, the person assimilates the mallet to her hammering scheme, but then makes an accommodation when things do not go as expected, and a perturbation is experienced. This accommodation involves an empirical abstraction in that it results in the construction of a novel property for the mallet – it is not the sort of thing that can be used to hammer nails into walls.

The interesting feature of this example for my purposes is that hammering is a cultural practice that involves acting with particular cultural artifacts, hammers and nails. The person's hammering scheme can be viewed as the product of active constructions she made in the course of her initiation into this practice. In other words, hammers, nails, and mallets are, for her, cultural tools that she can use for certain purposes. It is against the background of her engagement in this practice of hammering that she makes the empirical abstraction described by von Glasersfeld. This being the case, it seems reasonable to extend the definition of empirical abstraction by emphasizing both that it results in the emergence of novel physical properties and that it occurs as the individual participates in a cultural practice, often while interacting with others. This formulation involves the coordination of perspectives in that the first part, referring as it does to an experienced novelty, is said from the "inside," whereas the second part is said from the "outside" and locates the individual in a cultural practice.

The assumption that individual activity is culturally situated is also implicit in von Glasersfeld's discussion of the construction of mathematical concepts. Here, the notion of reflective abstraction is used to account for the process by which actions are reified and become mental mathematical objects that can themselves be acted upon (cf. Sfard, 1991; Thompson, 1994). For von Glasersfeld, it is by means of reflective abstraction that students reorganize their initially informal mathematical activity. Consider, for example, a situation in which the teacher introduces conventional written fraction symbols to record the results of students' attempts to partition objects such as pizzas fairly. Von Glasersfeld stresses that the students can only interpret the teacher's actions within the context of their ongoing activity. Further, the process by which the symbols come to signify the composition and decomposition of fractional units of some type for at least some of the students is accounted for in terms of the reification of partitioning activity via reflective abstraction. As with the example of the mallet, it can be observed that these conceptual reorganizations occur as the students participate in cultural practices. In this case, these are the mathematical practices that the students help to establish in the classroom. The mathematical concepts they each individually construct are relative to and are constrained by their participation in these practices. It can also be noted that the activities from which the students abstract include their interpretations of others' activity and of joint

activities (Voigt, 1992). These considerations suggest that in defining reflective abstraction, we should emphasize both that it involves the reification of sensory-motor and conceptual activity and that it occurs while engaging in cultural practices, frequently while interacting with others. As was the case with the characterization of empirical abstraction, this formulation involves the coordination of perspectives.

In comparing Rogoff's and von Glaserfeld's work, it can be noted that Rogoff's view of learning as acculturation via guided participation implicitly assumes an actively constructing child. Conversely, von Glasersfeld's view of learning as cognitive self-organization implicitly assumes that the child is participating in cultural practices. In effect, active individual construction constitutes the background against which guided participation in cultural practices comes to the fore for Rogoff, and this participation is the background against which self-organization comes to the fore for von Glasersfeld.

Coordinating Perspectives

The complementarity between the sociocultural and constructivist perspectives can be further clarified by considering the analyses of arithmetical activity offered by Saxe (1991) and Steffe et al. (1988). In contrast to the majority of sociocultural theorists, Saxe takes an explicitly developmental perspective that focuses on individuals' understandings while simultaneously emphasizing the influence of cultural practices and the use of sign forms and cultural artifacts. He illustrates his theoretical approach by analyzing the body-parts counting system developed by the Oksapmin people of Papua New Guinea.

Saxe explains that "to count as Oksapmin do, one begins with the thumb on one hand, and follows a trajectory around the upper periphery of the body down to the little finger of the opposite hand" (1991, p. 16). With Western contact and the introduction of tradestores, the Oksapmin had to use this indigenous counting system to solve arithmetical problems that did not emerge in traditional life, such as those of adding and subtracting values. In the course of his analysis of the interplay between the Oksapmin's participation in tradestore activities and their construction of mathematical understandings, Saxe identifies four developmental levels in the evolution of the body-parts counting system. At the least sophisticated level, individuals do not recognize the need to keep track of the second addend when they attempt to add, say, seven and nine coins. As a consequence, they frequently produce an incorrect sum. In contrast, the most sophisticated of the four levels involves the use of a "halved-body strategy" that incorporates a base-10 system linked to the currency. Here, in adding seven and nine coins,

> individuals use the shoulder (10) as a privileged value. In their computation, they may represent the 9 on one side of the body as biceps (9)

> and 7 on the other side of the body as forearm (7). To accomplish the problem, a tradestore owner might simply "remove" the forearm from the second side . . . and transfer it to the first side where it becomes the shoulder (the 10th). He then "reads" the answer as 10 - 6 or 16. (p. 21)

In sociocultural terms, the Oksapmin's increasingly sophisticated computational strategies can be viewed as cultural forms. An account of development made from this perspective might focus on the extent to which individual Oksapmin participate in the new practice of economic exchange. Such an account would stress that typically only tradestore owners, who have the most experience with economic transactions, use the sophisticated halved-body strategy. In contrast to this view that social and cultural practices drive development, a constructivist analysis might treat the Oksapmin's computational strategies as cognitive forms created by self-organizing individuals. An account of this latter type might focus on the processes by which individual Oksapmin reflectively abstract from and thus reorganize their enumerating activity, thereby creating increasingly sophisticated arithmetical units. Interestingly, it is possible to develop such an account by using the cognitive models of American children's arithmetical development proposed by Steffe as a source of analogies (Steffe et al., 1988).

We have seen that Oksapmin at the least sophisticated level do not recognize the need to keep track of counting. In contrast, Oksapmin at the next level consciously attempt to keep track. This suggests that these Oksapmin view their counting acts as entities that can themselves be counted. In Steffe et al.'s (1988) terms, these acts carry the significance of counting abstract units. This analysis, which is made from the "inside" rather than the "outside," explains why Oksapmin at the initial level do not recognize the need to keep track of counting. They are yet to reify their counting acts, and, as a consequence, body-parts counting as they currently understand it is simply not the kind of activity that can be kept track of.

This analysis can be extended to account for the development of more sophisticated strategies. For example, when the halved-body strategy is used, a body part such as the biceps (9) appears to symbolize not a single unit but the composite of nine abstract units that would be created by counting to the biceps. In Piagetian terminology, counting has been reified via reflective abstraction, and the biceps symbolizes nine experienced as an arithmetical object that can be conceptually manipulated.

Each of the two perspectives, the sociocultural and the constructivist, tells half of a good story, and each can be used to complement the other. For example, consider a situation in which a young Oksapmin works in a tradestore and eventually learns the halved-body strategy used by the store owner. A sociocultural explanation might talk of the novice appropriating or internalizing a cultural form. As we have seen, an account of this type has difficulty in explaining how a cultural form that is external to the novice is

brought across the barrier and becomes a cognitive form. The constructivist analysis circumvents this difficulty by stressing that rather than internalizing a cultural form that appears to be pregiven, the novice reorganizes his or her own activity. Thus, to paraphrase Rogoff (1990), there is nothing to bring across the barrier and, consequently, no need to posit a process of internalization from the sociocultural to the cognitive realm.

By the same token, the sociocultural perspective complements the constructivist perspective by emphasizing that the novice trader reorganizes his or her counting activity while attempting to achieve goals that emerge in the course of his or her participation in the practice of economic exchange (Saxe, 1991). From this point of view, it is readily apparent that both what counts as a problem and what counts as a legitimate solution are highly normative (cf. Solomon, 1989). Thus, both the process of individual construction and its products, increasingly sophisticated conceptual units, are social through and through. Conversely, it can be argued that the various strategies, viewed as cultural forms, are cognitive through and through in that they result from individual Oksapmin's constructive activities. As was the case with the discussion of Rogoff's and von Glasersfeld's analyses, this coordination of perspectives leads to the view that learning is a process of both self-organization and a process of enculturation that occurs while participating in cultural practices, frequently while interacting with others.

Theoretical Pragmatism

The discussion of Rogoff's, von Glasersfeld's, Saxe's, and Steffe's work indicates that sociocultural analyses involve implicit cognitive commitments, and vice versa. It is as if one perspective constitutes the background against which the other comes to the fore. This contention concerning the relationship between the perspectives can be contrasted with the claims made by adherents to each perspective that mind is either in the head or in the individual-in-social-action. Claims of this type reflect essentialist assumptions. In effect, adherents of both positions claim that they have got the mind right – this is what the mind really is, always was, and always will be, independent of history and culture. A perusal of Geertz's (1983) discussion of Western, Arabic, and Indic visions of the self and of community might lead proponents of a particular perspective to question whether theirs is the God's-eye view.

Following Fish (1989), it can be argued that theorizing is itself a form of practice rather than an activity that stands in opposition to practice. The discussion thus far suggests that if we want our practice of theorizing to be reflexively consistent with the theories we develop as we engage in that practice, we have to give up essentialist claims and take a more pragmatic

approach. In this regard, Rorty (1983), who uses the metaphor of wielding vocabulary rather than taking a perspective, argues that

> the idea that only a certain vocabulary is suited to human beings or human societies, that only that vocabulary permits them to be "understood," is the seventeenth-century myth of "nature's own vocabulary" all over again. (p. 163)

For Rorty, the various vocabularies we use or the particular perspectives we take are instruments for coping with things rather than ways of representing their intrinsic nature. Here, Rorty follows Dewey and Kuhn in arguing that we should "give up the notion of science traveling towards an end called 'corresponding with reality' and instead say merely that a given vocabulary works better than another for a given purpose" (p. 157). Thus, "to say something is better understood in one vocabulary than another is always an ellipsis for the claim that a description in the preferred vocabulary is most useful for a certain purpose" (p. 162).

The implication of this pragmatic approach for mathematics education, and for education more generally, is to consider what various perspectives might have to offer relative to the problems or issues at hand. In this regard, I suggest that the sociocultural perspective gives rise to theories of the conditions for the possibility of learning (Krummheuer, 1992), whereas theories developed from the constructivist perspective focus on both what students learn and the processes by which they do so. For example, Lave and Wenger (1991), who take a relatively radical position by attempting to avoid any reference to mind in the head, say that "a learning curriculum unfolds in *opportunities for engagement* in practice" (p. 93, italics added). Consistent with this formulation, they note that their analysis of various examples of apprenticeship in terms of legitimate peripheral participation accounts for the occurrence of learning or failure to learn (p. 63). In contrast, a constructivist analysis would typically focus on the ways in which students reorganize their activity as they participate in a learning curriculum, and on the processes by which the curriculum is interactively constituted in the local situation of development. In my view, both these perspectives are of value in the current era of educational reform that stresses both students' meaningful mathematical learning and the restructuring of the school while simultaneously taking issues of diversity seriously. Constructivists might argue that sociocultural theories do not adequately account for the process of learning, and sociocultural theorists might retort that constructivist theories fail to account for the production and reproduction of the practices of schooling and the social order. The challenge of relating actively constructing students, the local microculture, and the established practices of the broader community requires that adherents to each perspective acknowledge the potential positive contributions of the other perspective. In doing

so, constructivists would accept the relevance of work that addresses the broader sociopolitical setting of reform. Conversely, sociocultural theorists would acknowledge the pedagogical dilemmas articulated by Ball (1993) when she spoke of attending to both students' interests and understandings, and to their mathematical heritage.

In dispensing with essentialist claims, this pragmatic approach to theorizing instead proposes that the adoption of one perspective or another should be justified in terms of its potential to address issues whose resolution might contribute to the improvement of students' education. Voigt (1992) offered a justification of this type when he stated that

> personally the author takes the emphasis on the [individual] subject as the starting-point in order to understand the negotiation of meaning and the learning of mathematics in classrooms. . . . The main reason is that concepts like "socialization," "internalization," "initiation into a social tradition," etc. do not (directly) explain what I think is the most important objective of mathematics education. . . . The prominent objective of mathematics education is not that students produce correct solutions to mathematical problems but that they do it insightfully and by reasonable thinking. What on the behavioral level does in fact not make a difference should be an important subjective difference. (p. 10)

Justifications of this type are, of course, open to challenge. For example, a critic might argue that, in certain circumstances, it is more important that students produce correct answers than that they develop insight. This counterargument does not claim that Voigt's chosen perspective fails to capture the essence of mathematical development. Instead, it questions assumptions about educational objectives and, ultimately, about what counts as improvement in students' mathematics education. In general, claims about what counts as improvement reflect beliefs and values about what it ought to mean to know and do mathematics (or science or social studies) in school. These beliefs and values are themselves open to challenge and criticism, thus bringing to the fore the moral and ethical aspects of educational research and theorizing (Nicholls, 1989).

The central claim of this article, that the sociocultural and constructivist perspectives each constitute the background for the other, implies that justifications should explicitly bring the researcher into the picture by acknowledging his or her interpretive activity. Essentialist claims involve a denial of responsibility – it is social reality that dictates the correct theoretical perspective. In contrast, pragmatic justifications reflect the researcher's awareness that he or she has adopted a particular position for particular reasons. From the sociocultural perspective, a justification of this type would explain why it is not necessary to focus on the actively cognizing student for the purposes at hand. Conversely, constructivists would be obliged to explain why it is not necessary to go beyond the box of the classroom for their purposes,

while acknowledging that it is appropriate to take a perspective that locates classroom events within a wider sociopolitical setting for other purposes.

This pragmatic approach to theorizing also contends that ways of coordinating perspectives should be developed while addressing specific problems and issues. In addition, the suggestion acknowledges that Ball and other teachers have something interesting to say when they suggest that the tension in teaching between individual construction and enculturation cannot be resolved once and for all. Teachers instead have to act with wisdom and judgment by continually developing ways to cope with dilemmas in particular situations. A similar modus operandi would appear to be appropriate for researchers as we engage in our practice. In place of attempts to subjugate research to a single, overarching theoretical scheme that is posited a priori, we might follow Ball in reflecting on and documenting our attempts to coordinate perspectives as we attempt to cope with our specific problems. In doing so, we would give up the quest for an acontextual, one-size-fits-all perspective. Instead, we would acknowledge that we, like teachers, cast around for ways of making sense of things as we address the situated problems of our practice.

Note

1. The phrase "mind in the head" is used as a metonymy to refer to individualistic accounts of cognition. Following Johnson (1987) and Varela, Thompson, and Rosch (1991), the phrase should not be read as implying a mind-body dualism.

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15

Multiple Intelligences Go to School: Educational Implications of the Theory of Multiple Intelligences

Howard Gardner and Thomas Hatch

Despite swings of the pendulum between theoretical and applied concerns, the concept of intelligence has remained central to the field of psychology. In the wake of the Darwinian revolution, when scientific psychology was just beginning, many scholars became interested in the development of intelligence across species. The late 19th and early 20th centuries were punctuated by volumes that delineated levels of intelligence across species and within the human species (Baldwin, 1895; Hobhouse, 1915; Romanes, 1892). Francis Galton (cousin of Charles Darwin) was perhaps the first psychologically oriented scientist to try to measure the intellect directly. Though Galton (1870) had a theoretical interest in the concept of intelligence, his work was by no means unrelated to practical issues. A committed eugenicist, he sought to measure intelligence and hoped, through proper "breeding," to increase the overall intelligence of the population.

During the following half century, many of the most gifted and influential psychologists concerned themselves with the nature of human intelligence. Although a few investigators were interested principally in theoretical issues, most seasoned their concerns with a practical orientation. Thus Binet (Binet & Simon, 1916) and Terman (1916) developed the first general-purpose intelligence tests in their respective countries; Yerkes (Yerkes, Bridges, & Hardwick, 1915) and Wechsler (1939) created their own influential instruments. Even

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scientists with a strong theoretical bent, like Spearman (1927) and Thurstone (1938), contributed either directly or indirectly to the devising of certain measurement techniques and the favoring of particular lines of interpretation.

