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*Part One*  
*Education and knowledge*



# I. The psychogenesis of cognitive development

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The question of cognitive development in the child first of all raises the problem of the development of the cognitive tools that permit the passage from thinking like a child to thinking like an adult. This development should not be regarded as stopping at some point. Adult cognitive tools continue to evolve according to processes that in some ways can be compared to those operating in the cognitive development of the child. But, as Wallon<sup>1</sup> has stressed, the thought processes of the child and those of the adult are not necessarily subject to the same limitations. For Jean Piaget, the differences between children's thinking and that of adults stem from the degree to which general cognitive structures are developed. For other psychologists, these differences stem from the degree of development of more specialized tools of mind (language, concepts, knowledge, etc.). For instance, children are incapable of immediately adopting the adult classification of things and causes. Wallon calls this the "pre-categorical" period of development. The limitations of the child's thought processes are linked to the embryonic nature of his symbolic system. In particular, young children can group objects only according to the way they relate to their own activity or desires of the moment.

The child's inability to conceptualize objects as the adult does explains the fact that the two live in different problematic worlds. When one questions a child, the questions pose problems that the child is not as a rule intellectually prepared to see as such on his own; as Wallon notes, unless he is driven by personal curiosity, the child is unable to place himself in the position of the questioner. The motive he himself has in mind calls forth the affirmation which seems suitable.

This attitude is not confined to children's reasoning, however. The reasoning process supposes a guiding motive which in turn supposes a problem that has meaning for the subject. The subject's logical skills are never sufficient for him to identify the problems that may be posed. Logic merely provides a set of procedures for testing whether a conclu-

1 H. Wallon, *L'Évolution psychologique de l'enfant*, Paris, A. Colin, 1968.

sion is logically consistent with the premises. But it gives no indication as to the direction the subsequent inferences should take in order to reason out the problem.<sup>2</sup>

Cognitive development theories take differentiated views of the respective roles played in the development of cognitive tools by biological maturation factors, by the multiple interactions of the individual with his or her physical and social environments, and by the methodical transmission of knowledge and skills. Views diverge when it comes to the nature of the processes involved. For instance, the descriptive powers of Piaget's formalist interpretation far outstrip its explanatory powers.

## Jean Piaget and the adaptive construction of cognitive structures

For Piaget the development of the individual's cognitive capacities is driven by interaction with the environment through the self-regulating transformation of his cognitive structures. The model of intellectual development underpinning Piaget's theoretical frame places the genesis of intelligence within the formal continuity of the development of the elementary processes of biological adaptation. Piaget thus extrapolates the laws of reason from the processes of adaptation and biological equilibration. He goes about this using an abstract conception of environment that encompasses the physical, social and human environments. The *object*, a key notion in Piaget's theory, represents not only things and persons, but also abstract objects in the mind. The concept of object serves as the starting point for the generalization of the individual's relations with an outside world. Another key concept in Piaget's theory is the *scheme*, which is the counterpart of structure in biology. The scheme of an action is defined as the structured set of features that can be generalized from this action, in other words, those which enable a person to repeat the same action or to apply it to new contents. The scheme can be simple or unitary, like the schemes that underpin pre-

2 J.-B. Grize and B. Matalon (eds), *Introduction à une étude expérimentale et formelle du raisonnement naturel*, Paris, Presses Universitaires de France, 1962, p. 40.



dictable behaviors such as reflexes. It can also correspond to an overall system involving a set of coordinated, interdependent processes, like those underlying a person's understanding of the number system. This unitary conception of cognitive development places the formation of cognitive schemes and that of sensorimotor schemes in the same line of development. The first derive from the second by a process of internalization. When the diverse categories of action schemes are integrated into a coherent system of logic, they enable the person to carry out logical operations such as additions, inferences and so forth. This overall conception of cognitive development is by no means accepted by the whole scientific community.

Piaget's ambition from the outset was to apply the findings of his research in genetic psychology to epistemological questions. His goal, as he describes it, was to understand this higher form of adaptation, in the biological sense, that is represented by scientific thinking. Scientific thought calls for, at least in part, the use of formal thought, a form of thinking that works with subjects defined by relationships. The separation between form and content that defines the shift from manipulating objects to manipulating the relations between the objects is central to Piaget's theory of mental development. This manipulation is made possible first of all by the formation of the Kantian categories of mind. In much of his work, Piaget strove to understand how children form such notions as space, time, cause, but also movement, physical quantity, logical class structures, etc. He extended the cognitive-development model underpinning the formation of such notions to the formation of all objects of knowledge. Very roughly speaking, Piaget's constructivism, which he described as dialectical, sees knowledge as the outcome of processes by which the subject develops his ability to gather knowledge through cognitive interaction with the object. The subject's knowledge emerges from his manipulation of objects based on cognitive structures having logical-mathematical properties, which, for Piaget, are specific to the rational subject. Thinking is based on structures whose characteristics can be described in terms of logic not because thought mirrors logic but on the contrary because logic mirrors thought.<sup>3</sup>

3 Cf. J. Piaget, *Structuralism*, transl. C. Maschler, New York, Basic Books, 1970; translated from the French: *Le Structuralisme*, Paris, Presses Universitaires de France, 1968, p. 47

Piaget's model for the genesis of intelligence presents children's thinking as qualitatively different from that of adults for reasons that he formally justifies by the concept of structure. These qualitative differences stem from the all-encompassing character of the cognitive structures he believed governed intellectual activity. Before the age of seven, the child is convinced, for example, that the same quantity of liquid poured into different recipients changes volume according to the recipient. In reality, the child focuses on limited amounts of information. He grasps the states of the objects, but not their transformations. His concepts are relatively non-differentiated. He is incapable of developing the forms of thought that underpin the logical manipulation of facts and data he experiences. For Piaget, before the child reaches the age at which he is capable of carrying out "formal operations", his thinking relies on action schemes that always "focus on a specific state of the object and from a subject's particular point of view".<sup>4</sup> That is the meaning of the notion of "egocentric" thinking (nothing to do with the way the word is used in everyday language), which results from an incapacity to see the same object from different points of view. For the child, the world is a set of unconnected images. "Self" and environment are not separate entities. Yet the mind cannot really operate without permanent objects. Such permanence, according to Piaget, requires a process of *decentration*. From this standpoint, cognitive development proceeds from this separation between self and environment. It is not based on a simple assimilation of knowledge and experience, but on continuous rearrangements and corrections of previous points of view. The concept of decentration very roughly describes the general process of cognitive development, marking the transition of the diverse operations of mind to higher structures and ultimately to the capacity to manipulate abstract objects. For the child, the real prevails over the possible, while for the adolescent the opposite is true. The adolescent shows the ability to reason on propositions.

According to Piaget, cognitive structures go through four main qualitative stages. These are associated with periods of time that should not be regarded as rigid or determined. The *sensorimotor* stage covers

4 Cf. J. Piaget (1947), *The Psychology of Intelligence*, transl. M. Percy and Berlyne, London, Routledge and Kegan Paul, 1950; translated from the French: *La Psychologie de l'intelligence*, Paris, A. Colin, 1967, p. 152.

the period from birth to 18 or 24 months. During this time, the child's "knowledge" is limited to action schemes. It is not until the second, or *preoperational*, stage, between the ages of 2 and 7 or 8, that the child becomes capable of forming mental conceptions of objects separate from his own action on these objects. His mental structures now enable him to know that objects exist independently of any immediate perception he may have of them. The *concrete operational* stage, which comes to a close when the child is around 11 or 12, is characterized by the development of a system of mental operations that enable the child to represent objects but also their manipulation. In the last stage, that of *formal operations*, the adolescent has acquired the cognitive structures that enable him to think "thoughts", in other words abstract objects.<sup>5</sup>

These development stages correspond to a mental evolution based on individual experiences of the outside physical and social world. Each individual tends to repeat these experiences for himself. These "tools" of mind have a universal scope, like Immanuel Kant's categories of mind. The structured forms they constitute are ranked by filiation from less to more abstract. Natural thought is not based on directly perceived contents, on the one hand, and on forms provided by language alone or by hypothetical-deductive thought alone, on the other. According to Piaget, thought is organized into an unbroken hierarchy such that the cognitive structures of one level always act as forms for lower-level structures and as contents for higher-level structures. For instance, concrete operational structures are forms with regard to sensorimotor schemes

5 If "general cognitive structures" or "cognitive operations" are acquired automatically through maturation and only influenced in a general way by experience, we should see clear models of cognitive aptitudes running from infancy to adulthood. If, on the other hand, cognitive operations depend, as some argue, on the formation of organized structures of specific concepts, we can expect to find a high degree of variability in individual performances, among persons of the same age as well as in the same individual among different subjects. Now a six- or eight-year-old child is capable of abstract thought provided he has adequately acquired the necessary secondary concepts. Since all learning depends to a certain extent on time, most children are not capable of engaging in abstract reasoning before the age of eleven or twelve, and likewise, adults cannot always develop abstract reasoning in areas for which they lack the appropriate abstract concepts. Cf. J.D. Novak, *A Theory of Education*, Ithaca and London, Cornell University Press, 1977, p. 122.

but contents with respect to hypothetical-deductive operational structures.<sup>6</sup>

The evolution of cognitive capacities goes together with a dialectical progression between the processes of *assimilation* and *accommodation*, which are central to Piaget's conception of the genesis of intelligence. Assimilation refers to the organism's ability to understand new situations and problems using its pre-existing stock of cognitive processes. It corresponds to an "incorporation" of objects into the behavior schemes. Accommodation refers to a reorganization and a development of the individual's cognitive processes which enable him to grasp problems that were previously too complex for him. This process of adaptation corresponds to the environment's action on the organism. Or to be more accurate, it is an adaptation of the action schemes that occurs as a consequence of the subject's interaction with his environment. Development of the mind is stimulated and regulated, according to Piaget, in a general manner by an inner search for equilibrium. Once this equilibrium is achieved, it reflects the reversibility of the ongoing mental operations, and this reversibility explains the decentration of the knowing subject with respect to the object of knowledge. Decentration enables the subject to relate to the object from the outside, at a distance. "Object" is taken here in its broadest sense, as an object of knowledge; it is amenable to every degree of abstraction.

## Lev Vygotsky and social mediation of cognitive processes

Vygotsky's work is grounded in the fundamental observation that the "higher mental functions", which are specific to humans, are the products of man's social activity. The Russian psychologist opposed the dominant position in Soviet psychology of behaviorist reflexology, based on the Pavlovian model, and argued instead for the specificity of hu-

6 E.-W. Beth and J. Piaget, *Mathematical Epistemology and Psychology*, transl. W. Mays, Dordrecht, Holland, D. Reidel, 1966; translated from the French: *Épistémologie mathématique et psychologie, Essai sur les relations entre la logique formelle et la pensée réelle*, Paris, Presses Universitaires de France, 1961, p. 264.

man psychology with respect to that of animals, defining it as science of the conscious mind. Vygotsky rejects the naturalistic interpretations of human intellectual development because the biological cognitive processes were supplanted, in the course of this same development, by the use of intellectual tools that acted as mediators of thought. It is precisely this use, which is linked to man's social activity, which founds the specifically human form of conscious thought.

Biological adaptive mechanisms form the general substratum of all mental activities, but they by no means determine their development. While evolution prepared us specifically to acquire certain basic skills, these skills do not constitute the models for all cognitive development. Quite the contrary: the way forms of knowledge associated with "higher mental functions" are acquired is at odds with the biological model.

Vygotsky himself stresses the need to distinguish two lines of development. The first concerns the development of the elementary functions, which are of biological origin. The second concerns the development of the higher mental functions, which are of social origin. In this theory, cognitive development arises from the relationship between these two lines of development, which interact with each other in a dialectical fashion. Biological processes regulate the development of the elementary mental functions: memory, perception and certain forms of practical intelligence that grow out of animal intelligence. Social and cultural processes, on the other hand, regulate the acquisition of language and other systems of signs, as well as the development of the higher mental functions such as voluntary attention, generalization, abstraction, etc. The differences between the elementary and the higher mental functions rest on the key notion of *mediation*. The development of mediating cognitive tools conditions the process of the intellectualization of thought that is at the origin of truly human mental activity. While the elementary functions develop in response to direct stimulation from the environment, the higher mental functions are mediated in part by conscious thought. This mediation, which involves a process of abstracting from the immediate environment, increases action potentialities by augmenting the universality of the action. One essential feature of this mediation is that it depends on socially elaborated tools of thought.

In forming tools of mind for mediating thought, the cognitive functions involved first develop as an outside activity, and are later reconstructed inside the individual.

Every function in the child's cultural development appears twice: first on the social level, and later on the individual level; first, *between* people (*interpsychological*), and then *inside* the child (*intrapsychological*). This applies equally to voluntary action, to logical memory, and to the formation of concepts. All the higher functions originate as actual relations between human individuals.<sup>7</sup>

Internalization is the internal reconstruction of an external operation. The idea of internalization refers here to a dynamic process of developing cognitive tools which rests on the shift from an external activity to an internal activity. The idea reflects this shift, but by no means refers to a process of cognitive conditioning; on the contrary, it designates the acquisition of faculties of reflection. For instance, the child begins counting in his head, using his "logical memory" by calling on internal signs. In terms of language development, this is the final stage. Certain elements of interpersonal as well as of egocentric speech, when "internalized", serve as a basis for silent inner speech. Thus thought proper springs from the "internalization" of language, which is characterized by the transition from the child's egocentric language to internal dialogue. While the individual's acquisition of socially elaborated tools of mind interacts with his primary cognitive functions, it also breaks with their development. It corresponds to a genuine "rearmament" of the mind:

In the process of development, the child not only matures, but also *becomes re-armed*. Precisely this "rearmament" causes the greatest development and change that we observe in the child as he transforms into a cultural adult.<sup>8</sup>

Vygotsky distinguishes two principal kinds of memory. One is natural memory, very close to perception and immediate experience, the result of the direct influence of external stimuli on human beings. Memory and thought are closely linked in the young child, for whom "thinking" means "remembering". His spontaneous notions summon up the concrete memories with which these are associated. In the adolescent, on the contrary, "remembering" means "thinking", for this act is based on the creation of logical relations. This evolution is linked to the develop-

7 L. Vygotsky (1933–1935), *Mind in Society. The Development of Higher Psychological Processes*, Cambridge MA, Harvard University Press, 1978, p. 57.

8 L. Vygotsky and A.-R. Luria (1930), *Studies on the History of Behavior, Ape, Primitive, and Child*, Hillsdale, Lawrence Erlbaum Associates, 1993, p. 168.

ment of an elaborated form of memory based on auxiliary cognitive means. When someone ties a knot in his handkerchief, he is constructing a remembering process using an external object to remind him of something. In order to observe subjects' skill in forming internal mnemonic tools, the psychologist, for example, asks children to remember a list of words using pictures laid out in front of them. Four- or five-year-old children usually refuse to use the pictures as memory aids. They are incapable of a spontaneously "cultural" use of their memory. Six- or seven-year-olds go along with the experiment if they can manage to find simple connections between the words and the images proposed. These connections can be based on associations (tea and cup), on functional relations (knife and melon) or on resemblance (bird and airplane). If the pictures and the words cannot be connected using earlier experience of the things they refer to, then the child is unable to use the images as auxiliary means of memory. Ten- and eleven-year-olds show very different abilities. They are able to actively associate pictures and words, thus creating a new situation (for instance, the word "wish" is associated with an airplane; the child explains this way of remembering the word by his desire to fly on a plane). The difference between the child's memory and that of the adult therefore cannot be reduced to a biological development of cognitive abilities. It is instead based on the "cultural" acquisition of means of remembering that greatly increase the individual's natural potential. In the course of his development, the child's natural memory is transformed into a "cultural" memory. Remembering, based on the use of signs, is regarded as a prime example of modes of cultural behavior, in other words of the kinds of behavior a child will use to solve internal problems using external objects. School in particular provides the individual with a great number of sophisticated and complex auxiliary methods of memorization.

Vygotsky interprets the mediating role of play in behavioral development according to an analysis that is in many ways comparable in this regard to George Mead's. Play is based on an imaginary situation,<sup>9</sup> but above all it is predicated on rules of behavior that are, in their least elaborated forms, implicit. When little girls pretend, for instance, that they are sisters, they try to behave as they imagine sisters would behave.

9 L. Vygotsky (1933–1935), *Mind in Society*, chap. 7, pp. 92–104.

This corresponds to a behavior that is altogether different from the natural behavior of real sisters. In the little girls' game of sisters, the children strive to demonstrate their sisterhood, and only those actions that fit into this framework are allowed. What goes unnoticed in everyday life becomes a rule of behavior in the game. These implicit rules of behavior are based on events remembered by the children. Thus the possibilities of action of the child at play are constrained, first of all implicitly, then later as the child develops socially, explicitly. Games calling upon tacit imagination and explicit rules supplant forms of play calling on manifest imagination and implicit rules. According to Vygotsky, the role of play in development is as follows: early childhood is characterized by fusion between action patterns and perception. Perception stimulates activity. The young child's activity is thus constrained by his immediate environment. By contrast, play offers the child conditions in which he can act independently of what he sees. In play, with the invention of imaginary situations, the child becomes able to step back from his immediate environment. He acts not with respect to what he perceives but with respect to the meaning he ascribes to the situation and in so doing shakes off the situational constraints. The action, being a response to implicit rules, is determined by ideas and not by the objects themselves. Furthermore, in play, the child counters his immediate urges, he derives his pleasure from subordinating himself to the rule. The essence of play, Vygotsky writes, is a rule that has become a desire. Play is an important stage in the constitution of mediated activities, which underpin the development of will and consciousness.