By midcentury, theories of intelligence had become a staple of psychology textbooks, even as intelligence tests were taken for granted in many industrialized countries. Still, it is fair to say that, within scientific psychology, interest in issues of intelligence waned to some extent. Although psychometricians continued to perfect the instruments that purported to measure human intellect and some new tests were introduced (Guilford, 1967), for the most part, the burgeoning interest in cognitive matters bypassed the area of intelligence.

This divorce between mainstream research psychology and the "applied area" of intelligence might have continued indefinitely, but, in fact, by the late 70s, there were signs of a rewakening of interest in theoretical and research aspects of intelligence. With his focus on the information-processing aspects of items in psychological tests, Robert Sternberg (1977, 1982, 1985) was perhaps the most important catalyst for this shift, but researchers from a number of different areas of psychology have joined in this rediscovery of the centrality of intelligence (Baron, 1985; Brown & Campione, 1986; Dehn & Schank, 1982; Hunt, 1986; Jensen, 1986; Laboratory of Comparative Human Cognition, 1982; Scarr & Carter-Salzman, 1982; Snow, 1982).

The Theory of Multiple Intelligences

A decade ago Gardner found that his own research interests were leading him to a heightened concern with issues of human intelligence. This concern grew out of two disparate factors, one primarily theoretical, the other largely practical.

As a result of his own studies of the development and breakdown of cognitive and symbol-using capacities, Gardner (1975, 1979, 1982) became convinced that the Piagetian (Piaget, 1970) view of intellect was flawed. Whereas Piaget (1962) had conceptualized all aspects of symbol use as part of a single "semiotic function," empirical evidence was accruing that the human mind may be quite modular in design. That is, separate psychological processes appear to be involved in dealing with linguistic, numerical, pictorial, gestural, and other kinds of symbolic systems (Gardner, Howard, & Perkins, 1974; Gardner & Wolf, 1983). Individuals may be precocious with one form of symbol use, without any necessary carryover to other forms. By the same token, one form of symbol use may become seriously compromised under conditions of brain damage, without correlative depreciation of other symbolic capacities (Wapner & Gardner, 1979). Indeed, different forms of symbol use appear to be subserved by different portions of the cerebra cortex.

On a more practical level, Gardner was disturbed by the nearly exclusive stress in school on two forms of symbol use: linguistic symbolization and logical-mathematical symbolization. Although these two forms are obviously important in a scholastic setting, other varieties of symbol use also figure prominently in human cognitive activity within and especially outside of school. Moreover, the emphasis on linguistic and logical capacities was overwhelming in the construction of items on intelligence, aptitude, and achievement tests. If different kinds of items were used, or different kinds of assessment instruments devised, a quite different view of the human intellect might issue forth.

These and other factors led Gardner to a conceptualization of human intellect that was more capacious. This took into account a wide variety of human cognitive capacities, entailed many kinds of symbol systems, and incorporated as well the skills valued in a variety of cultural and historical settings. Realizing that he was stretching the word *intelligence* beyond its customary application in educational psychology, Gardner proposed the existence of a number of relatively autonomous *human intelligences*. He defined intelligence as the capacity to solve problems or to fashion products that are valued in one or more cultural settings and detailed a set of criteria for what counts as a human intelligence.

Gardner's definition and his criteria deviated significantly from established practices in the field of intelligence (however, see Guilford, 1967; Thurstone, 1938). Most definitions of intelligence focus on the capacities that are important for success in school. Problem solving is recognized as a crucial component, but the ability to fashion a product – to write a symphony, execute a painting, stage a play, build up and manage an organization, carry out an experiment – is not included, presumably because the aforementioned capacities cannot be probed adequately in short-answer tests. Moreover, on the canonical account, intelligence is presumed to be a universal, probably innate, capacity, and so the diverse kinds of roles valued in different cultures are not considered germane to a study of "raw intellect."

For the most part, definitions and tests of intelligence are empirically determined. Investigators search for items that predict who will succeed in school, even as they drop items that fail to predict scholastic success. New tests are determined in part by the degree of correlation with older, already accepted instruments. In sharp contrast, existing psychometric instruments play no role in Gardner's formulation. Rather, a candidate ability emerges as an intelligence to the extent that it has recurred as an identifiable entity in a number of different lines of study of human cognition.

To arrive at his list of intelligences, Gardner and his colleagues examined the literature in several areas: the development of cognitive capacities in normal individuals; the breakdown of cognitive capacities under various kinds of organic pathology; the existence of abilities in "special populations," such as prodigies, autistic individuals, idiots savants, and learning-disabled children;

forms of intellect that exist in different species; forms of intellect valued in different cultures; the evolution of cognition across the millennia; and two forms of psychological evidence – the results of factor-analytic studies of human cognitive capacities and the outcome of studies of transfer and generalization. Candidate capacities that turned up repeatedly in these disparate literatures made up a provisional list of human intelligences, whereas abilities that appeared only once or twice or were reconfigured differently in diverse sources were abandoned from consideration.

The methods and the results of this massive survey are reported in detail in *Frames of Mind* (Gardner, 1983) and summarized in several other publications (Gardner, 1987a, 1987b; Walters & Gardner, 1985). Gardner's provisional list includes seven intelligences, each with its own component processes and subtypes (see Table 1). It is claimed that, as a species, human beings have evolved over the millennia to carry out at least these seven forms of thinking. In a biological metaphor, these may be thought of as different mental "organs" (Chomsky, 1980); in a computational metaphor, these may be construed as separate information-processing devices (Fodor, 1983). Although all humans exhibit the range of intelligences, individuals differ – presumably for both hereditary and environmental reasons – in their current profile of intelligences. Moreover, there is no necessary correlation between any two intelligences, and they may indeed entail quite distinct forms of perception, memory, and other psychological processes.

Although few occupations rely entirely on a single intelligence, different roles typify the "endstates" of each intelligence. For example, the "linguistic"

Table 1: The seven intelligences

Intelligence	*End-states*	*Core components*
Logical-mathematical	Scientist Mathematician	Sensitivity to, and capacity to discern, logical or numerical patterns; ability to handle long chains of reasoning.
Linguistic	Poet Journalist	Sensitivity to the sounds, rhythms, and meanings of words; sensitivity to the different functions of language.
Musical	Composer Violinist	Abilities to produce and appreciate rhythm, pitch, and timbre; appreciation of the forms of musical expressiveness.
Spatial	Navigator Sculptor	Capacities to perceive the visual-spatial world accurately and to perform transformations on one's initial perceptions.
Bodily-kinesthetic	Dancer Athlete	Abilities to control one's body movements and to handle objects skilfully.
Interpersonal	Therapist Salesman	Capacities to discern and respond appropriately to the moods, temperaments, motivations, and desires of other people.
Intrapersonal	Person with detailed, accurate self-knowledge	Access to one's own feelings and the ability to discriminate among them and draw upon them to guide behavior; knowledge of one's own strengths, weaknesses, desires, and intelligences.

sensitivity to the sounds and construction of language is exemplified by the poet, whereas the interpersonal ability to discern and respond to the moods and motivations of other people is represented in the therapist. Other occupations more clearly illustrate the need for a blend of intelligences. For instance, surgeons require both the acuity of spatial intelligence to guide the scalpel and the dexterity of the bodily-kinesthetic intelligence to handle it. Similarly, scientists often have to depend on their linguistic intelligence to describe and explain the discoveries made using their logical-mathematic intelligence, and they must employ interpersonal intelligence in interacting with colleagues and in maintaining a productive and smoothly functioning laboratory.

The Education and Assessment of Intelligences

Until this point, we have been reviewing the history of intelligence research, admittedly from the perspective of the Theory of Multiple Intelligences (hereafter MI Theory). Since the publication of *Frames of Mind* (Gardner, 1983), we and our colleagues have been involved in investigating its implications. On the one hand, we seek to determine the scientific adequacy of the theory (for a discussion of some of the scientific questions raised by the theory, see Gardner, 1983, chapter 11, and Walters & Gardner, 1986). On the other hand, in our view, a principal value of the multiple intelligence perspective – be it a theory or a "mere" framework – lies in its potential contributions to educational reform. In both cases, progress seems to revolve around assessment. To demonstrate that the intelligences are relatively independent of one another and that individuals have distinct profiles of intelligences, assessments of each intelligence have to be developed. To take advantage of students' multiple intelligences, there must be some way to identify their strengths and weaknesses reliably.

Yet MI Theory grows out of a conviction that standardized tests, with their almost exclusive stress on linguistic and logical skills, are limited. As a result, the further development of MI Theory requires a fresh approach to assessment, an approach consistent with the view that there are a number of intelligences that are developed – and can best be detected – in culturally meaningful activities (Gardner, in press-a). In the remainder of the paper, we describe our approach to assessment and broadly survey our efforts to assess individual intelligences at different age levels. In addition, we report some preliminary findings from one of our projects and their implications for the confirmation (or disconfirmation) of MI Theory.

If, as argued, each intelligence displays a characteristic set of psychological processes, it is important that these processes be assessed in an "intelligence-fair" manner. In contrast to traditional paper-and-pencil tests, with their inherent bias toward linguistic and logical skills, intelligence-fair measure

seek to respect the different modes of thinking and performance that distinguish each intelligence. Althoug spatial problems can be approached to some degree through linguistic media (like verbal directions or word problems), intelligence-fair methods place a premium on the abilities to perceive and manipulate visual-spatial information in a direct manner. For example, the spatial intelligence of children can be assessed through a mechanical activity in which they are asked to take apart and reassemble a meat grinder. The activity requires them to "puzzle out" the structure of the object and then to discern or remember the spatial information that will allow reassembly of the pieces. Although linguistically inclined children may produce a running report about the actions they are taking, little verbal skill is necessary (or helpful) for successful performance on such a task.

Whereas most standard approaches treat intelligence in isolation from the activities of a particular culture, MI theory takes a sharply contrasting tack. Intelligences are always conceptualized and assessed in terms of their cultural manifestation in specific domains of endeavor and with reference to particular adult "end states." Thus, even at the preschool level, language capacity is not assessed in terms of vocabulary, definitions, or similarities, but rather as manifest in story telling (the novelist) and reporting (the journalist). Instead of attempting to assess spatial skills in isolation, we observe children as they are drawing (the artist) or taking apart and putting together objects (the mechanic).

Ideally, one might wish to assess an intelligence in a culture-independent way, but this goal has proved to be elusive and perhaps impossible to achieve. Cross-cultural research and studies of cognition in the course of ordinary activities (Brown, Collins, & Duguid, 1989; Laboratory of Comparative Human Cognition, 1982; Lave, 1988; Rogoff, 1982; Scribner, 1986) have demonstrated that performances are inevitably dependent on a person's familiarity and experience with the materials and demands of the assessments. In our own work, it rapidly became clear that meaningful assessment of an intelligence was not possible if students had little or no experience with a particular subject matter or type of material. For example, our examination of bodily-kinesthetic abilities in a movement assessment for preschoolers was confounded by the fact that some 4-year-olds had already been to ballet classes, whereas others had never been asked to move their bodies expressively or in rhythm. This recognition reinforced the notion that bodily-kinesthetic intelligence cannot be assessed outside of a specific medium or without reference to a history of prior experiences.

Together, these demands for assessments that are intelligence fair, are based on culturally valued activities, and take place within a familiar context naturally lead to an approach that blurs the distinctions between curriculum and assessment. Drawing information from the regular curriculum ensures that the activities are familiar; introducing activities in a wide range of areas makes it possible to challenge and examine each intelligence in an

appropriate manner. Tying the activities to inviting pursuits enables students to discover and develop abilities that in turn increase their chances of experiencing a sense of engagement and of achieving some success in their society.

Putting Theory into Practice

In the past 5 years, this approach to assessment has been explored in projects at several different levels of schooling. At the junior and senior high school level, Arts PROPEL, a collaborative project with the Educational Testing Service and the Pittsburgh Public School System, seeks to assess growth and learning in areas like music, imaginative writing, and visual arts, which are neglected by most standard measures (for further details, see Gardner, in press-b; Wolf, 1989; Zessoules, Wolf, & Gardner, 1988). Arts PROPEL has developed a series of modules, or "domain projects," that serve the goals of both curriculum and assessment. These projects feature sets of exercises and curriculum activities organized around a concept central to a specific artistic domain – such as notation in music, character and dialogue in play writing, and graphic composition in the visual arts. The drafts, sketches, and final products generated by these and other curriculum activities are collected in portfolios (sometimes termed "process-folios"), which serve as a basis for assessment of growth by both the teacher and the student. Although the emphasis thus far has fallen on local classroom assessments, efforts are also under way to develop criteria whereby student accomplishment can be evaluated by external examiners.

At the elementary level, Patricia Bolaños and her colleagues have used MI theory to design an entire public school in downtown Indianapolis (Olson, 1988). Through a variety of special classes (e.g., computing, bodily-kinesthetic activities) and enrichment activities (a "flow" center and apprentice-like "pods"), all children in the Key School are given the opportunity to discover their areas of strength and to develop the full range of intelligences. In addition, over the course of a year, each child executes a number of projects based on schoolwide themes such as "Man and His Environment" or "Changes in Time and Space." These projects are presented and videotaped for subsequent study and analysis. A team of researchers from Harvard Project Zero is now engaged in developing a set of criteria whereby these videotaped projects can be assessed. Among the dimensions under consideration are project conceptualization, effectiveness of presentation, technical quality of project, and originality, as well as evidence for cooperative efforts and distinctive individual features.

A third effort, Project Spectrum, co-directed by David Feldman of Tufts University, has developed a number of curriculum activities and assessment options suited to the "child-centered" structure of many preschools and kindergartens (for details, see Hatch & Gardner, 1986; Krechevsky & Gardner,

in press; Malkus, Feldman, & Gardner, 1988; Ramos-Ford & Gardner, in press; Wexler-Sherman, Feldman, & Gardner, 1988). At present, there are 15 different activities, each of which taps a particular intelligence or set of intelligences. Throughout the year, a Spectrum classroom is equipped with "intelligence-fair" materials. Miniature replicas and props invite children to deploy linguistic intelligence within the context of story telling; household objects that children can take apart and reassemble challenge children's spatial intelligence in a mechanical task; a "discovery" area including natural objects like rocks, bones, and shells enables children to use their logical abilities to conduct small "experiments," comparisons, and classifications; and group activities such as a biweekly creative movement session can be employed to give children the opportunity to exercise their bodily-kinesthetic intelligence on a regular basis.

Provision of this variety of "high-affordance" materials allows children to gain experiences that engage their several intelligences, even as teachers have the chance unobtrusively to observe and assess children's strengths, interests, and proclivities. More formal assessment of intelligences is also possible. Researchers can administer specific games to children and apply detailed scoring systems that have been developed for research purposes. For instance, in the bus game, children's ability to organize numerical information is scored by noting the extent to which they can keep track of the number of adults and children getting on and off a bus. Adults and children and on and off constitute two different dimensions. Thus, a child can receive one of the following scores: 0 – no dimensions recorded; 1 – disorganized recording of one dimension (either adults and children or on and off); 2 – labeled, accurate recording of one dimension; 3 – disorganized recording of two dimensions; 4 – disorganized recording of one dimension and labeled, accurate recording of one dimension; or 5 – labeled, accurate recording of two dimensions (for further information, see Krechevsky, Feldman, & Gardner, in press).