In play a child always behaves beyond his average age, above his daily behavior; in play it is as though he were a head taller than himself. As in the focus of a magnifying glass, play contains all developmental tendencies in a condensed form and is itself a major source of development.<sup>10</sup>

In the course of this development, which associates mastery of an activity with its conscious performance, language is a key mediator. Cognitive development, according to Vygotsky's reasoning, depends on the control and regulation of cognitive processes on a metacognitive level.<sup>11</sup>

10 L. Vygotsky (1933–1935), *Mind in Society*, pp. 101–102.

11 This is the specificity of the historical-cultural school founded by Vygotsky.



This line of cognitive development is opposed to Piaget's, in which development is driven by an internal process of self-equilibration. For Piaget, cognitive tools, which play the mediating role analyzed by Vygotsky, rest on a construction that is largely autonomous and, from a functional standpoint, largely endogenous to individual cognitive structures. The construction of these structures depends on the individual's relations with the outside world, on his interactions with his physical and social environment. But it is conditioned by the lower structures: the abstract proceeds from the concrete.<sup>12</sup> For Vygotsky, human cognitive development properly speaking is externally driven. The higher-level functions are constructed using signs and tools that are socially transmitted. In this sense, there is a rupture between the development of the elementary mental functions and that of the higher mental functions. This discontinuity stems from a dialectical relationship between the respective developments of the lower cognitive processes and the higher cognitive processes. One of the reasons for the conflict between Vygotsky's theory and that of Piaget has to do with what Vygotsky saw as an artificial separation between forms, or structures, of thought and its content:

[T]he evolution of the thought content is always considered to be a process of cultural development which, first and foremost, is conditioned by historical and social factors, whereas development of the form is normally looked upon as a biological

- 12 Vygotsky, who died prematurely, refers in his criticism of Piaget to his early work, in particular, J. Piaget, *The Language and Thought of the Child*, transl. M. Gabain, London, Routledge and Kegan Paul, 1926; translated from the French: *Le Langage et la pensée chez l'enfant*, Genève, Delachaux & Niestlé, 1923; J. Piaget, *Judgment and Reasoning in the Child*, transl. M. Warden, New York, Harcourt, Brace and World, 1926; translated from the French: *Le Jugement et le raisonnement chez l'enfant*, Genève, Delachaux & Niestlé, 1924; and J. Piaget, *The Child's Conception of the World*, transl. J. and A. Tomlinson, New York, Harcourt, Brace and World, 1929; translated from the French: *La Représentation du monde chez l'enfant*, Paris, F. Alcan, 1926. Vygotsky misinterpreted this development process in which the adult intellectual constructs are redeveloped by the individual. He presented Piaget's view of learning difficulties in school as based on an antagonism between formal learning and development (for which Piaget would reproach him when he read his critique twenty-five years later). Nevertheless, even had Vygotsky's interpretation of Piaget been correct, his criticism would be no less pertinent, since he reproaches Piaget for having differentiated between spontaneous and non-spontaneous concepts, but for having observed only the development of spontaneous concepts and for having made them the condition for formal learning.

process conditioned by the level of the child's organic maturation and parallel to the increase in the weight of the brain. When we talk about the content of the thinking process and the changes which it undergoes, we have in mind a historically variable, socially conditioned quantity which originates in the process of cultural development; but when we are discussing the forms of thinking and their dynamics, because of the misunderstandings arising from traditional psychology, we usually mean either metaphysically inert psychic functions or biologically conditioned, organically generated forms of activity.<sup>13</sup>

The movement followed by concept formation in the child and in the adolescent is not a process of abstraction based on the organization of cognitive structures, rather it is a process in which abstract forms and concrete thought interact. Children's notions develop from a non-differentiated state to a differentiated state. The child learns the word "flower" before learning the names of the different kinds of flowers. However, although the child uses the words of adult language, he gives these words functionally different contents. When the child uses abstract words, he is thinking of the ideas and objects these words denote in a concrete manner. For the very young child, concepts are connected first of all with syncretic images and with associations. Later, for the pre-schooler, concepts develop as "complexes", which, like family names, group together objects that retain their individual character. The objects combined into complexes do not possess any specific common feature as is the case with true concepts. They refer to different kinds of links (associations of ideas, functional connections, etc.). Complexes are characterized by the total absence of hierarchical connections or hierarchical relations between the elements and their respective attributes. Complexes give rise to pseudoconcepts. Pseudoconcepts are based on a real generalization, that is to say on collections of objects grouped together on the basis of a shared feature. Nevertheless they are closer in nature to complexes than to concepts. Although they can refer to the same concrete contents and, at least apparently, can play the same functional role as concepts, they do not have the systematic character of concepts. Pseudoconcepts, which are associated with the most general form of thinking in childhood, are transformed into concepts in adolescence. Processes like problem-solving,

13 L. Vygotsky, in R. Veer and J. Valsiner, *The Vygotsky Reader*, Oxford, Blackwell, 1994, chap. 9: "Thinking and concept formation in adolescence", p. 197.

which occupy the intellectual activity of adolescents, call upon such a transformation.

In the course of development, there also occurs, according to Vygotsky, a retroactive organization of the spontaneous concepts stemming from the structuring of the scientific concepts encountered in formal education.<sup>14</sup> On the one hand, the acquisition and development of scientific concepts is based on everyday concepts and, on the other hand, mastery of scientific concepts entails an elevation of the everyday-concepts level and their reorganization under the influence of this mastery.

It should be added that the scientific concept is, by nature, always mediated by other concepts. It is part and parcel of a system of concepts. It is defined in regard both to its relationship with reality and to its relationship with other concepts. Thus the key feature determining the difference between “everyday” concepts and “scientific” concepts is the absence or the existence of a system. With the system comes the possibility of relations between concepts, of relations between concepts and objects mediated by their relations with other concepts and, in a general fashion, of other relations between concepts and objects: supra-empirical links become possible in concepts. Depending on the types of objects being manipulated, the reasoning involved can be located on a continuum ranging from natural to formal reasoning. The more “naive” the theory, the more specific the object it deals with, since not all objects can be “put into classes”.<sup>15</sup>

The child has a hard time becoming aware of his spontaneous concepts, giving them a verbal definition, using them voluntarily in complex logical relationships. According to Vygotsky, the power of scientific concepts resides precisely in their higher properties: their conscious and voluntary character, whereas this is the weak point of everyday concepts. By contrast, the power of everyday concepts can be seen in their concrete spontaneous application, the meaning of which is situationally determined in the sphere of practical experience. It is only

14 For scientific concepts, see L. Vygotsky (1934), *Thought and language*, translation newly revised and edited by A. Kozulin, Cambridge MA, London, the MIT Press, 1986. In French-language publications, the Russian philosopher’s name is also transcribed “Vygotski”.

15 See J.-B. Grize, *Langage naturel et communication*, Paris, Presses Universitaires de France, 1996.

when the concept is included in a system that it can become voluntary and conscious because consciousness supposes the formation of a higher-level concept that includes the concept as a special case. Consciousness therefore supposes the existence of a series of subordinate concepts and so on. The need to avoid contradictions reveals in particular a hierarchical organization of concepts such that, in the event that two judgements contradict each other, they can be considered as special cases of a single general concept, as though two conflicting judgements had been delivered on the same case. In Vygotsky's theory, the influence of systems of "non-spontaneous" concepts transmitted through formal education on the child's cognitive development gives rise primarily to the general reorganization of his spontaneous concepts. This general reorganization is crucial for becoming conscious of concepts and for carrying out reasoning processes. Development of the child's intellectual tools produces the effects that can be compared with those Piaget describes in terms of the notion of decentration.

## II. The sociogenesis of cognitive development

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Analysis of the social factors involved in cognitive development grew in particular out of the study of the evolution of human thought over time. Lucien Lévy-Bruhl tried to show that “primitive” thought forms were qualitatively different from those of “civilized” thought. His conceptions enriched our understanding of the development of the human mind because they tried to explain, in the words of Auguste Comte, whom he summed up as follows: “not humanity through man but, on the contrary, man through humanity”.<sup>1</sup>

Lévy-Bruhl used the adjective “prelogical” to describe the mentality of primitive man because, in his view, it did not adhere exclusively to the laws of logic. He explained the reasoning process characteristic of primitive thought in terms of a “law of participation”, meaning that, for the primitive man, the same thing can partake of two modes of being that are incompatible from the standpoint of civilized thought. According to his thesis, this particularity leaves the primitive mentality indifferent to the principle of non-contradiction and would explain the purported absence in the primitive man of a dividing line between the natural and the supernatural. However, as certain critics have pointed out, primitive man would not have lasted one day if he had reasoned as Lévy-Bruhl supposed.<sup>2</sup> Even Lévy-Bruhl himself rejected the application of the adjective “prelogical” to the primitive mentality (1910).

According to Piaget, Lévy-Bruhl’s point of view needs completing in order to elucidate the paradox of the intellectual situation of people in primitive societies. They would seem to be prelogical as far as their representations of the world go, but highly intelligent in their actions. Their technical skill, their grasp of practical relations (including spatial orientation) would seem to be incommensurate with their apparent deductive

- 1 Cf. L. Lévy-Bruhl (1900), *Philosophy of Auguste Comte*, New York, Augustus M. Kelley Publishers, 2003 (rep. of 1903 edition), translated from the french *La Philosophie d’Auguste Comte*, Paris, Alcan, 1900.
- 2 L. Vygotsky and A.-R. Luria (1930), *Studies on the History of Behavior, Ape, Primitive, and Child*, transl. V. I. Golod and J.E. Knox, Hillsdale, Lawrence Erlbaum Associates, 1993, p. 85.

or reflective capacities. To explain these different forms of aptitude, Piaget opposed interactions based on verbal communication and the oral transmission of established truths to those based on tasks requiring the transmission of procedures. It is this second type of interactions that he believes explains the primitive man's practical intelligence. They suppose "an effective or actual cooperation as opposed to the simple submission of the mind".<sup>3</sup> According to Piaget, in the historical transformation of mentalities as in individual mental development, the structural stages of logic are linked to a certain mode of cooperation or social interaction. Their succession represents "the progress of technical or intellectual socialization itself", since social and logical aspects are inseparable.