We have also created a related instrument, the Modified Spectrum Field Inventory, that samples several intelligences in the course of two 1-hour sessions. Although this inventory does not draw directly from the curriculum, it is based on the kinds of materials and activities that are common in many preschools. In addition, related materials from the Spectrum curriculum can be implemented in the classroom to ensure that the children will be familiar with the kinds of tasks and materials used in the inventory.

Preliminary Results from Project Spectrum

Although none of these programs is in final form, and thus any evaluation must be considered preliminary and tentative, the results so far at the pilot sites seem promising. The value of rich and evocative materials has been

amply documented. In the classrooms in Pittsburgh, Indianapolis, and Boston, teachers report heightened motivation on the part of the students, even as students themselves appreciate the opportunity to reflect on their own growth and development. Moreover, our programs with both older and younger children confirm that a consideration of a broader range of talents brings to the fore individuals who previously had been considered unexceptional or even at risk for school failure.

As for the assessment instruments under development, only those of Project Spectrum have been field tested in classrooms. In 1987–1989, we used these instruments in two different settings to investigate the hypothesis that the intelligences are largely independent of one another. To examine this hypothesis, we sought to determine (a) whether young children exhibit distinct profiles of intellectual strengths and weaknesses and (b) whether or not performances on activities designed to tap different intelligences are significantly correlated. In the 1987–1988 academic year, 20 children from a primarily White upper middle-income population took part in a yearlong Spectrum program. In the 1988–1989 academic year, the Modified Spectrum Field Inventory was piloted with 15 children in a combined kindergarten and first-grade classroom. This classroom was in a public school in a low-to-middle-income school district.

In the preschool study, children were assessed on 10 different activities (story telling, drawing, singing, music perception, creative movement, social analysis, hypothesis testing, assembly, calculation and counting, and number and notational logic) as well as the Stanford-Binet Intelligence Scale, Fourth Edition. To compare children's performances across each of the activities, standard deviations were calculated for each activity. Children who scored one or more standard deviations above the mean were judged to have a strength on that activity; those who scored one or more standard deviations below the mean were considered to have a weakness on that activity. This analysis revealed that these children did not perform at the same level across activities and suggested that they do have distinct intellectual profiles. Of the 20 children, 15 demonstrated a strength on at least one activity, and 12 children showed a weakness on one or more activities. In contrast, only one child was identified as having no strengths or weaknesses, and her scores ranged from −.98 to + .87 standard deviations from the mean.

These results were reinforced by the fact that, for the most part, children's performances on the activities were independent. Using Spearman rank-order correlations, only the number activities, both requiring logical-mathematical intelligence, proved significantly correlated with one another ($r = .78$, $p < .01$). In the other areas, music and science, where there were two assessments, there were no significant correlations. Conceivably, this result can be attributed to the fact that the number activities, both of which involved calculation, shared more features than the music activities (singing and music perception) or the science activities (hypothesis-testing and

mechanical skill). Of course, the small sample size also may have contributed to the absence of powerful correlations among measures.

A comparison of the Spectrum and Stanford-Binet assessments revealed a limited relationship between children's performances on these different instruments. Spearman rank-order correlations showed that only performances on the number activities were significantly correlated with IQ (dinosaur game, $r = .69$, $p < .003$; bus game, $r = .51$, $p < .04$). With its concentration on logical-mathematic and linguistic skills, one might have expected a significant correlation with the Spectrum language activity as well. Conceivably, there was no significant correlation because the Stanford-Binet measures children's vocabulary and comprehension, whereas Spectrum measures how children use language within a story-telling task.

In the second study, eight kindergartners (four boys and four girls) and seven first graders (five girls and two boys) were assessed on the seven activities of the Modified Spectrum Field Inventory (MSPFI). This inventory, based on the activities developed for the yearlong Spectrum assessments of preschoolers, consists of activities in the areas of language (storyboard), numbers and logic (bus game), mechanics (assembly), art (drawing), music (xylophone games), social analysis (classroom model), and movement (creative movement). These assessments were administered in two 1-hour sessions. Each activity was videotaped, and children were scored by two independent observers. Spearman rank-order correlations between the scores of the two observers ranged from .88 (language) to .97 (art) and demonstrated the interrater reliability of these scores.

As in the first study, strengths and weaknesses were estimated using standard deviations. Unlike the findings from the earlier study, however, these results revealed that some children performed quite well and others performed quite poorly across many of the activities. It appears that the small sample size and wide age ranges may have contributed to this result. Of the five first-grade girls, none demonstrated a weakness in any area; all showed at least one strength, with one girl having strengths in six of the seven areas. The two first-grade boys showed no strengths, and both demonstrated weaknesses in three areas. Of the kindergartners, only two showed any strengths, with all but one of the other children showing at least one weakness. Quite possibly, these results reflect differences in developmental level, and perhaps gender differences as well, that did not obtain in the preschool sample and that may have overpowered certain individual differences. It is also conceivable that a more extended exposure to, and greater familiarity with, the Spectrum materials and activities, as in the yearlong Spectrum program, may have made the individual differences among younger children more visible.

Nonetheless, an examination of children's ranks on each of the activities revealed a more complex picture. Although the first-grade girls dominated the rankings, all but two children in the sample were ranked among the top

five on at least one occasion. All but one child also scored in the bottom five on at least one activity. Considered in this way, children did exhibit relative strengths and weaknesses across the seven activities.

To determine whether or not performance on one activity was independent of performance on the other activities, we standardized each of the scores with a mean = 0 and standard deviation = 1 (Sattler, 1988) and performed Spearman rank-order correlations. Because of the superior performance of the first-grade girls, the performances of kindergartners and first graders were computed separately. Consideration of the kindergartners alone revealed only one correlation, between art and social analysis, that approached significance ($r = .66$, $p < .071$). For the sample of first graders, including the "high"-scoring girls, there were a number of significant correlations: language and assembly ($r = .77$, $p < .04$), language and numbers ($r = .81$, $p < .027$), movement and social analysis ($r = .77$, $p < .04$), and assembly and numbers ($r = .79$, $p < .034$).

With the exception of the performance of the first graders in the second study, these results are reasonably consistent with the claims of MI Theory. For younger children, performances on the Spectrum activities were largely independent, relative strengths and weaknesses were uncovered, and there was a significant correlation between preschoolers' performances on the Spectrum activities and the Stanford-Binet in one of the two areas where it would be expected. Further investigations need to be conducted to establish norms, to identify strengths and weaknesses consistently, and to examine fully the effects of age and gender on the Spectrum activities.

Conclusion

In this essay, we have sketched the background and the major claims of a new approach to the conceptualization and assessment of human intelligence. Put forth in 1983, the theory of multiple intelligences has inspired a number of research-and-development projects that are taking place in schools ranging from preschool through high school. Until now, our focus has fallen largely on the development of instruments that can assess strengths and weaknesses in an "intelligence-fair" way. This research-and-development process has proved time consuming and costly. The measures must involve materials that are appealing and familiar to children; there is little precedent for developing scoring systems that go beyond linguistic and logical criteria; and materials appropriate for one age group, gender, or social class may not be appropriate for others. Of course, it should be recalled that huge amounts of time and money have already been invested in standard psychometric instruments, whose limitations have become increasingly evident in recent years.

Once adequate materials have been developed, it becomes possible to begin to address some of the theoretical claims that grow out of MI Theory. We have presented here some preliminary findings from one of our current projects. These results give some support to the major claims of the theory, inasmuch as children ranging in age from 3 to 7 do exhibit profiles of relative strength and weakness. At the same time, even these preliminary data indicate that the final story on Multiple Intelligences may turn out to be more complex than we envisioned. Thus, the rather different profile of results obtained with our two young populations indicates that, in future research, we must pay closer attention to three factors: (a) the developmental appropriateness of the materials; (b) the social class background, which may well exert an influence on a child's ability and willingness to engage with diverse materials; and (c) the exact deployment of the Spectrum materials and assessment instruments in the classroom.

Some critics have suggested that MI Theory cannot be disconfirmed. The preliminary results presented here indicate some of the ways in which its central claims can indeed be challenged. If future assessments do not reveal strengths and weaknesses within a population, if performances on different activities prove to be systematically correlated, and if constructs (and instruments) like the IQ explain the preponderance of the variance on activities configured to tap specific intelligences, then MI Theory will have to be revamped. Even so, the goal of detecting distinctive human strengths, and using them as a basis for engagement and learning, may prove to be worthwhile, irrespective of the scientific fate of the theory.

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16

Culture, Mind, and Education

Jerome Bruner

Fundamental changes have been altering conceptions about the nature of the human mind in the decades since the cognitive revolution. These changes, it now seems clear in retrospect, grew out of two strikingly divergent conceptions about how mind works. The first of these was the hypothesis that mind could be conceived as a computational device. This was not a new idea, but it had been powerfully reconceived in the newly advanced computational sciences. The other was the proposal that mind is both constituted by and realized in the use of human culture. The two views led to very different conceptions of the nature of mind itself, and of how mind should be cultivated. Each led its adherents to follow distinctively different strategies of inquiry about how mind functions and about how it might be improved through "education".

The first or *computational* view is concerned with *information processing*: how finite, coded, unambiguous information about the world is inscribed, sorted, stored, collated, retrieved, and generally managed by a computational device. It takes information as its given, as something already settled in relation to some preexisting, rule-bound code that maps onto states of the world.[1] This so-called "well-formedness" is both its strength and its shortcoming, as we shall see. For the process of knowing is often messier, more fraught with ambiguity than such a view allows.

Computational science makes interesting general claims about the conduct of education,[2] though it is still unclear what specific lessons it has to

Source: *The Culture of Education* (Cambridge, Mass.: Harvard University Press, 1996), pp. 1–14.

teach the educator. There is a widespread and not unreasonable belief that we *should* be able to discover something about how to teach human beings more effectively from knowing how to program computers effectively. One can scarcely doubt, for example, that computers provide a learner with powerful aids in mastering bodies of knowledge, particularly if the knowledge in question is well defined. A well-programmed computer is especially useful for taking over tasks that, at last, can be declared "unfit for human production". For computers are faster, more orderly, less fitful in remembering, and do not get bored. And of course, it is revealing of our own minds and our human situation to ask what things we do better or worse than our servant computer.

It is considerably more uncertain whether, in any deep sense, the tasks of a teacher can be "handed over" to a computer, even the most "responsive" one that can be theoretically envisioned. Which is not to say that a suitably programmed computer cannot lighten a teacher's load by taking over some of the routines that clutter the process of instruction. But that is not the issue. After all, books came to serve such a function after Gutenberg's discovery made them widely available.[3]

The issue, rather, is whether the computational view of mind itself offers an adequate enough view about how mind works to guide our efforts in trying to "educate" it. It is a subtle question. For in certain respects, "how the mind works" is itself dependent on the tools at its disposal. "How the *hand* works," for example, cannot be fully appreciated unless one also takes into account whether it is equipped with a screwdriver, a pair of scissors, or a laser-beam gun. And by the same token, the systematic historian's "mind" works differently from the mind of the classic "teller of tales" with his stock of combinable myth-like modules. So, in a sense, the mere existence of computational devices (and a theory of computation about their mode of operating) can (and doubtless will) change our minds about how "mind" works, just as the book did.[4]

This brings us directly to the second approach to the nature of mind – call it *culturalism*. It takes its inspiration from the evolutionary fact that mind could not exist save for culture. For the evolution of the hominid mind is linked to the development of a way of life where "reality" is represented by a symbolism shared by members of a cultural community in which a technical-social way of life is both organized and construed in terms of that symbolism. This symbolic mode is not only shared by a community, but conserved, elaborated, and passed on to succeeding generations who, by virtue of this transmission, continue to maintain the culture's identity and way of life.

Culture in this sense is *superorganic*.[5] But it shapes the minds of individuals as well. Its individual expression inheres in *meaning making*, assigning meanings to things in different settings on particular occasions. Meaning making involves situating encounters with the world in their appropriate cultural

contexts in order to know "what they are about." Although meanings are "in the mind," they have their origins and their significance in the culture in which they are created. It is this cultural situatedness of meanings that assures their negotiability and, ultimately, their communicability. Whether "private meanings" exist is not the point: what is important is that meanings provide a basis for cultural exchange. On this view, knowing and communicating are in their nature highly interdependent, indeed virtually inseparable. For however much the individual may seem to operate on his or her own in carrying out the quest for meanings, nobody can do it unaided by the culture's symbolic systems. It is culture that provides the tools for organizing and understanding our worlds in communicable ways. The distinctive feature of human evolution is that mind evolved in a fashion that enables human beings to utilize the tools of culture. Without those tools, whether symbolic or material, man is not a "naked ape" but an empty abstraction.

Culture, then, though itself man-made, both forms and makes possible the workings of a distinctively human mind. On this view, learning and thinking are always *situated* in a cultural setting and always dependent upon the utilization of cultural resources.[6] Even individual variation in the nature and use of mind can be attributed to the varied opportunities that different cultural settings provide, though these are not the only source of variation in mental functioning.

Like its computational cousin, culturalism seeks to bring together insights from psychology, anthropology, linguistics, and the human sciences generally, in order to reformulate a model of mind. But the two do so for radically different purposes. Computationalism, to its great credit, is interested in any and all ways in which information is organized and used – information in the well-formed and finite sense mentioned earlier, regardless of the guise in which information processing is realized. In this broad sense, it recognizes no disciplinary boundaries, not even the boundary between human and non-human functioning. Culturalism, on the other hand, concentrates exclusively on how human beings in cultural communities create and transform meanings.

I want to set forth some principal motifs of the cultural approach and explore how these relate to education. But before turning to that formidable task, I need first to dispel the shibboleth of a necessary contradiction between culturalism and computationalism. For I think the apparent contradiction is based on a misunderstanding, one that leads to gross and needless over-dramatization. Obviously the approaches are very different, and their ideological overspill may indeed overwhelm us if we do not take care to distinguish them clearly. For it surely matters ideologically what kind of "model" of the human mind one embraces.[7] Indeed, the model of mind to which one adheres even shapes the "folk pedagogy" of schoolroom practice, as we shall see in the following chapter. Mind as equated to the power of

association and habit formation privileges "drill" as the true pedagogy, while mind taken as the capacity for reflection and discourse on the nature of necessary truths favors the Socratic dialogue. And each of these is linked to our conception of the ideal society and the ideal citizen.

Yet in fact, neither computationalism nor culturalism is so linked to particular models of mind as to be shackled in particular pedagogies. Their difference is of quite a different kind. Let me try to sketch it.

The objective of computationalism is to devise a formal redescription of *any* and *all* functioning systems that manage the flow of well-formed information. It seeks to do so in a way that produces foreseeable, systematic outcomes. One such system is the human mind. But thoughtful computationalism does *not* propose that mind is like some particular "computer" that needs to be "programmed" in a particular way in order to operate systematically or "efficiently." What it argues, rather, is that any and all systems that process information must be governed by specifiable "rules" or procedures that govern what to do with inputs. It matters not whether it is a nervous system or the genetic apparatus that takes instruction from DNA and then reproduces later generations, or whatever. This is the ideal of Artificial Intelligence, so-called. "Real minds" are describable in terms of the same AI generalization – systems governed by specifiable rules for managing the flow of coded information.