According to Émile Durkheim, the fact that primitive societies develop beliefs about entities which do not fall into the domain of perception is the true sign that they use a form of logical thought which prefigures scientific thinking. The development of logical thought, like scientific thought, rests on the ability to make use of non-observable entities that are in fact the instruments of cognitive mediation. These cognitive tools make it possible to establish connections between phenomena that do not fall under the heading of immediate experience. More generally, the development of conceptual thought, which plays more than a simple classificatory role, underpins the development of logical thought. Conceptual thought leads to the ability to define permanent entities (apprehended by concepts) based on something understood as being variable (reality as it may appear independently of its comprehension by conceptual thought). Reasoning processes depend on the conceptual corpus on which they are based, but the thinking process does not undergo a fundamental change of nature as it develops. It is likely that the initial vocation of thought categories was to permit communication between minds and that they were the age-old outcome of social interactions. They are thought originally to have depended on the organization, the religious, moral and economic institutions, and so forth, of the group.<sup>4</sup> As Robin Horton notes, Durkheim

3 J. Piaget, *Études sociologiques*, Genève, Droz, 1965, pp. 89–90. Also published in the *Journal of Research in Science Teaching*, vol. 3, n° 3, 1965.

4 É. Durkheim and M. Mauss, *Primitive classification*, transl. R. Needham, Chicago, University of Chicago Press, 1967; translated from the French "De quelques formes primitives de classifications, contribution à l'étude des représentations collectives", *L'Année sociologique*, 1901, pp. 1–72.

may have been in a certain sense a “positivist”, but his main concern in *The Elementary Forms of Religious Life* was to find a viable alternative to the positivist conception of human intellectual activity.<sup>5</sup> Nevertheless, Durkheim did not regard socially elaborated categories of thought as subjective constructions. In particular, he believed that their organization tended in time to detach itself from the organization of society and to become autonomous and universal:

The categories cease to be regarded as primary and unanalyzable facts; and yet they remain of such complexity that analyses as simplistic as those with which empiricism contented itself cannot possibly be right. No longer do they appear as very simple notions that anyone can sift from his personal observations, and that popular imagination unfortunately complicated; quite the contrary, they appear as ingenious instruments of thought, which human groups have painstakingly forged over centuries, and in which they have amassed the best of their intellectual capital.<sup>6</sup>

The logical roles of the intellectual tools developed by societies have been analyzed with regard to mythic thought in particular. In their work on contradiction, the logician Jean-Blaise Grize and his collaborators emphasize the role played by “pairs” as an elementary thought structure: “What can be observed in the beginning is the existence of paired elements [...] Every term identifiable by thought, thinkable, requires a complementary term with respect to which it is differentiated and to which it can be opposed.”<sup>7</sup> The importance of these bipolar systems has been shown by historians, ethnologists and anthropologists, analyzing for example the role played by the mythic representation of the universe in logical thought. For instance, in Homeric epics, antitheses are constructed from polarized expressions: mortals and immortals, slaves and freemen, land and sea, speech and action, cunning and strength, and so on. Greek culture is rich in antithetical notions, out of which it has grown: *ubris* and *sophrosune*, *Mnemmosyne* and *Lethe*, *Prometheus* and *Epimetheus*. Chinese thought opposes numerous notions that refer to the primordial opposition between *yin*, “the dark side, the shadows”, and *yang*,

5 R. Horton, “Lévy-Bruhl, Durkheim and the Scientific Revolution”, in R. Horton and R. Finnegan, *Modes of Thought*, London, Faber, 1973, p. 297.

6 É. Durkheim (1912), *The Elementary Forms of Religious Life*, transl. by Karen E. Fields, New York, The Free Press, 1995, p. 18; translated from the French: *Les Formes élémentaires de la vie religieuse*, Paris, Presses Universitaires de France, 1985.

7 J.-B. Grize and G. Piérait-Le Bonniec, *La Contradiction, essai sur les opérations de la pensée*, Paris, Presses Universitaires de France, 1985, p. 41.

“the light side, the sun”. These opposing relations can take complex forms. In the South American Borrero culture, the myths about honey and tobacco can place these products either on axes relating to their natural properties or on axes relating to their uses. The investigations show in particular, as Grize writes, that there is never a contradiction between things, only in the way the things are represented. The Story of Asdiwal, recorded by Claude Lévi-Strauss, uses an identification between the salmon and man. This identification is contradictory, the logician points out, only if one sees, in the assimilation of the salmon to man, the establishment of a relation of equivalence, having the property of symmetry that is ascribed to it by mathematical logic. But in this myth one can just as easily see the very subtle thought process which makes it possible to adopt different points of view on things. The evolution of the relations of opposition goes hand in hand with social development and the use of speech as a weapon in the confrontation of arguments. It is the question of “what qualifies as truth” that makes the question of contradiction a primordial theme of reflection. These investigations developed “along two paths, depending on whether the stress was laid on the need to avoid contradiction which invalidates the proof, or on the need to overcome the oppositions which render the thinking process sterile”;

Western thought grew out of Aristotelian logic, which reasons on unchanging objects as the necessary condition for the establishment of proof; Chinese thought never considers objects taken out of time and space, it seeks truth in the infinite dialogue through which all possible aspects of the object could be envisaged.<sup>8</sup>

Contrary to mathematical logic, everyday thinking does not separate form and matter in an absolute way. The investigations carried out on subjects’ speech activities show that their categories are never “clear-cut”, their object-classes are not sets in the mathematical sense of the word. “Opposites” (French: *contraires*), which do not demand a definitive choice between the terms present as opposed to “contradictory terms” (French: *contradictaires*), play a fundamental role. In this case, contradiction acts as a stimulant to thought, opening up the prospect of going further.

Vygotsky’s ambition for a Marxist psychology was to build a theory of intellectual development that would account for the historical evolution of the conditions of human consciousness. But he by no means

8 J.-B. Grize and G. Piéraud-Le Bonniec, *La Contradiction*, p. 19.



subscribed to the Soviet Marxist dogma that saw man as a “product of history and circumstances”.<sup>9</sup> According to Vygotsky, this evolution depends on the intellectual tools transmitted by culture. Nevertheless, while society “surpasses” the individual by generating cultural forms that stem from life in society, at the same time it offers him the means to go beyond the bounds of history and his own circumstances. The tools of cognitive mediation with which society provides the individual undergo a historical evolution that depends on the cumulative character of the experiences they make possible. But the crucial point, which characterizes humankind as such whatever its stage of development, bears on the social constitution of tools for mediating behavior. In this sense, all cultures have higher forms of behavior and thought that underpin rational thinking. All cultures possess the most basic system of mediation there is: language. Vygotsky proposes an interpretation of Lévy-Bruhl’s “law of participation” based on the character of the symbolic system that mediates thought processes in the primitive man. According to this interpretation, the words in his language are organized for the most part into “complexes”, as he defines them, which, like family names, preserve the individuality, the uniqueness of the elements of the group. Lévy-Bruhl saw the propensity of primitive thought to establish heterogeneous connections lying outside logical thought. Vygotsky saw it as a logical thinking process based on connections that allowed the same object to exist in different complexes, in other words to be an element of different families that form while preserving the individuality of their members. The degree to which reasoning processes correspond to the canons of logic depends, according to the various studies carried out on this subject, on the degree of elaboration of the objects of thought on which the reasoning processes are based, and not on any inborn capacity for logic. Further research on these questions shows that the apparent irrationality of the subjects observed can be explained by the difference in the skills, habits and more generally *cognitive dispositions* between the observer and the subjects.

The studies carried out in Uzbekistan by Alexander Luria, Vygotsky’s student and collaborator, in conjunction with a group of fellow Russian psychologists, show that individuals who have never gone to school,

9 See J. Bruner, in L. Vygotsky (1933–35), *Mind in Society, The Development of Higher Psychological Processes*, Cambridge MA, Harvard University Press, 1978, Foreword to the English edition.

and are therefore functionally illiterate, appear to have practically no aptitude for abstract reasoning. The explanation advanced by these researchers was based on the specificity of the conceptual tools used in non-spontaneous thought: classification into categories supposes fully fledged verbal and logical thought processes. These processes exploit the capacity of language for abstraction and generalization in order to “designate” features and “subsume” objects into a general category. Such representations are as a rule fairly flexible; subjects switch easily from one feature to another and construct valid categories. They classify objects by kind (animals, flowers, tools), material (wood, metal, glass), size (big, small) and color (light, dark), or by some other property. Thus, as Luria points out, the ability to pass freely from one category to another is one of the principal characteristics of “abstract thought” or of the “categorical behavior” that is crucial to it.<sup>10</sup>

For illiterate subjects, the experiments show that all attempts to suggest abstract groupings of objects fail. The subjects do not retain the generic terms or else regard them as irrelevant or of no use for classifying the objects. Their groupings are based on concrete relationships, functionally linked with situations, and not on abstract operations that call on the generalizing function of language.<sup>11</sup> These initial results might have suggested a simple development of concrete thought, in Piaget’s sense, by the subjects. But the subjects show different degrees of “logical aptitudes” according to the category of syllogisms they are presented with. Illiterate subjects are highly skillful at manipulating syllogisms whose content relates to notions and relations based on personal experience. However the same subjects are incapable of manipulating the syllogisms most familiar to the educated observer, those based on terms and systems of concepts that make no sense to them. The conditions of social life are at the origin of the systems of mediation out of which human thinking has grown. It is with these conditions that the problems most likely to make sense for people and the cognitive tools underpinning the development of abstract thinking are connected. Luria’s re-

10 A.-R. Luria, *Cognitive Development. Its Cultural and Social Foundations*, Cambridge MA, Harvard University Press, 1976.