But, as already noted, the rules common to all information systems do not cover the messy, ambiguous, and context-sensitive processes of meaning making, a form of activity in which the construction of highly "fuzzy" and metaphoric category systems is just as notable as the use of specifiable categories for sorting inputs in a way to yield comprehensible outputs. Some computationalists, convinced a priori that even meaning making can be reduced to AI specifications, are perpetually at work trying to prove that the messiness of meaning making is not beyond their reach.[8] The complex "universal models" they propose are sometimes half-jokingly referred to by them as "TOEs," an acronym for "theories of everything."[9] But though they have not even come near to succeeding and, as many believe, will probably never in principle succeed, their efforts nonetheless are interesting for the light they shed on the divide between meaning making and information processing.

The difficulty these computationalists encounter inheres in the kinds of "rules" or operations that are possible in computation. All of them, as we know, must be specifiable in advance, must be free of ambiguity, and so on. They must, in their ensemble, also be computationally consistent, which means that while operations may alter with feedback from prior results, the alterations must also adhere to a consistent, prearranged systematicity. Computational rules may be contingent, but they cannot encompass unforeseeable contingencies. Thus Hamlet cannot (in AI) tease Polonius with ambiguous banter about "yonder cloud shaped like a camel, nay 'tis backed like a weasel," in the hope that his banter might evoke guilt and some telltale knowledge about the death of Hamlet's father.

It is precisely this clarity, this prefixedness of categories that imposes the most severe limit on computationalism as a medium in which to frame a model of mind. But once this limitation is recognized, the alleged death struggle between culturalism and computationalism evaporates. For the meaning making of the culturalist, unlike the information processing of the computationalist, is in principle interpretive, fraught with ambiguity, sensitive to the occasion, and often after the fact. Its "ill-formed procedures" are like "maxims" rather than like fully specifiable rules.[10] But they are hardly unprincipled. Rather, they are the stuff of *hermeneutics*, an intellectual pursuit no less disciplined for its failure to produce the click-clear outputs of a computational exercise. Its model case is text interpretation. In interpreting a text, the meaning of a part depends upon a hypothesis about the meanings of the whole, whose meaning in turn is based upon one's judgment of meanings of the parts that compose it. But, as we shall have many occasions to see in the following chapters, a wide swath of the human cultural enterprise depends upon it. Nor is it clear that the infamous "hermeneutic circle" deserves the knocks it gets from those in search of clarity and certainty. After all, it lies at the heart of meaning making.

Hermeneutic meaning making and well-formed information processing are incommensurate. Their incommensurability can be made evident even in a simple example. Any input to a computational system must, of course, be encoded in a specifiable way that leaves no room for ambiguity. What happens, then, if (as in human meaning making) an input needs to be encoded according to the context in which it is encountered? Let me give a homely example involving language, since so much of meaning making involves language. Say the input into the system is the word *cloud*. Shall it be taken in its "meteorological" sense, its "mental condition" sense, or in some other way? Now, it is easy (indeed necessary) to provide a computational device with a "look-up" lexicon that provides alternative senses of *cloud*. Any dictionary can do it. But to determine *which* sense is appropriate for a particular context, the computational device would also need a way of encoding and interpreting all contexts in which the word *cloud* might appear. That would then require the computer to have a look-up list for all possible contexts, a "contexticon." But while there are a finite number of words, there are an infinite number of contexts in which particular words might appear. Encoding the context of Hamlet's little riddle about "yonder cloud" would almost certainly escape the powers of the best "contexticon" one could imagine!

There is no decision procedure known that could resolve the question whether the incommensurability between culturalism's meaning making and computationalism's information processing could ever be overcome. Yet, for all that, the two have a kinship that is difficult to ignore. For once meanings are established, it is their formalization into a well-formed category system that *can* be managed by computational rules. Obviously one loses the subtlety of context dependency and metaphor in doing so: *clouds* would have to

pass tests of truth functionality to get into the play. But then again, "formalization" in science consists of just such maneuvers: treating an array of formalized and operationalized meanings "as if" they were fit for computation. Eventually we come to believe that scientific terms actually were born and grew that way: decontextualized, disambiguated, totally 'lookuppable'.

There is equally puzzling commerce in the other direction. For we are often forced to interpret the output of a computation in order to "make some sense" of it – that is, to figure out what it "means." This "search for the meaning" of final outputs has always been customary in statistical procedures such as factor analysis where the association between different "variables," discovered by statistical manipulation, needed to be interpreted hermeneutically in order to "make sense." The same problem is encountered when investigators use the computational option of parallel processing to discover the association between a set of coded inputs. The final output of such parallel processing similarly needs interpretation to be rendered meaningful. So there is plainly some complementary relationship between what the computationalist is trying to explain and what the culturalist is trying to interpret, a relationship that has long puzzled students of epistemology.[11]

For now it suffices to say that in an undertaking as inherently reflexive and complicated as characterizing "how our minds work" or how they might be made to work better, there is surely room for two perspectives on the nature of knowing.[12] Nor is there any demonstrable reason to suppose that without a single and legitimately "true" way of knowing the world, we could only slide helplessly down the slippery slope that leads to relativism. It is surely as "true" to say that Euclid's theorems are computable as to say, with the poet, that "Euclid alone has looked on beauty bare."

To begin with, if a theory of mind is to be interesting educationally, it should contain some specifications for (or at least implications bearing on) how its functioning can be improved or altered in some significant way. All-or-none and once-for-all theories of mind are not educationally interesting. More specifically, educationally interesting theories of mind contain specifications of some kind about the "resources" required for a mind to operate effectively. These include not only instrumental resources (like mental "tools"), but also settings or conditions required for effective operations – anything from feedback within certain time limits to, say, freedom from stress or from excessive uniformity. Without specification of resources and settings required, a theory of mind is all "inside-out" and of limited applicability to education. It becomes interesting only when it becomes more "outside-in," indicating the kind of world needed to make it possible to use mind (or heart!) effectively – what kinds of symbol systems, what kinds of accounts of the past, what arts and sciences, and so on. The approach of computationalism to education tends to be inside-out – though it smuggles the world into the mind by inscribing bits of it in memory, as with our earlier dictionary example, and then relies on "look-up" routines. Culturalism

is much more outside-in, and although it may contain specifications about mental operations *eo ipso*, as it were, they are not as binding as, say, the formal requirement of computability. For the approach of the computationalist to education is indeed bound by the constraint of computability – that is, whatever aids are offered to mind must be operable by a computational device.

When one actually examines how computationalism has approached educational issues, there seem to be three different styles. The first of these consists in "restating" classical theories of teaching or learning in a computable form. But while some clarity is gained in so doing (for example, in locating ambiguities), not much is gained by way of power. Old wine does not improve much for being poured into differently shaped bottles, even if the glass is clearer. The classic reply, of course, is that a computable reformulation yields "surplus insight." Yet "association theory," for example, has gone through successive translations from Aristotle to Locke to Pavlov to Clark Hull without much surplus yield. So one is justifiably impatient with new claims for veiled versions of the same – as with many so-called PDP "learning models."[13]

But in fact, computationalism can and does do better than that. Its second approach begins with a rich description or protocol of what actually transpires when somebody sets out to solve a particular problem or master a particular body of knowledge. It then seeks to redescribe what has been observed in strict computational terms. In what order, for example, does a subject ask for information, what confuses him, what kinds of hypotheses does he entertain? This approach then asks what might be going on computationally in devices that operate that way, for instance, like the subject's "mind." From this it seeks to reformulate a plan about how a learner of this kind might be helped – again within limits of computability. John Bruer's interesting book is a nice example of what can be gained from this fresh approach.[14]

But there is an even more interesting third route that computationalists sometimes follow. The work of Annette Karmiloff-Smith[15] provides an example if taken in conjunction with some abstract computational ideas. All complex "adaptive" computational programs involve redescribing the output of prior operations in order both to reduce their complexity and to improve their "fit" to an adaptation criterion. That is what "adaptive" means: reducing prior complexities to achieve greater "fitness" to a criterion.[16] An example will help. Karmiloff-Smith notes that when we go about solving particular problems, say language acquisition, we characteristically "turn around" on the results of a procedure that has worked locally and try to redescribe it in more general, simplified terms. We say, for example, "I've put an *s* at the end of that noun to pluralize it; how about doing the same for *all* nouns?" When the new rule fails to pluralize *woman*, the learner may generate some additional ones. Eventually, he ends up with a more or less

adequate rule for pluralizing, with only a few odd "exceptions" left over to be handled by rote. Note that in each step of this process that Karmiloff-Smith calls "redescription," the learner "goes meta," considering how he is thinking as well as what he is thinking about. This is the hallmark of "metacognition," a topic of passionate interest among psychologists – but also among computational scientists.

That is to say, the rule of redescription is a feature of *all* complex "adaptive" computation, but in the present instance, it is also a genuinely interesting *psychological* phenomenon. This is the rare music of an overlap between different fields of inquiry – if the overlap turns out to be fertile. So, REDESCRIBE, a TOE-like rule for adaptive computational systems that also happens to be a good rule in human problem solving, may turn out to be a "new frontier." And the new frontier may turn out to be next door to educational practice.[17]

So the computationalist's approach to education seems to take three forms as noted. The first reformulates old theories of learning (or teaching, or whatever) in computable form in the hope that the reformulation will yield surplus power. The second analyzes rich protocols and applies the apparatus of computational theory to them to discern better what might be going on computationally. Then it tries to figure out how the process can be helped. This, in effect, is what Newell, Shaw, and Simon did in their work on the General Problem Solver,[18] and what is currently being done in studies of how "novices" become "experts."[19] Finally there is the happy fortuity where a central computational idea, like "redescription," seems to map directly onto a central idea in cognitive theory, like "metacognition."

The culturalist approaches education in a very different way. Culturalism takes as its first premise that education is not an island, but part of the continent of culture. It asks first what function "education" serves in the culture and what role it plays in the lives of those who operate within it. Its next question might be why education is situated in the culture as it is, and how this placement reflects the distribution of power, status, and other benefits. Inevitably, and virtually from the start, culturalism also asks about the enabling resources made available to people to cope, and what portion of those resources is made available through "education," institutionally conceived. And it will constantly be concerned with constraints imposed on the process of education – external ones like the organization of schools and classrooms or the recruitment of teachers, and internal ones like the natural or imposed distribution of native endowment, for native endowment may be as much affected by the accessibility of symbolic systems as by the distribution of genes.

Culturalism's task is a double one. On the "macro" side, it looks at the culture as a system of values, rights, exchanges, obligations, opportunities, power. On the "micro" side, it examines how the demands of a cultural system affect those who must operate within it. In that latter spirit, it concentrates on how individual human beings construct "realities" and meanings

that adapt them to the system, at what personal cost, with what expected outcomes. While culturalism implies no particular view concerning inherent psychobiological constraints that affect human functioning, particularly meaning making, it usually takes such constraints for granted and considers how they are managed by the culture and its institured educational system.

Although culturalism is far from computationalism and its constraints, it has no difficulty incorporating its insights – with one exception. It obviously cannot rule out processes relating to human meaning making, however much they do not meet the test of computability. As a corollary, it cannot and does not rule out subjectivity and its role in culture. Indeed, as we shall see, it is much concerned with *intersubjectivity* – how humans come to know "each other's minds." In both these senses, culturalism is to be counted among the "sciences of the subjective." And, in consequence, I shall often refer to it as the "cultural psychological" approach, or simply as "cultural psychology." For all that it embraces the subjective in its purview and refers often to the "construction of reality," cultural psychology surely does not rule out "reality" in any ontological sense. It argues (on epistemological grounds) that "external" or "objective" reality can only be known by the properties of mind and the symbol systems on which mind relies.[20]

A final point relates to the place of emotion and feeling. It is often said that all "cognitive psychology," even its cultural version, neglects or even ignores the place of these in the life of mind. But it is neither necessary that this be so nor, at least in my view, is it so. Why should an interest in cognition preclude feeling and emotion?[21] Surely emotions and feelings are represented in the processes of meaning making and in our constructions of reality. Whether one adopts the Zajonc view that emotion is a direct and unmediated response to the world with subsequent cognitive consequences, or the Lazarus view that emotion requires prior cognitive inference, it is still "there," still to be reckoned with.[22] And, particularly in dealing with the role of schools in "self" construction, it is very much a part of education.

Notes

1. Though I use the expression "the computational view," there are in fact two such models, one based upon the idea of the mind as a set of computational devices that operate in parallel and without benefit of a central processing system, the other on the idea of a central processing unit that controls the sequential order of computational operations that must be performed to achieve solutions to particular problems. Though the differences between these two models are profound in many ways – particularly in their conceptions of the role of "rationality" and "experience" – that difference need not concern us. Compare, for example, David E. Rumelhart and James L. McClelland, eds., *Parallel Distributed Processing: Explorations in the Microstructure of Cognition*, vols. 1 and 2 (Cambridge, Mass.: MIT Press, 1986), with Philip N. Johnson-Laird, *The Computer and the Mind: An Introduction to Cognitive Science* (Cambridge, Mass.: Harvard University Press, 1988).

2. Judith W. Segal, Susan F. Chipman, and Robert Glaser, eds., *Thinking and Learning Skills* (Hillsdale, N.J.: Erlbaum, 1985); John T. Bruer, *Schools for Thought: A Science of Learning in the Classroom* (Cambridge, Mass.: MIT Press, 1993); Michelene T. H. Chi, Robert Glaser, and M. J. Farr, eds., *The Nature of Expertise* (Hillsdale, N.J.: Erlbaum, 1988).
3. Walter J. Ong, *Orality and Literacy: The Technologizing of the Word* (London: Routledge, 1991), David A. Olson, *The World on Paper: The Conceptual and Cognitive Implications of Writing and Reading* (Cambridge: Cambridge University Press, 1994).
4. Olson, *The World on Paper*.
5. Alfred L. Kroeber, "The Superorganic," *American Anthropologist*, 19(2) (1917): 163–213.
6. Some representative works in this cultural-psychological tradition are: Jerome Bruner, *Acts of Meaning* (Cambridge, Mass.: Harvard University Press, 1990); Michael Cole, *The Cultural Context of Learning and Thinking: An Exploration in Experimental Anthropology* (New York: Basic Books, 1971); Barbara Rogoff, *Apprenticeship in Thinking: Cognitive Development in Social Context* (New York: Oxford University Press, 1990); Richard A. Shweder, *Thinking through Cultures: Expeditions in Cultural Psychology* (Cambridge, Mass.: Harvard University Press, 1991); James V. Wertsch, *Voices of the Mind: A Sociocultural Approach to Mediated Action* (Cambridge, Mass.: Harvard University Press, 1991). Its ancestry traces back to writers like Vygotsky, Durkheim, Schutz, and Max Weber: Lev S. Vygotsky, *Thought and Language* (Cambridge, Mass.: MIT Press, 1962); Emile Durkheim, *Elementary Forms of the Religious Life: A Study in Religious Sociology* (Glencoe, Ill.: Free Press, 1968); Alfred Schutz, *On Phenomenology and Social Relations: Selected Writings* (Chicago: University of Chicago Press, 1970); Max Weber, *Theory of Social and Economic Organization* (Glencoe, Ill.: Free Press, 1947).
7. Crane Brinton, *The Anatomy of Revolution* (New York: Vintage Books, 1965).
8. J. L. McClelland, "The Programmable Blackboard Model of Reading," in Rumelhart and McClelland, *Parallel Distributed Processing*, vol. 2, pp. 122–169; Roger C. Schank, *Tell Me a Story* (New York: Scribner's, 1990).
9. Melanie Mitchell, "What Can Complex Systems Approaches Offer the Cognitive Sciences?" Paper presented at the Annual Meeting of the Society for Philosophy and Psychology, State University of New York at Stony Brook, New York (June 10, 1995).
10. Dan Sperber and Deirdre Wilson, *Relevance: Communication and Cognition* (Cambridge, Mass.: Harvard University Press, 1986); H. Paul Grice, *Studies in the Way of Words* (Cambridge, Mass.: Harvard University Press, 1989).
11. Georg Henrik von Wright, *Explanation and Understanding* (Ithaca, N.Y.: Cornell University Press, 1971); Jerome Bruner, "Narrative and Paradigmatic Modes of Thought," in Elliot Eisner, ed., *Learning and Teaching the Ways of Knowing: Eighty-fourth Yearbook of the National Society for the Study of Education* (Chicago: University of Chicago Press, 1985), pp. 97–115.
12. von Wright, *Explanation and Understanding*.
13. Rumelhart and McClelland, eds., *Parallel Distributed Processing*.
14. Bruer, *Schools for Thought*.
15. Annette Karmiloff-Smith, *A Functional Approach to Child Language: A Study of Determiners and Reference* (Cambridge: Cambridge University Press, 1979); Karmiloff-Smith, *Beyond Modularity: A Developmental Perspective on Cognitive Science* (Cambridge, Mass.: MIT Press, 1992).
16. Melanie Mitchell, "What Can Complex Systems Approaches Offer the Cognitive Sciences?" Paper presented at the Annual Meeting of the Society for Philosophy and Psychology, State University of New York at Stony Brook, New York (June 10, 1995); James P. Crutchfield and Melanie Mitchell, *The Evolution of Emergent Computation*, Santa Fe Institute Technical Report 94-03-012 (Santa Fe, N.J.: Santa Fe Institute, 1994).

17. Ann Brown and Joseph Campione have, for example, put the "rule of description" to work in their Oakland project. They make it a virtually obligatory step for their pupils. They even use a computer whose program requires a more general redescription of any specific "conclusion."
18. Allen Newell and Herbert A. Simon, *Human Problem Solving* (Englewood Cliffs, N.J.: Prentice-Hall).
19. Susan Chipman and Alan L. Meyrowitz, *Foundations of Knowledge Acquisition*, vols. 1 and 2 (Boston: Kluwer Academic Publishers, 1993).
20. Nelson Goodman, *Ways of Worldmaking* (Indianapolis: Hackett, 1978).
21. See, for example, Keith Oatley, *Best Laid Schemes: The Psychology of Emotions* (Cambridge: Cambridge University Press, 1992), or the pages of the journal *Cognition and Emotion* (Hove, East Sussex: Lawrence Erlbaum Associates).
22. Robert B. Zajonc, "Feeling and Thinking: Preferences Need No Inferences," *American Psychologist*, 35(2) (1980): 151–175; Richard S. Lazarus, "A Cognitivist's Reply to Zajonc on Emotion and Cognition," *American Psychologist*, 36 (1981): 222–223; Lazarus, "Thoughts on the Relations between Emotion and Cognition," *American Psychologist*, 37(9) (1982): 1019–1024; Zajonc, "On the Primacy of Affect," *American Psychologist*, 39(2) (1984): 117–123; Lazarus, "On the Primacy of Cognition," *American Psychologist*, 39(2) (1984): 124–129.

17

Vertical and Horizontal Discourse: An Essay

Basil Bernstein

Introduction

It might be useful to recall the development of the work that leads up to the present analysis. Up to the 1980s, the work was directed to an understanding of different principles of pedagogic transmission/acquisition, their generating contexts and change. These principles were conceptualised as code modalities. However, what was transmitted was not in itself analysed apart from the classification and framing of the categories of the curriculum. In the mid-1980s, what was transmitted became the focus of the analysis (Bernstein, 1986). A theory of the construction of pedagogic discourse, its distributive, recontextualising and evaluative rules, and their social basis, was developed: the pedagogic device. However, the *forms* of the discourses, i.e. the internal principles of their construction and their social base, were taken for granted and not analysed. Thus, there was an analysis of modalities of elaborated codes and their generating social contexts, and an analysis of the construction of pedagogic discourse which the modalities of elaborated codes pre-supposed, but no analysis of the discourses subject to pedagogic transformation.

This analysis will proceed by distinguishing between two fundamental forms of discourse which have been subject to much comparison and contrast. The two forms are generally seen as oppositional rather than complementary.

Source: *British Journal of Sociology of Education*, 20(2) (1999): 157–173.

Table I

Evaluative	Spontaneous	Contrived
Epistemological	Subjective	Objective
Cognitive	Operations	Principles
Social	Intimacy	Distance
Contextual	Inside	Outside
Voice	Dominated	Dominant
Mode	Linear	Non-linear
Institutional	Gemeinschaft	Gesellschaft

Indeed, one form is often seen as the destruction of the other. Sometimes one form is seen, essentially, as a written form and the other as an oral form. Bourdieu refers to these forms in terms of the function to which they give rise; one form creating symbolic, the other practical mastery. Habermas sees one form as constructing what he calls the 'life world' of the individual and the other as the source of instrumental rationality. Giddens, following Habermas, sees one discursive form as the basis for constructing what he calls 'expert systems'. These 'expert systems' lead to a disembedding of individuals from their local experiential world, which is constructed by a different form. Underlying these contrasts or oppositions is a complex multi-layered structure of pairs operating at different levels of individual and social experience (Table I)[3].

Although any one author may single out one pair of contrasts from the set in Table I (not exhaustive), the remainder of the set, like the nine-tenths of an iceberg, lurk invisible below the surface of the text.

In the educational field, one form is sometimes referred to as school(ed) knowledge and the other as everyday common-sense knowledge, or 'official' and 'local' knowledge. These contrasts are often ideologically positioned and receive different evaluations. One form becomes the means whereby a dominant group is said to impose itself upon a dominated group and functions to silence and exclude the voice of this group. The excluded voice is then transformed into a latent pedagogic voice of unrecognised potential.

To my mind, much of the work generating these oppositions homogenises these discursive forms so that they take on stereotypical forms where their differences or similarities are emphasised. It is not unusual for one form to be romanticised as a medium celebrating what the other form has lost.

What I shall attempt here is to produce a language of description which produces greater differentiation within and between these forms, and explores the social basis of this differentiation. This will involve using yet another set of descriptors with internal sub-divisions. The justification for yet another language can only be whether, on the one hand, its use enables a more productive, a more general perspective, and on the other, whether it leads to new research possibilities and interpretations.

Vertical and Horizontal Discourses

To begin, I shall distinguish between a 'vertical discourse' and a 'horizontal discourse', and give brief definitions which will be developed later. These definitions will take 'forms of knowledge' as criteria. Different forms of knowledge will be realised in the two discourses.

Horizontal Discourse

We are all aware and use a form of knowledge, usually typified as everyday or 'common-sense' knowledge. Common because all, potentially or actually, have access to it, common because it applies to all, and common because it has a common history in the sense of arising out of common problems of living and dying. This form has a group of well-known features: it is likely to be oral, local, context dependent and specific, tacit, multi-layered, and contradictory across but not within contexts. However, from the point of view to be taken here, the crucial feature is that is it segmentally organised. By segmental, I am referring to the sites of realisation of this discourse. The realisation of this discourse varies with the way the culture segments and specialises activities and practices. The knowledge is segmentally differentiated. Because the discourse is horizontal it does not mean that all segments have equal importance, clearly some will be more important than others. I shall contrast this horizontal discourse with what I shall call a vertical discourse.

Vertical Discourse

Briefly, a vertical discourse takes the form of a coherent, explicit, and systematically principled structure, hierarchically organised, as in the sciences, or it takes the form of a series of specialised languages with specialised modes of interrogation and specialised criteria for the production and circulation of texts, as in the social sciences and humanities.

I want first of all to raise the question of how knowledge circulates in these two discourses. In the case of vertical discourse, there are strong distributive rules regulating access, regulating transmission and regulating evaluation. Circulation is accomplished usually through explicit forms of recontextualising affecting distribution in terms of time, space and actors. I am not here concerned with the arenas and agents involved in these regulations. Basically, circulation is accomplished through explicit recontextualisation and evaluation, motivated by strong distributive procedures. But how does knowledge circulate in the case of horizontal discourse, where there is little systematic organising principles and therefore only tacit recontextualising? Of course, in horizontal discourse there are distributive rules

regulating the circulation of knowledge, behaviour and expectations according to status/position. Such distributive rules structure and specialise social relations, practices and their contexts. But how is new knowledge freed from the local context and local agents of its enactment, and how does it begin to circulate? In order to answer this question, I wish to sharpen and delimit the definition of horizontal discourse:

> A horizontal discourse entails a set of strategies which are local, segmentally organised, context specific and dependent, for maximising encounters with persons and habitats.

With this definition in mind, I wish to consider a fictitious community operating only with horizontal discourse. Here a distinction can be made between the set of strategies any one individual possesses and their analogic potential for contextual transfer, and the total sets of strategies possessed by all members of this community. I shall use the term 'repertoire' to refer to the set of strategies and their analogic potential possessed by any one individual, and the term 'reservoir' to refer to the total of sets and its potential of the community as a whole. Thus, the repertoire of each member of the community will have a common nucleus but there will be differences between the repertoires. There will be differences between the repertoires because of differences between the members arising out of differences in member contexts and activities, and their associated issues. Now it is possible to ask about the relation between reservoir and repertoire? What is the regulation on the relation between reservoir and repertoire? Or what is the relation between the potential and the actual practice of a member? How do new strategies circulate?

Clearly, the more members are isolated or excluded from each other, the weaker the social base for the development of either repertoire or reservoir. If there is to be a development of either repertoire or reservoir, this development will depend upon how social relationships are structured. The greater the reduction of isolation and exclusion, the greater the social potential for the circulation of strategies, of procedures, and their 'exchange'. Under these conditions, there can be an expansion of both repertoire and reservoir. The exchange of strategies will affect the analogical potential of any one repertoire. Under these conditions, the relation between a member's actual and potential practice becomes dynamic. Consider a situation where one small-holder meets another and complains that what he/she had done every year with great success, this year failed completely. The other says that when this has happened, he/she finds that this 'works'. He/she then outlines the successful strategy. Now any restriction to circulation and exchange reduces effectiveness. Any restriction specialises, classifies and privatises knowledge. Stratification procedures produce distributive rules which control the flow of procedures from reservoir to repertoire. Thus,

both vertical and horizontal discourses are likely to operate with distributive rules that set up positions of defence and challenge.

From the idealisation constructed, it is possible to see the inter-relations between horizontal discourse and the structuring of social relations. The structuring of the social relationships generates the forms of discourse but the discourse in turn is structuring a form of consciousness, its contextual mode of orientation and realisation, and motivates forms of social solidarity. Horizontal discourse, in its acquisition, becomes the major cultural relay. I shall now consider briefly the mode of acquisition. I shall propose that the mode of acquisition is created by the form taken by the pedagogy. And the pedagogic interventions, in turn, are a function of the different 'knowledges' required to be acquired. These 'knowledges' are related not by integration of their meanings by some co-ordinating principle, but through the functional relations of segments or contexts to the everyday life. It then follows that what is acquired in one segment or context, and how it is acquired, may bear no relation to what is acquired or how it is acquired in another segment or context. Learning how to tie up one's shoes bears no relation to how to use the lavatory correctly. These competences are segmentally related. They are not related by any principle integrating their specific acquisitional 'knowledge'. I have called the form of this pedagogy 'segmental'. Later, I will distinguish this segmental pedagogy and the segmental 'knowledges' or literacies[21] to which it gives rise, from the institutional pedagogy of vertical discourse.

The segmental organisation of the 'knowledges' of horizontal discourse leads to segmentally structured acquisitions. There is no necessary relation between what is learned in the different segments. Furthermore, as acquisition arises from discrete segments, pedagogic practice may well vary with the segment. Thus, similar segments across social groups/classes may differ in the code modality regulating acquisition. Or, to put it another way, vertical discourse may regulate more segments of acquisition in one social group/class than another, and this entails a different mode of learning and context management[22]. I am here contrasting a segmental pedagogic control with an institutional or official pedagogic control.

Segmental pedagogy is usually carried out in face-to-face relations with a strong affective loading as in the family, peer group or local community. The pedagogy may be tacitly transmitted by modelling, by showing or by explicit modes. Unlike official or institutional pedagogy, the pedagogic process may be no longer than the context or segment in which it is enacted. The pedagogy is exhausted in the context of its enactment, or is repeated until the particular competence is acquired: learning to dress, running errands, counting change, addressing different individuals, using a telephone, selecting a video. The segmental pedagogies of the peer group may well depend strongly on modelling/showing. In general, the emphasis of the segmental pedagogy of horizontal discourse is directed towards acquiring a common

competence rather than a graded performance[4]. Clearly, competitive relations may well develop, as in the peer group, on the basis of these common competences.

Thus, in the case of horizontal discourse, its 'knowledges', competences and literacies are segmental. They are contextually specific and 'context dependent', embedded in on-going practices, usually with strong affective loading, and directed towards specific, immediate goals, highly relevant to the acquirer in the context of his/her life. The activation of the learning strategies may require the features of the original segment. Where these features are absent, the learning strategies may not be demonstrated. Segmental competences literacies are culturally localised, evoked by contexts whose reading is unproblematic. Although the competences/literacies are localised, they do not necessarily give rise to highly coded inflexible practices. Indeed, any one individual may build up an extensive repertoire of strategies which can be varied according to the contingencies of the context or segment. (As I have proposed earlier, any individual repertoire may depend on its relation to the reservoir of the group.) From the point of view of any one individual operating within horizontal discourse, there is not necessarily one and only one correct strategy relevant to a particular context (see note 2). Horizontal discourse relayed through a segmental pedagogy facilitates the development of a repertoire of strategies of operational 'knowledges' activated in contexts whose reading is unproblematic.

I now wish to turn to vertical discourse which, it will be remembered, has two forms: one is a coherent, explicit and systematically principled structure, hierarchically organised; and the second takes the form of a series of specialised languages with specialised modes of interrogation, specialised criteria for the production and circulation of texts, e.g. the natural sciences, humanities and social sciences. In the case of any vertical discourse, this, unlike horizontal discourse, is not a segmentally organised discourse. The integration of a vertical discourse is not integration at the level of the relation between segments/contexts as in horizontal discourse, but integration at the level of meanings. Vertical discourse consists not of culturally specialised segments, but of specialised symbolic structures of explicit knowledge. The procedures of vertical discourse are then linked, not by contexts, horizontally, but the procedures are linked to other procedures hierarchically. The institutional or official pedagogy of vertical discourse is not consumed at the point of its contextual delivery, but is an on going process in extended time.

The social units of acquisition of this pedagogy (that of a vertical discourse) have a different arbitrary base to the arbitrary base of the social units of the pedagogy of horizontal discourse. The social units of the pedagogy of vertical discourse are constructed, evaluated and distributed to different groups and individuals, structured in time and space by 'principles' of recontextualising. We have context specificity through 'segmentation' in

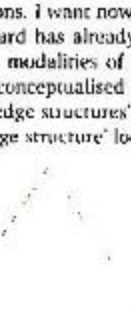
Table II

	Vertical discourse	Horizontal discourse
Practice	Official/institutional	Local
Distributive principle	Recontextualisation	Segmentation
Social relation	Individual	Communalised
Acquisition	Guided performance	Competence

horizontal discourse, but context specificity through recontextualisation in vertical discourse. Both discourses, vertical and horizontal, have an arbitrary pedagogic base. The arbitrary of both discourses is constructed by distributive rules regulating the circulation of the discourses. The pedagogy so far is summarised in the contemporary context in Table II.