11 Cf. R. Hasan, “On Social Conditions for Semiotic Mediation: The Genesis of Mind in Society”, in A.-R. Sadovnik (ed.), *Knowledge & Pedagogy*, Norwood, Ablex Publishing Corp., 1995, pp. 171–196.

search in Uzbekistan was aimed at evaluating the effects on cognitive thinking of a rapid and fundamental change in the social structures and in the economic and cultural system following the socialist revolution. A network of schools had been set up in regions where the population had been totally illiterate for centuries. The researchers were able to show the development of these abilities in subjects whose earlier activities had been confined to essentially practical tasks. After a short exposure to formal education, they showed a tendency to use both “modes” of generalization – practical and theoretical – though the first still predominated. In acquiring the rudiments of reading and writing, the subjects had been led to break down their oral language into its component parts and, using these, to put together a system of symbols. The concept of number had formerly meant something only in connection with their practical activities. It now became an abstract entity to be learned for itself. As a result, the subjects had opened up not only to new areas of knowledge, but also to new action motives. Those who had been exposed to one or two years of schooling had no trouble switching between “situational” thinking and “abstract” thinking, and the second mode was then the more prevalent.

In the framework of the analyses of the relationship between cognition and cultures, each fact observed can be interpreted in many ways. But as yet no proof has been adduced as to the existence of modes of reasoning specific to the cultures that produce them.<sup>12</sup> The most fruitful line of research involves not the analysis of hypothetically different “modes” of thought but that of the problem situations to which individuals react in a subjective manner. The rain-making rituals in primitive societies seem irrational because they are based, Raymond Boudon explains<sup>13</sup> referring to Durkheim and Max Weber’s analyses of magic, on erroneous causal relations. If we correctly understand the fact that the subjects’ cognitive capacities do not allow them to realize that reality tends to contradict their belief, then it becomes clear that the sparks produced by rubbing a piece of wood are just as “magical” as the rain

12 Cf. M. Cole and S. Scribner, *Culture & Thought, A Psychological Introduction*, New York, John Wiley and Sons, 1974, p. 170.

13 Cf. R. Boudon, *The Analysis of Ideology*, transl. M. Slater, Chicago, University of Chicago Press, 1986; translated from the French: *L’Idéologie ou l’origine des idées reçues*, Paris, Fayard, 1986.

produced by the rain-maker. According to these views, there is no fundamental discontinuity between magical primitive thought and modern scientific thought. Vygotsky's analysis of magic is comparable<sup>14</sup>: the actions involved are rational, given the beliefs on which they are based. When a person suffers from an attack or an illness, the primitive man supposes he has been possessed by an evil spirit and attempts an exorcism. For someone who believes the person's change of state is due to the action of alien powers, it is altogether logical to try to get rid of them in this way. The beliefs themselves are rational, from the primitive person's standpoint, given the intellectual tools they are based on. The evolution of the intellectual tools depends on that of the problem situations. Vygotsky stresses that magic, which is not a characteristic feature of primitive societies but shows a certain degree of social and cultural "development", reflects the quest for control over nature, which is comparable in this respect to scientific thought. The reasoning processes depend fundamentally on the intellectual tools mediating thought. But the modes of thought themselves are not basically different.

Vygotsky and Piaget both maintain that parallels can be drawn between the psychogenetic development of the individual and the historical development of human thought. These parallels are associated with a certain formal correspondence linked with the dynamic evolution of knowledge in the individual, although the analogy cannot be carried any further. According to Piaget and Rolando Garcia,<sup>15</sup> there is a functional analogy between the self-regulating mechanisms underpinning cognitive development in the individual and the evolution of knowledge in society. For Vygotsky, on the other hand, the development of knowledge in society follows a dialectical process, just like cognitive development in the individual. But it is never more than the product of the individual uses of the culturally transmitted cognitive tools.

Similar to what happens in the process of historic development whereby the tools of human beings change rather than their natural organs, in the process of psychological development the human being perfects the work of the mind mainly in conjunction with the development of specific techniques or "auxiliary means" of thought

14 L. Vygotsky and A.-R. Luria (1930), *Studies on the History of Behavior*, chap. 2.

15 J. Piaget and R. Garcia, *Psychogenesis and the History of Science*, transl. Helga Feider, New York, Columbia University Press, 1989, translated from the French: *Psychogenèse et histoire des sciences*, Paris, Flammarion, 1993, p. 39.

and behavior. The history of human memory is impossible to understand without the history of writing, just as the history of human thinking cannot be understood without the history of speech.<sup>16</sup>

We can try to illustrate these developments using the development of scientific thinking. Fundamental concepts of contemporary science are so far from being “natural” that they might have seemed more irrational than rational to those who first glimpsed them. Let us take the example of the concept of *physical force*.

It is utterly inconceivable, that inanimate brute Matter (without the mediation of Some Immaterial Being) should operate upon and affect other Matter without mutual Contact; that distant Bodies should act upon each other through a *Vacuum* without the intervention of Something else by and through which the action may be conveyed from the one to the other [...] It remains then, that these Phaenomena are produced either by the intervention of Air or Aether or other such medium, that communicates the impulse from one Body to another; or by Effluvia and Spirits that are emitted from the one and pervene to the other [...]<sup>17</sup>

Newton could not attenuate the “absurdity” of his concept, Koestler writes, by calling upon an all-pervading ether (whose characteristics were no less paradoxical) and on God himself. The notion of a ‘force’ acting instantaneously and at a distance, without benefit of an outside agent, which covers vast distances in zero seconds, and reaches its omnipresent, ghostly fingers out towards the immense stellar objects, the whole idea is so mystical, so lacking in scientific rigor that “modern” minds like Koepler, Galileo, Descartes, who were trying to break free of Aristotle’s animism, tended instinctively to reject it: they regarded it as a relapse.<sup>18</sup>

As Piaget and Garcia point out, science is propelled forward at critical moments in its development not only by methodological considerations but also by the epistemic foundations underlying a given approach. The momentum of scientific development corresponds to a reorganization of knowledge in the light of newly obtained information, and to a reinterpretation of the basic concepts. The seventeenth-century revolution in mechanics was not triggered by the discovery of new answers to the classical questions about motion but by the discovery of new questions

16 L. Vygotsky and A.R. Luria (1930), *Studies on the History of Behavior*, pp. 38–39.

17 I. Newton (1693), *Papers & Letters On Natural Philosophy and related documents*, ed. I. Bernard Cohen, Cambridge MA, Harvard University Press, 1958, pp. 340–343.

18 A. Koestler, *The Sleepwalkers, A History of Man’s Changing Vision of the Universe*, London, Penguin Books, 1959, p. 511.

that made it possible to formulate the problems in a different way.<sup>19</sup> New questions are not based on the “direct” observation of real phenomena but on their mediated observation, thus paving the way for other possibilities. At the outset, the real consists of “observables”, directly apprehended by the sense organs, which present themselves as reality. As soon as a phenomenon tends to repeat itself, it comes to seem necessary and the only possibility in its domain. For a mind to feel the need to test its spontaneous observations, it must be capable of “going beyond the real”, that is of imagining other possibles by inventing problems concerning points that *a priori* seem to raise none.

The accumulation of information alone does not enable one to “see” the problems, since it is the new possibilities that allow the problems to be raised. Just as the contradiction between two opinions appears only in the light of a higher idea that embraces them both. According to Piaget and Garcia, it is probably at the moment when scientific inquiry shifted from the attributes of bodies to the relations between bodies that new questions could be asked about the notion of movement.

The history of scientific ideas, Koyré writes,

shows us the human mind wrestling with reality; reveals to us its defeats, its victories; shows us the superhuman effort cost it by each step on the path to the intellection of the real, an effort which sometimes leads to a genuine “mutation” of the human intellect: thanks to such a transformation, notions painstakingly ‘invented’ by the greatest geniuses become not only accessible to, but easy, evident for schoolchildren.<sup>20</sup>

This is tantamount to saying, Piaget remarks, that a twentieth-century child of seven or twelve, will have different ideas about movement, speed, time, space, etc. than children of the same age in the sixteenth century, before Galileo and Descartes. That is obvious, he stresses, and such a fact “shines a bright light on the role of social and educational transmission.”<sup>21</sup>

19 J. Piaget and R. Garcia, *Psychogenesis and the History of Science*, 1989.

20 A. Koyré, *À l'aube de la science classique*, Paris, Hermann, 1939, p. 15.

21 Cf. J. Piaget, *Sociological Studies*, transl. T. Brown et al., London, Routledge, 1995; translated from the French: *Études sociologiques*, Geneva, Droz, 1965, p. 24. According to Piaget, this transmission is not accomplished by the assimilation of knowledge and cognitive structures independently of their maturation in the individual, but it does accelerate such a maturation. This interpretation is imposed by the momentum of the cognitive development in the individual, which proceeds by reorganization of lower-level contents.

### III. Cognitive development and formal education

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The problem of the relationship between formal education and cognitive development, in the broad sense including intellectual development as part of what can be regarded as the adult stages, belongs to the wide-open field of psychology of learning research. One of the reasons for the little knowledge on the subject is that theoretical views on formal education as well as on intellectual development usually apply to differentiated processes for reasons having to do with the way these areas of research came to be constituted. That is why they have tended to be regarded as opposing approaches to cognitive development. Nevertheless, insofar as formal education influences and in part determines individuals' cognitive abilities, skills and performances, it becomes a vector of *cognitive development* that acts and interacts with other factors.<sup>1</sup>

The principal viewpoints on the psychology of learning and development lead to the establishment of fundamentally different relations between formal education and cognitive development. One can show the relations using the typology Vygotsky developed for the purpose.<sup>2</sup> The influence of these theoretical views on educational conceptions and practices varied considerably from country to country over the twentieth century.

The earliest theory establishes a direct but twofold relationship between formal education and intellectual development. Instruction depends on the development stage of the mind and at the same time accelerates this development by exercising the individual's intellectual abilities. Instruction and development are mutually linked, but this relationship locks the two sources of development into a dual aim. In its most general form, this view is based on the doctrine of mental discipline. No precise

- 1 Cf. R. Canfield and S. Ceci, "Integrating Learning into a Theory of Intellectual Development", in R. Sternberg and C. Berg (eds), *Intellectual Development*, Cambridge, Cambridge University Press, 1993, pp. 278–297.
- 2 L. Vygotsky (1934), *Thought and Language*, translation newly revised and edited by A. Kozulin, Cambridge MA, London, The MIT Press, 1986, pp. 174–190.

time of origin can be assigned, as it can be found in one form or other in numerous pedagogical and philosophical writings down through the ages, from Plato and Aristotle to the nineteenth-century psychological theories that divided the mind into different faculties (power of observation, logical faculties, judgement, etc.), which were to be developed in a general manner. The doctrine of mental discipline fuelled one of the great ambitions of Western formal education, that of increasing pupils' overall intellectual potential. The ancient Roman schools of rhetoric, the medieval universities and the Latin grammar schools throughout Europe founded a large part of their curricula on this ambition. The key disciplines in the art of mental development were held to be the most abstract and difficult. These are based on the most formalized or most highly developed conceptual systems such as mathematics, or those that combine subtlety and a nimble mind in translating complex languages such as Greek and Latin. In this perspective, the actual knowledge transmitted is of less importance for the development of the mind than the nature of the subjects taught. The idea of effort, with which is associated the task of mind training assigned to teaching, often takes on a moral coloring connected with the training of the will. The notion of mental discipline thus sees formal teaching as driving both intellectual and moral development.

This first conception of the relationship between teaching and development rests on a scientific basis that is too thin to justify the teaching methods and curricula it advocates. With socioeconomic development, the same effects came to be expected from knowledge designed to be more useful in modern-day life.

The second theoretical perspective, which had important repercussions, in particular on the American and Soviet schools in the first half of the twentieth century, stands at the opposite end of the spectrum. It reduces intellectual development to learning, basing this identification on the development of elementary cognitive processes. At the root of this conception lie William James' views on psychology, which, while criticizing the idea of the mind's passive adaptation to the environment as presented in Herbert Spencer's evolutionist doctrine, nevertheless interprets the human mind in a naturalist perspective. According to James, who seeks to keep psychology within the bounds of positivism so as to preserve it from metaphysical speculation, consciousness can be explained scientifically in terms of brain physiology. Thus, as he himself



says, the subjective interests of the subject work together with the environment to develop the mind.

The American psychologist Edward Lee Thorndike was interested in James' ideas on psychology and developed a learning theory according to which all mental processes depend on the operation of inherited and acquired connections between situations and responses. In other words, learning consists of an accumulation of conditioned reflexes. The connections in question are supposed to have a physical basis in the nervous system. The doctrine of "connectionism" can in certain respects be regarded as a resurgence of associationism. It is rooted in the evolutionist doctrines and situates human behavior on a continuum with animal behavior. Thorndike's laws of learning are supported by experiments performed on baby chicks, fish, cats, etc. Intelligence is therefore defined by quantitative relations: it depends on the sum total of all the connections an organism is capable of achieving. For these reasons, he believed the differences between humans and animals to be a question of quantity. "Connectionism" and "behaviorism" have some strong affinities. Both doctrines disregard the question of consciousness. Their differences stem in particular from the importance ascribed to hereditary factors in cognitive development. In the "connectionist" view, a person's life can be described by the list of all the situations he has encountered and the responses he has given. Behavioral tendencies grow stronger, evolve or disappear in the course of the experiments. The functional ties the animal or the person tends to reproduce depend on a *law of effect* based on the satisfaction that comes from performance of the acts. All learning consists of training to perform specific tasks that can be repeated in similar situations. All acquired skills are based on learning situations that correspond to the same types of elementary processes. That is why this perspective fuses learning and development. Application of the concepts borrowed from Thorndike to different learning tasks requires that each task be broken down into its simplest components and that each stage thus obtained be drummed into the pupil in the form of cognitive habits.

Thorndike's experiments were the focus for the discredit that fell on the doctrine of mental discipline in the United States at the beginning of the twentieth century. As the objects of his learning experiments, Thorndike used activities connected with the simplest cognitive processes typical of highly specialized training, whereas formal learning is

concerned with the higher mental functions. However the potential of mental discipline should theoretically not be the same in the area of the higher processes, which emerge in the course of the child's cultural development, as it is in the area of the elementary processes.<sup>3</sup>

The third theoretical view is the most widespread, having developed at different rates and times throughout the Western world over the twentieth century. In its most common form, it describes the child's development as a process governed by natural laws akin to a maturation, while it sees learning as an external use of the possibilities appearing in the development process. Learning thus depends on development, but development is not basically modified by the learning process. This conception is central to the so-called new teaching theories, based on the notion of maturation, which see cognitive development as a relatively independent growth process. The first to propose a theory of such preordained development in the child was Jean-Jacques Rousseau. According to Rousseau, the child goes through a series of developmental stages that unfold according to a pre-established order and plan. Development is favored when the social environment interferes as little as possible with the child's spontaneous maturation processes. An education that rests on proper activity of the child is supposed to promote the harmonious unfolding of his full potential. These conditions also depend on moral considerations, as the child is seen as being naturally good, the source of social ills being attributed to the corruption of society. Rousseau's conceptions were taken up in the eighteenth and nineteenth centuries by the pedagogical doctrines of Johann H. Pestalozzi and Friedrich Froebel, who emphasized the importance of the child's spontaneous interests and activities for his development, and recommend the non-coercive, non-directive style of instruction which is the basis of the child-centered conceptions of modern teaching theories.

3 As Vygotsky points out, the discredit that accrued to the doctrine is in part a result of the embryonic state of the theory. But Thorndike's own experiments do not go to the heart of the doctrine. They were performed using a reductionist (mechanicist) conception of learning which is Thorndike's own. What is tested is the mental discipline produced by teaching insofar as it consists of "generalized transfers", in other words of mechanical, automatic elementary learning such that everything contained in instruction would influence everything.

This perspective has been developed by authors at the origin of twentieth-century pedagogical theories such as, in chronological order, Herbert Spencer, Granville Stanley Hall, John Dewey and Jean Piaget. Each of these men, following his own views, borrows from the evolutionist conceptions of the development of the animal species and mankind: this is the biological adaptation model. The evolutionist doctrines of Jean-Baptiste Lamarck, Charles Darwin and their successors revolutionized all areas of thought in the second half of the nineteenth century and went on to exert a strong influence on the psychological foundations that inspired the conceptions of child development prevalent at the turn of the twentieth century. The theoretical premises underlying the processes of cognitive maturation differ from one author to the next.

For Spencer, history is the result of a gradual adaptation of people's characteristics to their living conditions. The general structures of the human mind evolve mainly as man learns about his environment and through genetic transmission. These conceptions are based on Lamarck's theory of adaptation through exercise and of the inheritance of acquired characteristics. The individual is supposed, in the course of his psychic development, to reproduce the forms of thought and behavior that are themselves attributed to the major stages in the cultural development of the species: ontogeny recapitulates phylogeny. The theory of recapitulation, or biogenetic law, is an extrapolation from anatomical development to behavioral and intellectual development. Despite having been partly discredited, the theory strongly influenced the future of ideas on education, and is central in the work of Hall. Hall was one of the founding fathers of genetic psychology in the United States. He defended a very general theory of the development of the human mind; its starting point is grounded in the "theory of recapitulation" inspired by Spencer and by Darwin's disciple, Ernst Haeckel. The "cultural epoch theory" draws an analogy between the mind of the civilized child and that of the primitive adult, and calls for teaching methods adapted to the intellectual, affective and motivational stages of childhood and adolescence. According to Hall, educators should not interfere with an inevitable natural process that, moreover, is based on a sequence of stages necessary to the individual's psychic equilibrium. From the start of the twentieth century, Hall, in particular with *Adolescence* (1904) and *Educational Problems* (1911), contrib-

uted to promoting the development of what is known as “child-centered” conceptions of teaching in the United States.

Piaget, as we have seen, represents intellectual development according to an adaptive growth model of the cognitive structures; this model has had two fundamental impacts on teaching theory. First of all the growth model determines the child’s cognitive limits insofar as his growth follows a logical order. Formal teaching in particular can make sense for the child only if it respects the general intellectual development stages he has reached. Adult concepts, encoded in intellectual language, Piaget writes, make it possible to systematize knowledge already acquired and facilitate intellectual exchanges between individuals. But in the child, experimentation precedes knowledge and, above all, the effort of thinking cannot be communicated for some time. For instance, the child manipulates concepts by a process of syncretic assimilation rather than using logical generalization. This is why the educational methods advocated by these views present the subjects taught in forms that children can assimilate in accordance with their stage of mental development. The notion of pupil’s activity is measured by the extent to which the teaching corresponds to the development level of his intellectual structures. If the teaching method identifies the child’s mind with that of the adult, it can seek nothing else from him but passive submission.