The language of description I have developed has examined the oppositions that began this paper and has illuminated their internal structures, and in the case of horizontal discourse, its social base, acquisition mode and form of knowledge. However, if this language I have developed was limited only to such a context then it would only produce the homogenising which I argued underpinned the oppositions. I want now to examine in more detail vertical discourse. The way forward has already been adumbrated by the distinction between the different modalities of knowledge of vertical discourse. These modalities will be conceptualised as 'hierarchical knowledge structures' and 'horizontal knowledge structures'.

Briefly, a hierarchical knowledge structure[4] looks like the following:



This form of knowledge attempts to create very general propositions and theories, which integrate knowledge at lower levels, and in this way shows underlying uniformities across an expanding range of apparently different phenomena[5]. Hierarchical knowledge structures appear, by their users, to be motivated towards greater and greater integrating propositions, operating at more and more abstract levels. Thus, it could be said that hierarchical knowledge structures are produced by an 'integrating' code.

In contrast, horizontal knowledge structures consist of a series of specialised languages with specialised modes of interrogation and criteria for the construction and circulation of texts. Thus, any one of the specialised disciplines within the form of a horizontal knowledge structure found within the humanities and social sciences can be visually portrayed as:

$$L^1\ L^2\ L^3\ L^4\ L^5\ L^6\ L^7 \ldots L^n$$

Thus, in the case of English literature, the languages would be the specialised languages of criticism; in Philosophy, the various languages of this mode of inquiry; and in Sociology, on which we shall focus, the languages refer, for example, to functionalism, post-structuralism, post-modernism, Marxism, etc. The latter are the broad linguistic categories and within them are the idiolects (theories) of particular favoured or originating speakers. Horizontal knowledge structures, unlike hierarchical knowledge structures, which are based on integrating codes, are based upon collection or serial codes; integration of language in one case and accumulation of languages in the other.

It is interesting to inquire what counts as a development of hierarchical knowledge structures and of horizontal knowledge structures. In the case of hierarchical knowledge structures, development is seen as the development of theory, which is more general, more integrating, than previous theory. In the case of horizontal knowledge structures, this criteria, as we shall see, cannot apply. It cannot apply because the set of languages which constitute any one horizontal knowledge structure are not translatable, since they make different and often opposing assumptions, with each language having its own criteria for legitimate texts, what counts as evidence and what counts as legitimate questions or a legitimate problematic. Indeed, the speakers of each language become as specialised and as excluding as the language. Their capital is bound up with the language and, therefore, defence of and challenge of other languages, is intrinsic to a horizontal knowledge structure. A particular field is constructed by the internal characteristics of a horizontal knowledge structure. Thus, the internal characteristics and external field amplify the serial character of a horizontal knowledge structure[6].

Development, in the case of a horizontal knowledge structure, cannot be a function of the greater generality and integrating property of the knowledge because, as has been shown, such developments simply are not possible in the case of a horizontal knowledge structure. So what counts as development? I suggest that what counts as development is the introduction of a new language. A new language offers the possibility of a fresh perspective, a new set of questions, a new set of connections, and an apparently new problematic, and most importantly, a new set of speakers. This new language is likely to be taken up by the younger speakers of the particular horizontal knowledge structure[7]. This new language can then be used to challenge the hegemony and legitimacy of more senior speakers. The latter may be cut off from acquiring the new language because of trained incapacity arising out of previous language acquisition, and a reduced incentive, arising out of the loss of their own position.

Now to turn hierarchical knowledge structures. In a way, the opposition between theories in hierarchical knowledge structures is analogous to the oppositions between languages in a horizontal knowledge structure, but it would be a mistake to view this similarity as indicating no difference between

these knowledge structures. Opposition between theories in hierarchical knowledge structures is played out in attempts to refute positions where possible, or to incorporate them in more general propositions. At some point, sometimes later than sooner, because of special investments, a choice is possible provided the issue can be settled by empirical procedures. However, in the contrasting case of a horizontal knowledge structure within the social sciences (for example, sociology, which I have in mind here and earlier), neither of these possibilities are possible because the discreteness of the languages defy incorporations into a more general language. Indeed, built into the construction of the language here is the protection of its discreteness, its strategies of apparent uniqueness, its non-translatability, and its essential narcissism. Motivations under this discursive regime are oriented to speaking/acquiring/developing the hegemonic language or its challenge or marketing a new language.

Horizontal Knowledge Structures: Strong and Weak Grammars

I wish now to turn attention to issues arising out of acquisition and I have in mind, as before, sociology. One of the problems of acquiring a horizontal knowledge structure is the range of languages which have to be managed, each having its own procedures. It might be useful here to make a distinction within horizontal knowledge structures, distinguishing those whose languages have an explicit conceptual syntax capable of 'relatively' precise empirical descriptions and/or of generating formal modelling of empirical relations, from those languages where these powers are much weaker. The former I will call strong grammars and the latter weak grammars. It is important to add here that 'strong' and 'weak' must be understood as relative within horizontal knowledge structures. From this point of view, economics, linguistics and parts of psychology would be examples of strong grammar. Mathematics would also be considered a horizontal knowledge structure as it consists of a set of discrete languages, for particular problems. Thus, mathematics and logic would be regarded as possessing the strongest grammers, although these languages, for the most part, do not have empirical referents nor are they designed to satisfy empirical criteria. Examples of weak grammars would be sociology, social anthropology, and cultural studies.

The strong grammars of horizontal knowledge structures (excluding mathematics and logic) often achieve their power by rigorious restrictions on the empirical phenomena they address. For example, the formal precision of transformation grammar arises out of the exclusion of meaning from its concerns: whereas Halliday's systemic functional grammar addresses meanings as the fundamental focus of the grammar and is a much less tidy system.

Following these distinctions within horizontal knowledge structures, I can return to issues of acquisition. In the case of hierarchical knowledge structures, the acquirer does not have the problem of knowing whether she/he is speaking physics or writing physics, only the problem of correct usage. The strong grammar visibly announces what it is. For the acquirer, the passage from one theory to another does not signal a break in the language; it is simply an extension of its explanatory/descriptive powers. However, if the social sciences are considered, then problems of acquisition arise particularly where the grammar is weak. The acquirer may well be anxious whether he/she is really speaking or writing sociology. In these conditions, it is likely that canonical names will be a useful resource. Later, the names will be associated with languages or, in some cases, the language will come before the exemplars. Thus, managing names and languages together with their criticisms becomes both the manner of transmission and acquisition. There is, however, a prior issue. Because a horizontal knowledge structure consists of an array of languages, any one transmission necessarily entails some selection, and some privileging within the set recontextualised for the transmission of the horizontal knowledge structure. The social basis of the principle of this recontextualising indicates whose 'social' is speaking. The social basis of the principle of the recontextualising constructs the perspective of the horizontal knowledge structure. Whose perspective is it? How is it generated and legitimated? I say that this principle is social to indicate that choice here is not rational in the sense that it is based on the 'truth' of one of the specialised languages. For each language reveals some 'truth', although to a great extent, this partial 'truth' is incommensurate and language specific. The dominant perspective within any transmission may be a function of the power relations among the teachers, or of pressure from groups of acquirers, or, particularly today, a function of indirect and direct external pressures of the market or the State itself. Thus, a perspective becomes the principle of the recontextualisation which constructs the horizontal knowledge structure to be acquired. Also, behind the perspective is a position in a relevant intellectual field/arena.

At the level of the acquirer, this invisible perspective, the principle of recontextualisation structuring the transmission, is expected to become how the acquirer reads, evaluates and creates texts. A 'gaze' has to be acquired, i.e. a particular mode of recognising and realising what counts as an 'authentic' sociological reality[8].

Perhaps this is why the acquirer has such difficulty in recognising what he/she is speaking or writing, for to know is to 'gaze'. And this is, I suspect, a tacit transmission: to be inside the specialised language probably requires oral transmission; the experience of a social interactional relationship with those who possess the 'gaze'. I am not suggesting for one moment that this component does not facilitate acquisition of a hierarchical knowledge structure, only that 'gaze' is not crucial to the acquisition. Here, what is important

is mastering the procedures of investigation and instruments of observation and understanding the theory; developing the imaginative potential of the language comes much later, if at all. However, work in a laboratory does not proceed only by a mechanical regulation of the procedures. Measurement is the result of something prior to measurement. And a component of that something is a developed *sense* of the potential of a phenomenon arising out of practice.

Basically, in the case of a hierarchical knowledge structure, in the end, it is the theory that counts and it counts both for its imaginative conceptual projection and the empirical power of the projection. Clearly, acquisition of a hierarchical knowledge structure also may involve acquisition of a perspective; a perspective that a hierarchical knowledge structure is the only and sole pathway to 'truth'. Its procedures are the only valid way to 'truth'. Where choice of theory is possible, such choice may well have a social base. Indeed, in areas of biology, as in the case of the nature/nurture issue, the social base of choice is often revealed. Nor does my position deny that any one hierarchical knowledge structure may entail a principle of recontextualisation for its transmission which is influenced by the interests of particular teachers or by external pressures. These interests may well relate to advancing social, economic and cultural capital or simply survival. But the recognition and construction of legitimate texts in a hierarchical knowledge structure is much less problematic, much less a tacit process than is the case of a horizontal knowledge structure, particularly those with weak grammars. In the latter case, what counts in the end is the specialised language, its position, its perspective, the acquirer's 'gaze', rather than any one exemplary theory (although the exemplary theory may be the originator of the linguistic position). In the case of horizontal knowledge structures, especially those with weak grammars, 'truth' is a matter of acquired 'gaze'; no-one can be eyeless in this Gaza.

There is a resemblance, at a fairly abstract level, between horizontal knowledge structures, particularly and especially of the weak grammar modality, and the horizontal discourse I discussed at the beginning of this paper. These two forms share some common features: both are horizontally organised, both are serial, both are segmented. In both, the contents are volatile. In the case of horizontal discourse, volatility refers to the referents of this discourse, and in the case of horizontal knowledge structures, especially of the weak grammar modality, volatility refers to additions and omissions of the specialised languages of a particular horizontal knowledge structure. Perhaps there is a deeper resemblance. Acquisition of horizontal discourse is a tacit acquisition of a particular view of cultural realities, or rather of a way of realising these realities. The 'way' itself is embedded in the unity latent in the contextual segmentation of this discourse. The 'way' may be likened to the 'gaze' as it becomes active in the experience and ongoing practices of the speakers. This is similar to the 'gaze' embedded in the

acquisition of the specialised languages of a horizontal knowledge structure with a weak grammar.

To recoup, the contrast between hierarchical knowledge structures and horizontal knowledge structures lies in the fight for 'linguistic hegemony' and its acquired 'gaze' within a horizontal knowledge structure, and the competition for 'integration of principles' or for furthering, or for challenging, such integration in the case of hierarchical knowledge structures. The fight for linguistic hegemony and the competition for, or to further, integration may well share common field strategies, but the issues are different[9]. It is, therefore, important to relate the external conditions of the context of the field/arena to the internal conditions of the discourse. Separation of field from discourse may well distort analysis. Indeed, from the point of view taken here, field and discourse are inter-related and inter-dependent.

Horizontal Knowledge Structures: Changes and Orientations

The seriality of horizontal knowledge structures may vary as between those with a strong grammar and those with a weak grammar. The number of languages internal to any horizontal knowledge structure may be fewer in the case of a strong grammar than the number internal to a horizontal knowledge structure with a weak grammar. This raises the question as to whether the serial organisation and its variations are internal to the phenomena studied. Broadly speaking, all the specialised knowledges of horizontal knowledge structures from the social sciences to the humanities address human behaviour, conduct or practice in one form or another. What is of interest is that those knowledges produced by particular methodological procedures (the social sciences) share a similar linguistic organisation to the humanities, the disciplines of which operate quite differently as a group and differ within that group. It therefore seems that what, on the contrary, has to be accounted for, is the shape of hierarchical knowledge structures. Clearly, this is not a function of its methods as the social sciences claim that in the most part they operate with similar methods. Popper insisted that there were no differences between the social and natural sciences, and that differences in the phenomena studied were irrelevant to the question of the status of the knowledge. The status is a function of methods. But I have shown that, for the most part, there is a common method in the social sciences; a common method but an organisation of knowledge similar to that of the humanities.

As a first approach to this similarity it might be useful to look at changes in the development of specialised languages across time. It might be useful to plot the increase in the number of languages, for example, in sociology across time to see whether the rate of increase is linked to a particular period of societal development or change. Certainly, the number of practitioners

engaged in the social sciences has increased enormously over the past 40 years. It is also the period of the greatest economic, cultural and technological change, possibly since industrialisation. Certainly, in sociology and, I suspect, in other social sciences and the humanities, there has been an increase in the number of languages and procedures of inquiry. It has been noted that the ritual of the generations provides a dynamic of intellectual change. Bourdieu (1984, 1993) sees this as a function of new class habituses entering a particular field. But the increase in numbers, the rituals of the generations, the new habituses are the resources, perhaps the necessary conditions, but not the sufficient conditions, to explain changes in languages. It is possible that the languages of horizontal knowledge structures, especially those of the social sciences, have an inbuilt redundancy. They could be called retrospective languages. They point to the past and the hegemonic conceptual relations they generate have that past embedded in them. Thus, their descriptions presuppose what has been. But under conditions of rapid social change, what is to be described is not describable or is only inadequately describable in a retrospective language. This fuels the fight for linguistic hegemony within a horizontal knowledge structures[10].

But why are the languages within horizontal knowledge structures retrospective? Why is the past projected on to continuous becoming? I think it is necessary here to return to horizontal discourse. As others have also noted, the contributors to horizontal knowledge structures have no means of insulating their constructions from their experience constructed by horizontal discourse. The contributors cannot think beyond the sensibility which initially formed them, a sensibility embedded in a knowledge structure and on an experiential base, local in time and space. The specialised languages that the speakers therefore construct are embedded in projections from the past. What of the future? Language again limits such projections, but language, here, as a formal set of combinatory rules. This finite set of rules is potentially capable of generating 'n' other rule systems; consequently, language is an open system and opens the way to a universe of potential futures. At the level of speakers, language creates reflective feedback from on-going experience and practices. This introduces constraint on the determination of the future. Such determination weakens with the period of time entailed. Thus, in the case of the social sciences, their knowledge structures are likely to be retrospective with respect to intellectual orientation and sensibility, and restricted with reference to the time period of their future projections. There is then built into horizontal knowledge structures an internal obsolescence of the languages.

This has two potential consequences. There is an expectation of change which facilitates and legitimises attempts to add to the existing set of languages. It also encourages, at a lower level of description, idiosyncratic terms; all have the power of naming and re-naming. Furthermore, the more contemporary the specialised language, the less retrospective it appears to

be and the more its terms and syntax, to some, appear to create more relevant descriptions. Such consequences are more probable in the case of a horizontal knowledge structure with a weak grammar than in the case of a horizontal knowledge structure with a strong grammar. I would expect then that horizontal knowledge structures with weak grammars, as a consequence of their acquisition, would generate speakers obsessed with issues of language, which in turn would serve to construct, destruct, affirm and so reproduce the positional structure of a particular intellectual field.