Secondly, the biological growth model appeals to spontaneous and relatively independent aspects of the development of the child’s intellectual structures. Intellectual adaptation is achieved when equilibrium is realized between the assimilation of the experience by the “deductive structures” and the accommodation of these structures to the data of the experience. Development, equilibration, self-regulation, accommodation, experience, activity, discovery are intrinsically intertwined processes. These concepts tend to present the subjects as “discoverers”, in other words as the more or less autonomous builders of their own knowledge. A pupil is “active” whenever he discovers for himself the truths being taught him. The importance given to “activity”, as defined above in Piaget’s cognitivism, is central to the child-centered pedagogical ideas linked, in the United States in the first half of the twentieth century, to the names of Hall and Dewey.

The fourth theoretical viewpoint sees, with Vygotsky’s work, formal education and development not as two independent processes but as a single process in which learning and development entertain complex

relations of reciprocity that evolve at their own rate. Vygotsky does not hesitate to talk about “effects of formal discipline” of teaching on development. For example, to the question of what use is it to teach grammar to a child who already has a good intuitive grasp of his mother tongue, Vygotsky gives the following explanation. Because of the unconscious character of his knowledge, the child cannot intentionally do what he is able to do involuntarily. In school the child learns, primarily through written language, to make conscious use of his own skills. The child’s new-found awareness and mastery of the mechanisms of his language are of crucial importance for mastering written language and, more generally, for the development of his thinking processes. Because he is now capable of voluntarily doing those things he used to do involuntarily, the child can attain a higher level of language development.

One of the important shortcomings of the great majority of studies on concept formation in children, according to Vygotsky, is that they were based uniquely on data concerning the child’s everyday or “spontaneous” concepts. These concepts correspond to forms of thought, categorization and generalization that do not develop during the transmission of a system of knowledge to the child (through teaching) but are formed in the course of the child’s practical activity and immediate communication with those around him. In such experiments, the questions put to the children attempt systematically to seize tendencies of their own thinking processes separately from the influence of what they learn at school. However the results of these studies are rashly extrapolated to the formation of “non-spontaneous”, scientific concepts. The outcome of Vygotsky’s teaching theory, on the contrary, uses the notion of “zone of proximal development”. The zone of proximal development lies between the level of development actually attained by the child and the level he is able to attain with the aid of an adult or in cooperation with more advanced children. The only valid learning during childhood, according to Vygotsky, is that which goes on in this zone, in other words that which anticipates the child’s development and furthers it.

The reasons one theoretical viewpoint on learning and development psychology comes to dominate ideas on education and teaching proper do not obey a wholly rational logic. The history of pedagogical theories shows that the domination of one viewpoint corresponds to a set of interacting factors, among which ideological and political conflicts play

an important part. This is one of the lessons of Durkheim's *The Evolution of Educational Thought*.<sup>4</sup> The importance accorded to a psychological theory depends to a large extent on the way it relates to the dominant social and educational theories and, in a more subtle way, as one historian of education in America points out, to the spirit of the times. At the outset, Thorndike and Dewey took on the same adversaries. Dewey advanced penetrating analyses, while Thorndike sought scientific support for his own analyses. A casual observer would have seen nothing but their mutual opposition to what they felt was an outdated tradition. But Dewey captured the spirit of the times in a way Thorndike did not, so that, when the differences between them did appear, Dewey was the educators' choice. He was chosen because he gave meaning to the notion of education in a democracy. This idea "had wide appeal to a generation committed to making the world safe for democracy".<sup>5</sup>

- 4 English translation: *The Evolution of Educational Thought: Lectures on the Formation and Development of Secondary Education in France*, transl. Peter Collins. London, Boston, Routledge & Kegan Paul, 1977; translated from the French: *L'évolution pédagogique en France* (1938), Paris, Presses Universitaires de France, 1990.
- 5 Cf. F.J. McDonald, "The Influence of Learning Theories on Education (1900–1950)", in *The Sixty-third Yearbook of the National Society for the Study of Education*, I, Chicago, The University of Chicago Press, 1964.

## IV. Theories of knowledge and educational principles

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Formal education acts to transmit and to develop individuals' means for understanding their experiences and more generally to provide them with tools of thought that can be used to reflect and to act. Educational principles and theories of knowledge thus work together: theories of knowledge define the epistemological status of those tools of mind that participate in the cognitive action of education.

The Platonic model of education and the educational model developed by medieval scholastics under the influence of Aristotelian philosophy enable us to propose an illustration of the connections between the theories of knowledge and educational principles. For Plato, the way to truth lies essentially through rational analysis. Reality is not understood through interaction between a knowing subject and an outside world but through access to the essence of things, through reason. According to the Platonic model of education, conceived for the future rulers of an ideal City, education is based on training the powers of reason and therefore on those disciplines best equipped to ensure such training. The problem is not to instill in the individual various areas of knowledge selected for the usefulness of their content, but to teach him those kinds of knowledge best fit to shape his mind. Arithmetic, geometry, astronomy, harmony should be taught as preliminary training for dialectics because dialectics provides the key to the world of "intelligible essences". The educated person is thus given the means to seek the truth for himself. He is educated not because of what he has learned but because he has harnessed his ability to learn. The liberating effect of intellectual training, illustrated by the famous "Allegory of the Cave" presented in Book Seven of Plato's *Republic*, finds direct epistemological justification in the mode of access to the first principles of all things. Because the sensible universe is regarded as an illusion and because the exercise of rational thought, which culminates in the art of dialectics, enables the individual to go beyond appearances, Plato's educational program is devoted entirely to intellectual training conceived as preparation for dialectics.

For Aristotle, the model for all sciences is syllogistic reasoning because it leads to establishing necessary relations between premises. Dialectics, on the contrary, is the art of reasoning about opinions, about likelihoods. The aim of dialectics is not to seek the truth, though it may help in discovering the first principles of the sciences. It can be applied to all areas of knowledge that are based not on the deduction of necessary truths but on the confrontation of plausible arguments. Now, as Durkheim shows in *The Evolution of Educational Thought*, the fact that, in the Middle Ages, argumentation was the primary means of apprehending the natural and the human world is central to scholastics. The process of dialectical reasoning as it is set out by Aristotle, comprising the definition of a problem, the confrontation of conflicting opinions and the resolution of the conflict, is the basis of the *disputatio*, the principle academic exercise of scholastics.

Interpretations of the relationship between thought and reality are usually situated between two poles associated, respectively, with what are termed “idealistic” conceptions of knowledge, at one end, and “realistic” conceptions, at the other, even though these conceptions may be associated with very different doctrines. Roughly speaking, idealism and realism designate two theoretical orientations that become meaningful only when they are opposed to each other. The first holds that thought precedes reality, while the second argues that reality precedes thought. Theories of knowledge grow up somewhere between these two poles. There are four major trends that have diversely influenced contemporary ideas on teaching. These are: positivism, relativism, rationalism – to which we apply the adjective cognitivist – and epistemological constructivism.

These trends refer to heterogeneous sets of viewpoints, principles and hypotheses, and cannot all be placed on the same theoretical or conceptual level. They are not mutually exclusive and in certain respects they even overlap. This point cannot be overstated for, depending on the definition one adopts, one can go, in certain cases, from simple differences of views or nuances to deep-seated antagonisms.

Near the “object” pole can be found the positivist theories, for which only experience and the experimental approach, based on establishing relations between facts, are sources of objectivity. From this viewpoint, the knowing subject should ideally rid himself of all *a priori* liable to pre-shape the experimental data. The outside world prevails over thought,



but the “real” can be objectively apprehended only through relationships and laws.

Near the “subject” pole, knowledge depends fundamentally on the activity of the subject apprehending reality. All of the viewpoints developed around the “subject” pole are therefore, in certain respects, of a constructivist nature. Constructivism is based on the idea that an effective activity on the part of the subject is the source of all knowledge. But it regards the idea of an independent outside world as something that, at best, cannot be known. Alternatively, cognitivist rationalism is founded on the existence of an outside world whose reality is manifested by its capacity to put the subject’s categories of knowledge to the test. Relativism considers that objectivity is not possible because all truth is relative to organized, socially and culturally determined systems of thought. It can be expressed in terms of a radical constructivism for which categories of knowledge and reality are undetectable, in other words for which there is no such thing as an independent external reality. Further details are necessary to clarify the principles underlying these orientations.

According to the perspectives we have grouped under the heading of cognitivist rationalism, knowledge depends on the means of analysis available to the mind, on the one hand, and is functionally linked to reality, on the other. It does not constitute “necessary” representations of reality, but is subjected to the criteria of true and false. The scientist and the man in the street perceive, select, rank, interpret in accordance with a set of preconceived ideas that they use to understand the world and to act. Kant’s theory of knowledge rests on the most basic and universal of these forms reason uses to confront reality and to understand it. Yet at all levels of thought, cognitive tools have a hand in shaping the external data, in breaking down the experience into observations and knowledge, in transforming what is lived into history. As Georg Simmel writes, Kant’s *a priori*, which is the *basis of the possibility of experience as such*, is merely the most abstract term of a whole series that, taken together, pervades all particular areas of experience. Depending on one’s level of abstraction, certain propositions can appear to be empirical, in other words to represent an application of the most general forms of thought to a specific matter. But these propositions can also act as *a priori* at other levels of knowledge. In this case they serve as what Simmel terms “forms”, by means of which the mind can perform

the activity of establishing relationships that is specific to it. In effect, it is by casting these propositions in these forms that the mind classifies, defines and sorts the results of its experience.<sup>1</sup>

Conceptually speaking, constructionist viewpoints are so general that they develop in numerous areas in which connections with epistemology or education can be quite different. There are constructivist learning theories, like Piaget's (individual) constructivism or Vygotsky's (social) constructivism; there are constructivist teaching theories, constructivist theories of knowledge, constructivist epistemologies, and so on.<sup>2</sup> Constructivist pedagogical theories do not necessarily call for constructivist epistemologies, but epistemological constructivism does have educational implications. Starting from the idea that all knowledge depends on the mental constructs developed by each individual, epistemological constructivism tends to suppress the distinction between the subject and the object of knowledge.