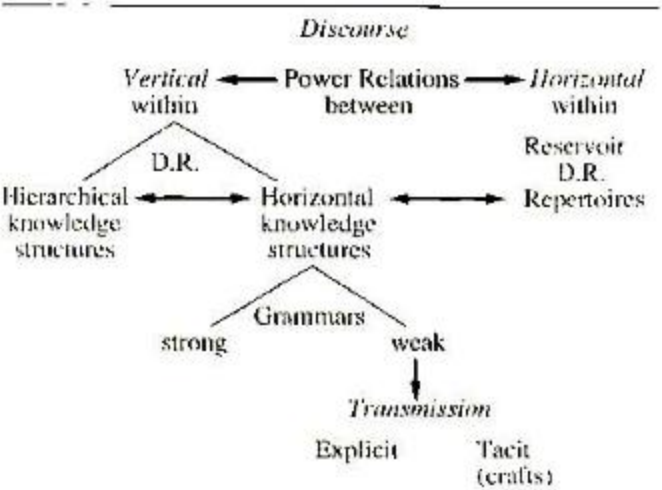
This obsession with language is transferred through initiation into a particular horizontal knowledge structure. The obsessive orientation is particularly pronounced where derivations from the specialised language yield very weak powers of specific unambiguous, empirical descriptions. This disguises any mismatch between the description and that which prompts it. Weak powers of empirical descriptions remove a crucial resource for either development or rejection of a particular language and so contribute to its stability as a frozen form. Text books, particularly in the case of sociology, devote little space to reports of empirical research in comparison to the space devoted to the specialised languages, their epistemologies and their methodologies (rather than methods).

In summary, horizontal knowledge structures, especially and particularly those with weak grammars as in some of the social sciences, give rise to speakers obsessed with languages characterised by inherent obsolescence, weak powers of empirical descriptions and temporally retrospective.

This, of course, is an implied contrast with hierarchical knowledge structures, where it will be recalled that the orientation is towards the experimental potential of a generalising theory. While the field strategies typical of horizontal knowledge structures may well be common to any hierarchical knowledge structures, survival of a theory in the latter case ultimately depends on its power to deliver the empirical expectations. The obsolescence of theory in this discourse is not because of inbuilt obsolescence, but because of a failure to meet empirical expectations or its absorption into a more general theory. Although there may well be field strategies to delay failure, there are contexts within hierarchical knowledge structures, with characteristics and consequences possibly similar to the 'natural' state of horizontal knowledge structures, especially those with weak grammars. This is the case where theories compete in a context where experimental procedures are not available or inadequate. Such theories are usually at the edge or over the edge of 'established' knowledges. The plausibility of these theories, however, will draw on their relation to existing, more established theory in that particular field.

Before turning to the relationships between vertical discourses and horizontal discourses as these arise in education, it might be useful to produce a map of the discourses and knowledge structures I have discussed (see Table III).

Table III



In the figure, a level has been added. Within weak grammars of horizontal knowledge structures, a distinction has been made in terms of the manner of their transmission and acquisition. Explicit transmission refers to a pedagogy which makes explicit (or attempts to make explicit) the principles, procedures and texts to be acquired. This is usually the case with the social sciences and perhaps less so for the humanities where the transmission tends to be more implicit. A 'tacit' transmission is one where showing or modelling precedes 'doing'. This is likely to occur with the transmission of crafts. From this point of view, a craft is a modality of vertical discourse and is characterised as a horizontal knowledge structure with weak grammar, tacit transmission. This knowledge structure is the nearest to horizontal discourse emerging as a specialised practice to satisfy the material requirements of its segments.

Vertical and Horizontal Discourses in Education

As part of the move to make specialised knowledges more accessible to the young, segments of horizontal discourse are recontextualised and inserted in the contents of school subjects. However, such recontextualisation does not necessarily lead to more effective acquisition for the reasons already given. A segmental competence, or segmental literacy, acquired through

horizontal discourse, may not be activated in its official recontextualising as part of a vertical discourse, for space, time, disposition, social relation and relevance have all changed[11]. When segments of horizontal discourse become resources to facilitate access to vertical discourse, such appropriations are likely to be mediated through the distributive rules of the school. Recontextualising of segments is confined to particular social groups, usually the 'less able'. This move to use segments of horizontal discourse as resources to facilitate access, usually limited to the procedural or operational level of a subject, may also be linked to 'improving' the student's ability to deal with issues arising (or likely to arise) in the students' everyday world: issues of health, work, parenting, domestic skills, etc. Here, access and recontextualised relevance meet, restricted to the level of strategy or operations derived from horizontal discourse. Vertical discourses are reduced to a set of strategies to become resources for allegedly improving the effectiveness of the repertoires made available in horizontal discourse.

However, there may be another motive. Horizontal discourse may be seen as a crucial resource for pedagogic populism in the name of empowering or unsilencing voices to combat the élitism and alleged authoritarianism of vertical discourse. Here, students are offered an official context in which to speak as they are thought to be: Spon-tex (the sound-bite of 'spontaneous text')[12]. This move at the level of the school is parallelled by the confessional narratives of a variety of Feminist and Black studies in higher education. The 'new' ethnography celebrates horizontal discourse through extensive use of quotations which serve as experiential 'evidence'[13]. The 'ethno' is the 'unconstructed' voiced informant; what is missing is the 'graphic' (Moore & Muller, 1998).

From various points of views, some diametrically opposed, segments of horizontal discourse are being inserted in vertical discourse. However, these insertions are subject to distributive rules, which allocates these insertions to marginal knowledges and/or social groups. This movement has been described and analysed by Maton (1999) as a discursive shift in legitimation from knowledge to knower.

The shift in equity from equality ('of opportunity') to recognition of diversity[14] (of voice) may well be responsible for the colonisation of vertical discourse or the appropriation by vertical discourse of horizontal discourse. This, in turn, raises an interesting question of the implications for equality by the recognition and institutionalisation of diversity. There may be more at stake here than is revealed by attacks on the so-called élitism, authoritarianism, alienations of vertical discourse.

Conclusion

In this somewhat wide-ranging paper, I began with a complaint that the contrasts and oppositions between specialist knowledge and everyday local knowledges (as if the latter were not specialised) produced limiting, often

homogenising, descriptions in which the social basis of these forms was inadequately conceptualised. I have tried to show how by developing a more systematic and general language of description, albeit at the cost of introducing a new conceptual vocabulary (an irony of this analysis), a more general and delicate perspective may be gained. Furthermore, the language of description contains within the analysis it generates, new research issues and re-positions some present research. The analysis which takes as its point of departure the internal properties of forms of discourse, reveals the interdependence between properties internal to the discourse and the social context, field/arena, in which they are enacted and constituted. Briefly, 'relations within' and 'relations to' should be integrated in the analysis. Contrasts, variations and relationships in the form taken by different knowledges are related to the social contexts of their production, transmission, acquisition and change.

There are other implications of the analysis. I have referred to the tacitly acquired 'gaze' of a horizontal knowledge structure by means of which the acquirer learns how to recognise, regard, realise and evaluate legitimately the phenomena of concern. This 'gaze' is a consequence of the perspective created by the recontextualising principle constructing and positioning the *set of languages of a particular horizontal knowledge structure, or privileging a particular language in the set.* This is a conscious process giving rise to a tacit acquisition, but *there is, I suggest, an unintended consequence of acquiring the set of languages of a horizontal knowledge structure.* I can illustrate this with my own discipline of sociology. The array of specialised languages which fragment the experience of the acquirer, and shatters any sense of an underlying unity, may yet reveal the various ways the social is imaged by the complex projections arising out of the relationship between individuals and groups. This diverse imaging shows the potential of the social in its different modes of realisation.

Looking through the set of languages and their fractured realities, forever facing yesterday rather than a distanced tomorrow, is rather like visiting a gallery where paintings are in continuous motion, some being taken down, others replacing and all in an unfinished state. The invisible energy activating this movement is changes in the landscapes already taken place or taking place, some disfiguring, some eroding, some opening new prospects.

Yet, I suppose that the view would be markedly improved if the discursive centre of gravity shifted from the specialised languages to issues of empirical description: a shift from commitment to a language to dedication to a problem and its vicissitudes. Latour makes a distinction (see note 9) between science and research. Science refers to established canons, research refers to a dynamic inter-actional process. In the case of sociology and many of its 'ofs', the specialised languages are the equivalent of science. What is being advocated here is linguistic challenge by the dynamic interactional process of research; not a displacement, but a re-positioning of the role of specialised languages.

Notes

[1] Dowling (1993, 1997) gives the following list of authors who contrast abstract thought with concrete thought: Bernstein, Bourdieu, Foucault, Freud, Levi-Strauss, Levi-Bruhl, Lorman, Luria, Piaget, John-Rethel, Vygotsky and Walkerdine; to which he adds his own contrast, high discursive saturation, low discursive saturation. Dowling (1997), a development of Dowling (1993), analyses what he describes as the Public Domain (the everyday world) contrasted with the Esoteric Domain (specialised knowledge structures). His analysis of the Public Domain draws on Bernstein (1996, pp. 169 181). Dowling's major contribution is the construction of a language of description of great power, rigour and potential generality, which he applies to mathematical textbooks written for students of different assumed ability levels. He shows successfully how the texts constructed for these 'ability levels' incorporate, differentially, fictional contexts and activities drawn from the Public Domain in the classification and framing of mathematical problems; inserted in such a way that the 'low ability' textbooks orient the student to a world of manual practice and activity to be managed by restricted mathematical operations.

[2] It may be interesting to compare this discussion with that of Lave *et al.* (1984) and Lave (1988). Gemma Moss's research (Moss, 1991, 1993, 1996, 1999) on informal literacies and their relation to formal schooled literacies is of particular interest as she has developed an original language for their description and interpretation.

[3] For such differences see Bernstein (1990, Chapters 2 and 3). See also Heath (1984) who I understand is now about to publish a new edition with an added epilogue; also Collins (1999).

[4] Bernstein (1996, Chapter 3) gives a detailed analysis of differences within and between 'performance' and 'competence' modes of pedagogic transmission.

[5] There is likely to be more than one triangle in a hierarchical knowledge structure. The motivation is towards triangles with the broadest base and the most powerful apex.

[6] As languages are based on different, usually opposing, epistemological/ideological/social assumptions, the relations between them cannot be settled by empirical research. The relations can only be those of critique. Each specialised language, or rather their sponsors and authors, may accuse the other of failures of omission and/or epistemological/ideological/social inadequacies of the assumptions.

[7] Bourdieu makes a similar point with reference to both the intellectual field (Bourdieu, 1984) and the cultural field (Bourdieu, 1993) where he sees change arising out of new opposing class habituses entering a field. Examples can be found in Sociology (Garfinkle and Parsons) and in Linguistics (Chomsky and Bloomfield), but I doubt whether this explanation of change holds across hierarchical and horizontal knowledge structures or, necessarily, within all horizontal knowledge structures. However, it is possible, in the case of a horizontal knowledge structure where there is an expansion of access to Higher Education under conditions of rapid social change (access and change appear to go together), that new authors and their sponsors of new languages appear, arising out of their own history of such change.

[8] I believe 'gaze' was first introduced by Foucault (1976) in *The Birth of the Clinic*, where it referred to the 'medical gaze' which transformed the body into a positivist object. That specialised knowledge selected and constructed a particular object, on the basis of recognition and realisation procedures internal to the specialisation of that knowledge. Dowling (1997) puts his own spin on Foucault's 'gaze' with a twist of Bernstein (1986, 1996).

> The gaze lights upon external practices which are recontextualised by it. Recontextualising entails the subordination or partial subordination of the

> form of expression and/or contents of practices of one activity to the regulatory principle of another. (Dowling, 1997, p. 136)

> We can say that the gaze of school maths recontextualises shopping practices. In so doing shopping is constituted as a set of virtual practices. It is mythologised.

Gaze, it seems, is the inventor and shaper of the recontextualising process. So what is it?

> 'Gaze' refers to a mechanism which dislocates and relocates, that is which recontextualises ideological expression and content. The result of such recontextualising is to subordinate the recontextualising ideology to the regulatory principles of the recontextualising ideology.' (Dowling, 1997, p. 136)

. . . Clear?
More concrete perhaps?. . .

> That mathematics can be exchanged for shopping is contingent upon mathematics incorporating recognition and realisation principles that facilitate that exchange; the mathematics string for that recall transaction and so forth. That is what I mean by 'gaze'.

But surely, what is meant here is that a specialised discourse must contain features which make 'gaze' possible. However, the conditions for 'gaze' are not what 'gaze' is. It seems to me that 'gaze' is the 'result' of the recontextualising principle, 'a principle which removes (de-locates) a discourse from its substantive practice and context and re-locates that discourse according to its principles of selective re ordering and focusing. In this process of the de-location and the re-location of the original discourse the social basis of its practice including its power relation is removed. In the process of the de- and re-location the original discourse is subject to a transformation which transforms it from an actual practice to a virtual or imaginary subject'. From this point of view, 'gaze' is not a mechanism, but is entailed in the 'outcome' of the recontextualising principle. The 'mechanism' is more likely to be the principle of selection of a theory of instruction. This theory (implicit or explicit) is the means whereby a specialised discourse is pedagogised. The theory of instruction selects both the 'what' of the specialised discourse and the modality of its realisation. It guides the recontextualising process. If the matter is to be pressed further to ask what regulates this process, the answers in Bernstein's terms would be a modality of classification and framing ($\pm$ C^{m} / $\pm$ F^{m}). The recontextualising process translates the theory or instruction into a specific pedagogic form.

This rather lengthy comment is necessary to disentangle the use of 'gaze' in this paper. It is used to refer to the acquirer nor to the discourse to be acquired. The pedagogic discourse to be acquired is constructed by the recontextualising process of the transmitter(s), which creates a specific modality of the specialised knowledge to be transmitted and acquired. The acquirer rarely has access to the transmitter(s) recontextualising principle but this principle is tacitly transmitted and is invisibly active in the acquirer as his/her 'gaze' which enables the acquirer, metaphorically to look at (recognise) and regard, and evaluate (realise) the phenomena of legitimate concern.

[9] See Latour (1979, 1987) and Serres (1995). Latour makes a crucial distinction between science and research and produces a complex description of the invisible mediations of the social process in which research is embedded. He argues that 'truth' emerges out of the relative weight of mediations of opposers and allianers. However, Latour considers that the 'Modern Constitution' has attempted explicit

work of purification by seperating nature from society, while invisibly colluding with society through processes of mediation. Truth is essentially a hybrid. From this point of view, it does not make sense to ask any more where nature leaves off and society begins. Clearly, there are outcomes where the dialectic of mediation is suspended and the battle lines drawn elsewhere. But the outcome must work discursively, i.e. it has to bear not simply the weight of successful mediations, but work retrospectively with respect to the past and prospectively as a springboard to further explorations (see also Nader (1996)). For different views, see Wolpert (1992) and Barnes (1982).

[10] Indeed, the issue of the relevance of the descriptions of a particular specialised language raises the even more controversial question about social change and its nature. What changes, where, to what extent, and with what consequences cause the alleged descriptive inadequacy? In this way, the demise or rise of a language may be bound up with a theory of social change which unfortunately again exists only in the pluralities of specialised languages.

[11] Cooper & Dunne (1998) analysed national curriculum mathematics texts and showed social class differences on those texts which incorporated segments from horizontal discourse in the framing of the question. Middle-class students tended to read these questions as calling for mathematical principles, i.e. they identified these questions as elements of the school's vertical discourse. Whitty *et al.* (1994) showed that when a school subject drew extensively on segments of horizontal discourse, as in the theme 'Personal and Social Education', the students did not regard this subject as 'academic', i.e. as a realisation of vertical discourse. Lave *et al.* (1984), in their classic study, gave an example of the lack of transfer of arithmetic competence from a shopping context to a school context. Thus, the incorporation of segments of horizontal discourse by the school may lead to such contents being defined as non-pedagogic. On the other hand, transfers of apparent competences from horizontal discourse to the vertical discourse of the school may not occur.

[12] Interesting work remains to be done examining the recontextualising of social anthropology, linguistics, history, literature/English to provide a legitimation for what is here called pedagogic populism. A favoured position in the 1970s of the school subject English, now a position strongly held in some quarters in the USA with respect to marginalised social groups.

I should make it quite clear that it is crucial for students to know and to feel that they, the experiences which have shaped them, and their modes of showing are recognised, respected and valued. But this does not mean that this exhausts the pedagogic encounter. For, to see the pedagogic encounter only in terms of a range of potential voices and their relation to each other is to avoid the issue of pedagogy itself, i.e. the appropriate classification and framing modality. When this is considered, institutional, structural and interactional features are integrated in the analysis. Necessary resources (material and symbolic) can be assessed to become the site for challenge of what is, and demands for what should be.

[13] See any issue of the *British Journal of the Sociology of Education* for examples.

[14] An important discussion of the relation between equality and diversity is in Solstad (1997).

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18

Learning

Marilyn Strathern

Common anthropological wisdom has it that fieldwork offers intellectual resources to which the anthropologist returns over and again, a recourse to stretches of time spent with other people. Over more time, this acknowledgement of the input of informants and interlocutors can turn into something else: the work the anthropologist does in synthesizing or analysing fieldwork materials becomes itself a vehicle of 'memory'. In effect, one may have recourse to stretches of thinking or workings-out. So I find myself drawing on understandings developed in one context for use in another.

Here are two examples, presented less as case studies drawn from first-hand encounters than as pieces of analysis. The second I have used to further diverse arguments, notably about the sufficiency of knowledge as the key to informed consent in certain medical settings or, in conflict resolution, about the failure of dialogue meant to allow parties to appreciate the other's point of view, and recently along with the first about the nature of (anthropological) evidence [1] A comment is in order on that activity of revisiting itself. For it holds the promise that in drawing on earlier moments in the unfolding of data one might also be learning lessons. I mean this in the sense of driving home a conclusion or ensuring that one does not throw away hard-won insights, or indeed reviewing and revising them. Another piece of wisdom lies in the conviction that one goes on learning. Possibly.

I have brought the examples together because of a certain resonance between them, and because each offers a way of thinking through the other, a process I see so powerful in anthropology's use of analogies (e.g. Maurer

Source: *Critique of Anthropology*, 30(1) (2010): 107–109.

2005). Indeed it may be that the analytical work in the first example contributed indirectly to my elucidation of the second. How much thinking I was in fact doing is another matter. I suspect I have been less determined about learning than Stephan Feuchtwang.

Two Analytical Moments

The first takes me back to Mt Hagen, Papua New Guinea, in the 1960s. Somewhat eagerly embracing the then Administration's injunction that they should 'sit down' under the law, people went beyond what the Administration would have regarded as law and organized unofficial courts, with self-appointed, invariably male, adjudicators. It was an arena to which women could bring complaints – and to which men could bring women. A surprising number of hearings concerned marital relations, though not so surprising in a situation where marriages sustained alliances between men. Yet women found it hard to get their grievances taken as grievances. Often the (unofficial) courts seemed to be exacerbating rather than remedying the problem. That was because of how they dealt with women as judicial subjects: it was their *feelings* that commanded attention.

There was nothing peculiar to women in this; feelings offered a currency to male politics, massive warfare compensations being made on the grounds of assuaging (men's) anger or grief. The point is not that, when women appeared before the unofficial courts, feelings should be at issue, but how they were treated. A woman's emotional state was taken as a clue to her disposition or intentions (*noman*) (Strathern, 1972: 210). Indeed expressing anger (*popokl*) could lead her to be construed, by herself and others, as a suffering subject. The state of being *popokl* (Strathern, 1968), that is, upset or frustrated because of a grievance against another, evoked the sympathy (*kuemb*) of ancestors, who put a person's body into a suffering condition. Ancestral sympathy could turn sour if persons let their feelings get out of hand or were angry for no good cause, and with lethal consequences, turning *popokl* into an instrument of self-harm.

What the men of the court tried to find out was how a woman felt, in the double sense of her state of emotion and her state of mind (was she, for example, intent on divorce regardless?). For, as I came to work through my materials, it seemed to me that if court adjudicators could discover the woman's intentions, they did not have to dwell on all the 'little' reasons for the way she had acted or the grievances she aired; also unsurprisingly, women's intractability emerged as the root of many troubles.

An appeal to disposition or feeling looked like nothing less than a device to avoid talking about rights and wrongs, including conflicts of interest, and this apparent insight of mine coloured my earlier account. While I fairly quickly came to a conclusion about 'talk' often instigating its own circuit of

interaction (when talk did not 'solve' conflicts but translated the issue into another register). I held on to the notion that there was some kind of trick being perpetrated on women who wanted to air their grievances. Now I am not so sure; recent fieldwork has raised new questions. In any event, to echo Stephan Feuchtwang, that further conclusion was as much judgement about the behaviour of adjudicators as analysis.

On the face of it, the second case seems to be all about mechanisms to help people voice grievances.[2] The grievances came through representations from groups seeking the repatriation of human remains currently being held in museums, at a time when guidelines were being developed to change UK legislation so that museums could release their holdings.

A Working Group on Human Remains (WGHR)[3] at once reported on the issues at stake and was an unofficial adjudicator of them, soliciting commentaries both from scientific experts and from 'communities' who had articulated their protest. The material in question ranged from skeletal pieces to specimens of bone and hair. Scientific interest in such materials was justified by the medical information the remains might yield as well as by promise of information about human evolution; it was feared that with repatriation knowledge would be lost to the world. Statements from the aggrieved, indigenous or First Nations people in Australia, as well as Tasmania, New Zealand and North America, were put side by side with 'the' scientific view. Indeed, the report was constructed in terms of a dialogue between two sides each with its viewpoint.[4]

It was in thinking it all through afterwards that I was struck by the assumption that had guided our discussions, namely that each side would attempt to persuade the other to see the force of its argument. Although scientists were interpreted as experts representing the interests of universal knowledge about the human condition, while the First Nations peoples appeared as representatives of minority interests, expert in local traditions, the final report framed these as comparable viewpoints. Thus in suggesting that one way forward might be independently supervised resolution procedures, it noted they would 'foster a mood of understanding among parties' (DCMS, 2003: 157).

It seemed to me there was a trick of a kind here. Again, I was being judgemental about the aspirations of adjudicators. For making this kind of suggestion (I argued to myself) was to take a third viewpoint, that of the WGHR trying to reach some kind of agreement. The First Nations representatives did not necessarily see any common ground. For many of them, the difference between the two sides could not be reduced to the idea of 'viewpoints', to the idea that through discussion they would appreciate the context from which the scientists were operating, and shift their own viewpoint accordingly, or that informing the WGHR of the context from which they themselves were operating could be the basis of a compromise agreement.[5]

To many of the aggrieved, then, the difference between the two parties meant that they could not be brought into one field of discourse simply because both were talking. To take up some of the Australian Aboriginal representations, the clinching argument was that they (the Aborigines) were related to their ancestors, the scientists were not. They were different kinds of people.[6] The Aborigines' and scientists' relationships to the human remains simply could not be compared. Rather, the former uniquely encompassed the remains within their own field of moral relations. The HRWG, in offering guidelines to agreement, stood beyond the parties on either side; in effect it tried to extend its field of moral judgement to encompass everyone.

The HRWG's position was to be echoed in the way museums came to be involved in subsequent repatriation moves. In one instance, museum trustees gave explicit voice to the importance of respect for the different viewpoints of the parties involved. Their ideal was to reach an identification of shared values through (in their phrase) effective dialogue, while acknowledging that securing common ground and reconciliation might require considerable effort. When it came to adjudication, the museum avoided questioning the (legal) status of the community claims; it said it was moved by the *feelings* that the aggrieved expressed, by their distress and pain as suffering subjects.[7] It thus put the legality of the situation to one side in favour of the museum's recognition of the emotions that its continuing possession raised. These items may have come into the institution through proper routes, but when one looked at how they had been torn from their original location the story could only elicit sympathy for those claiming to be descendants. Such a reaction avoided the implications of competing legalities, just as described for dealings with Aboriginal 'law' elsewhere (Weiner, n.d.). In short, the institution's own emotional response enabled it to come to a decision.

The unofficial court adjudicators in Hagen were also anxious to create a basis for making decisions, but not necessarily because they had respect for or were moved by the aggrieved's emotions to become emotional themselves. When I thought about this as a trick on the part of men, I thought rather that the reason was to avoid giving women too much public space to vent their problems.

Learning or Not Learning?

As I was writing this for the Manchester workshop, there was a news announcement that child psychologists were to be sent to several regions in the UK to help develop people's parenting skills. Why? Because of children's anti-social behaviour. Parents need help in learning how to control their children and overcome discomfort in dealing with them; it is widely assumed that parents should be guiding personal development. Perhaps it

was the same assumption about parental responsibility that led me, earlier that summer, to complain to the mother in one case and father in the other (they came from separate households) of two young Hagen men who – through letter and email – had successfully conned me out of large sums of money. I have to say that the parents' response took me some time to work through. In both cases the reaction was ready and eager agreement with me that his/her son was a cheat – and had cheated the speaker too. We were meant to expostulate together on their nefarious characters, from which we had all suffered, rather than rehearse in the parental generation (as parents and child psychologists would rehearse) issues that lay with the children themselves.

For some time I could only think that the parents were avoiding the facts. Moreover, rather like the HRWG desire to create an open dialogue in order to meet a grievance, I hankered after some 'talking out' of what had happened. The sons came from families I knew extremely well, and I could not just push my grievance away. I would have settled for a private admission that my relationship with the parent was in some way affected by what his/her offspring did. But since that admission never came, instead I embarrassed myself by talking about it too much. Indeed, the more I talked about it the more the seniors showed me sympathy, empathizing with my emotions by saying they had been treated like that too! I think the seniors assumed I would have the same feelings on the matter as they did: if I was angry it was because of the loss of money, not (which is what I thought was my grievance) through hurt at being duped by close acquaintances.

In many other ways, my being in Hagen once more reminded me that I already knew that parents do not construe children as needing to be controlled, however young they are, and however irritating their refusal to help or not coming home at night or being caught thieving. And I already knew that it would be absurd to say the seniors were avoiding responsibility. For that is conventionally defined in quite other terms: it is parents' responsibility to keep the child in good health, and not themselves do stupid things that might endanger it, including incurring ancestral wrath that can result in a sickness or even death. A child can bring a similar fate on itself: when they are thwarted, very little children become *popokl* and invariably against those parental figures for whom they also feel 'sympathy' and whose sympathy in turn they want back (Strathern, 1968: 556–7). So a mother can trick an infant into yielding up the kitchen knife; she is less likely to risk its anger by taking the implement away.

While I talk of ancestors where people these days would talk of God (though God does not work in quite the same way), a hands-off, non-reformist approach to other people's actions remains a strong ethos. What people do tells you the kind of person you – and they – are (Sykes, 2005: 5): you may want to elicit from others certain actions or gestures or feelings towards yourself. But there seems to be no agenda of personal development or behavioural reform. So while there is constant comment on what people

are like and what you can expect from them, it sounds very non-judgemental to English ears. Indeed, it sometimes sounds for all the world as though the evocation of someone's disposition is nothing less than a device to avoid talking about rights and wrongs and conflicts of interest.

And, as we have seen, this is just what I had long analysed in relation to the unofficial courts: appeal to disposition avoids detailed attention to grievance. I was holding on to the notion of some kind of trick being perpetrated on the women who wanted to air their grievances, only now it was I who had been tricked. I had fallen for the conmen's appeal to my emotions and then been tricked again by the ready (mis)interpretation of what I was feeling. At the same time, being back in the field brought back other things I had reflected on. I should have remembered that people live in a world where whole groups may be liable for a killing but no-one is responsible for the killer, or where no-one would see it a duty to show up people's faults in order to change them. Rather, like the mother being careful how she takes something from her child so that it does not commit self-harm, that is, get cross, there is constant concern with how people feel. What counts is knowing that someone is angry insofar as that has effects that must be dealt with.

If it is important to Hagen people to assess how others are feeling, this is because of the effect those feelings will have, both on the person who is aggrieved and on those with or against whom those feelings are expressed.[8] These people do not issue verbal invitations to one another to extend 'respect' for the emotions and dispositions these others may be feeling, as though virtue lay in acknowledgement as such. Empathy is more like a bodily contagion. I knew all this, indeed had written about circuits of emotions (Strathern, 1997), so what I was forgetting was not so much fieldwork 'experience' as my own analytical insights.

The problem was, I suppose, that I had taken my lessons from some parts of my analysis and not others. It seems I hadn't learned from my working-through thirty to forty years earlier the fact that the more women gave public vent to their grievances, the more they were examined on the one issue that affected everyone around them – their feelings and dispositions. And my cultural error was to mobilize the wrong relationship in talking about my feelings to the parents.[9] Parents are probably the most practised of all in being non-judgemental.

Notes

1. Presented under the title 'Old and New Reflections', at a joint Cambridge and LSE workshop, 2007, convenors Liana Chua, Casey High, Timm Lau, published in *How Do We Know? Evidence, Ethnography and the Making of Anthropological Knowledge* (Newcastle: Cambridge Scholars Publishing).
2. Originally presented in a paper called 'Can One Rely on Knowledge?' for a conference on research ethics and informed consent, 'Locating the Field: The Ethnography of Medical Research in Africa', Kenya, 2005, convenor Wenzel Geissler.

3. The group set up by the UK Department of Culture, Media and Sport (DCMS) to reconsider the responsibilities of English and Welsh museum trustees for material entrusted to them. Recommendations in the Human Tissue Act 2004 enabled nine national museums to divest themselves of human remains in their collections. I was a member of the Working Group (2001–3).
4. The dual structure is set out at the beginning of the report, and there is discussion of 'an irreconcilable conflict between "scientists" and "indigenous people"', and 'polarized views', which meant that consensus would be difficult (DCMS, 2003: 29). The last chapter is called 'Resolving the Conflict'.
5. For example, allowing museums to retain portions of the materials for future DNA investigation, or in taking back any remains in question but making them accessible to scientific enquiry.
6. The report gives several verbatim comments, for example: 'It is our *direct* ancestors that are being experimented on' (original emphasis); 'We went to XY Museum to see our ancestors and we were told that we cannot see them. For us it is like going to see somebody in hospital. To us the people in museums are not dead, they are living' (DCMS, 2003: 55).
7. They said they were moved by the situation of the aggrieved, and had a clear sense that the return of the human remains could have an important role for the living community in moving forward from a negative historical experience.
8. The kinds of feelings at issue here are those directed to or from other persons. So we can also say that it is (their) relationship that is the subject of attention. On a reading of relations, where desire for or greed over acquiring relationships can lead to people taking all kinds of auto-destructive actions, see Strathern (1997).
9. This was eventually rectified, my feelings being appropriately re-directed in one of the cases, abandoned in the other.

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VOLUME 1

THEORIES OF LEARNING

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SAGE