According to Piaget, who describes his brand of constructivism as dialectical, the constructivist position essentially considers that knowledge is linked with an action that *modifies* the object and which therefore can apprehend the object only through the transformations brought about by this action. Thus the subject no longer "stands before" the object – and at another level – seeing it as it is or through structuring glasses: he "delves into" the object by means of his own body, which is necessary to the action, and "reacts" with the object, enriching it with what his action has to offer; in other words, "subject and object are now on exactly the same footing, or rather on the same successive footings".<sup>3</sup>

Piaget was particularly interested in the formation of universal categories of thought. However, the systematization of these conceptions leads to what have been called "radical" constructivist views. These perspectives have the same epistemological starting point as the philosophy of pragmatism: they reject the idea of a truth applied to an abstract reality. In this respect they disregard the idea that knowledge

1 G. Simmel (1892), *The Problems of the Philosophy of History: An Epistemological Essay*, New York, Free Press, 1977.

2 In sociology of scientific knowledge, constructivism is identified with the Edinburgh "Strong programme".

3 J. Piaget, "Les Courants de l'épistémologie scientifique contemporaine", in J. Piaget (dir.), *Logique et connaissance scientifique*, Paris, Gallimard, 1967, p. 1244.

can have an objective value not because it brings us closer to hidden realities but precisely because it enables us to go beyond our immediate experience of the world. If epistemological constructivism ultimately has radical implications, it is because it rejects the idea of a knowable outside world relatively independent of experience. From the standpoint of this approach, knowledge is a form of self-organization. The different approaches to reality are believed to define different worlds. This perspective rests on fairly flimsy arguments, but in many regards it represents the resurgence of an old discussion launched by the advocates of pragmatism<sup>4</sup> and, as far as education goes, by the progressists. Like the latter, and for similar reasons, the proponents of epistemological constructivism associate knowledge transmission with passive learning.<sup>5</sup>

In view of the conceptions of truth and the status attributed to cognitive tools by the different perspectives cultivated in epistemology and knowledge theory, we can deduce the following very general logics operating in education. Positivism privileges teaching students an experimental approach. Since, for this perspective, objectivity increases with the accumulation of experiences, it favors specialized activities and, in particular, the technical and scientific disciplines. Relativism is theoretically incompatible with any normative justification of teaching, except when it is founded on intersubjective choices. It may tend to favor diversification of school curricula in relation to the students' tastes and abilities. Cognitivist rationalism argues for a rationalistic approach to education that is interested primarily in training the knowing subject. Since it regards the multiplication of viewpoints as enriching our knowledge of reality, it favors a multidisciplinary basic curriculum. From the pedagogical standpoint, constructivism is the privileged promoter of child-centered individualism. As an individual's knowledge depends on his own cognitive constructions, the preferred curricula do not focus on school subjects but on individual learning, with a tendency to blur the boundaries between disciplines (so-called "integrated" curricula). These general tendencies are given in Table 1.

4 We will return to this subject later, when discussing Durkheim's reflections on pragmatism.

5 Cf. M.-R. Matthews, *Constructivism in Science Education. A Philosophical Examination*, Dordrecht, Kluwer Academic Publisher, 1998.

*Table 1. Perspectives in knowledge theory and their pedagogical implication*

	<i>Positivism</i>	<i>Relativism</i>
Intervention of subjectivity	slight (notion of progress)	incommensurability of approaches
Relation to objectivity	positive and unitarian	no point
Guiding principle of the pedagogical conceptions	experimental approach	absence of normativity
Preferred kinds of curricula	specialized (sciences and techniques)	open choice
	<i>Cognitivist rationalism</i>	<i>Constructivism</i>
Intervention of subjectivity	complementarity, variety of approaches	structuring of experience
Relation to objectivity	positive and plural	no point (viability, feasibility)
Guiding principle of the pedagogical conceptions	rationalism	child-centeredness
Preferred kinds of curricula	multidisciplinary	integrated

*Part Two*  
*Education and social action:*  
*theoretical foundations*



*Social bond, order and action*

Analysis of social action brings into play theoretical constructions about the ways individuals act in the situations they encounter. These actions are themselves products of the ways the social actors apprehend their own situations. That is why Alfred Schütz<sup>1</sup> says that sociologists' constructs are constructs of the second degree; they are constructs of the constructs produced by social actors in the course of their actions and interactions. Strictly speaking, the sociologist's theoretical constructions are models, usually non-formal ones. Just as, in the process of reasoning, individuals select the elements of the situation pertinent to the pursuit of their action, so too the sociologist makes a selection, at one remove: he selects the elements pertinent for explaining the social phenomenon in question. This selection implies hypotheses about the major social processes that account for the actions leading to the observed social phenomenon.

The chapters in Part Two present some of the main sociological perspectives on the genesis of social action. The authors introduced have been chosen for intellectual reasons, with a view to showing how sociological approaches to education underpin the constructs of sociology.

1 Cf. A. Schütz, in A. Brodersen (ed.), *Alfred Schütz. Collected Papers*, vol. I, The Hague, Martinus Nijhoff, 1962, p. 6.





# I. Karl Marx

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The interest for Marx in the sociology of education of today is founded largely on an indirect reason. Marx and Friedrich Engels wrote little about education, even though the question constantly preoccupied them. Nevertheless, there are so many links between Marxism and sociology in general, and sociology of education in particular, that it is indispensable to read Marx, notably his writings on ideology. This necessity can be explained not only by Marx's influence, though his own work must be distinguished from the various brands of Marxism developed later in his name, but also by the intellectual reactions he inspired.

Marx's interpretation of the social order and of historical development sets out a human ideal to be realized. Human development takes place on a historical scale. The succession of social forms over time underlies the succession of all forms and products of consciousness up to man's material and spiritual liberation. However this liberation can be brought about only through a radical break with the different types of society that must emerge before the final advent of communism. Man cannot fulfill himself in those types of society in which his "activity is not voluntarily but naturally divided". Why? The answer to this question is the very basis of Marxist ideology. It reveals a conception of the formation of man that is deeply rooted in the organization of labor.

In *The German Ideology*<sup>1</sup> Marx and Engels teach that man, his ideas and ideals do not determine the world, but that it is the world that determines man and his ideas. More precisely, it is the form of social relations, which itself depends on the economic organization of labor. The reason for this is that man's consciousness is embedded in reality, a reality that is historical and which depends in particular on the division of labor.

1 K. Marx, F. Engels (1848), *The German Ideology*, Includes: *Theses on Feuerbach* and the *Introduction to the Critique of Political Economy*, New York, Prometheus Books, 1998.

In the social production of their existence, men inevitably enter into definite relations, which are independent of their will, namely relations of production appropriate to a given stage in the development of their material forces of production. The totality of these relations of production constitutes the economic structure of society, the real foundation, on which arises a legal and political superstructure and to which correspond definite forms of social consciousness. The mode of production of material life conditions the general process of social, political and intellectual life. It is not the consciousness of men that determines their existence, but their social existence that determines their consciousness.<sup>2</sup>

The distinction between the economic and social infrastructure, and the ideological and political superstructure is highly questionable. The economic organization of a society cannot be separated from that society's accepted knowledge and ways of thinking.<sup>3</sup> What interests us here however – human development – is the idea that man's consciousness of himself is conditioned by the system of social relations.

Conceiving, thinking, the mental intercourse of men at this stage still appear as the direct efflux of their material behaviour. The same applies to mental production as expressed in the language of the politics, laws, morality, religion, metaphysics, etc. of a people. Men are the producers of their conceptions, ideas, etc., that is, real, active men, as they are conditioned by a definite development of their productive forces and of the intercourse corresponding to these, up to its furthest forms. Consciousness can never be anything else than conscious being, and the being of men is their actual life-process. If in all ideology men and their relations appear upside-down as in a *camera obscura*, this phenomenon arises just as much from their historical life-process as the inversion of objects on the retina does from their physical life-processes.<sup>4</sup>

The way men perceive and think depends on a set of ideas, concepts, that are developed from reality and which, as they become independent, crystallize a historically situated reality. Ideology, according to Marx and Engels, considers that the world is dominated by ideas, that ideas and concepts are the determining principles; whereas, in fact, ideas

2 K. Marx (1859), *A Contribution to the Critique of Political Economy*, edited, with an Introduction by Maurice Dobb, New York, International Publishers, 1970, Preface, pp. 20–21.

3 Cf. for example, R. Aron's critique in his *Industrial Society*, Glasgow, Simon & Schuster 1968, transl. from the French *Dix-huit leçons sur la société industrielle*, Paris, Gallimard, 1962.

4 Marx with Engels, *The German Ideology*, p. 42.

and concepts are not formed independently of reality, which they merely express: “The production of ideas, of conceptions, of consciousness, is at first directly interwoven with the material activity and the material intercourse of men – the language of real life.”<sup>5</sup> Men are incapable of seeing the real causal links between reality and their mental constructs. Their tools of mind, which they have built out of reality, constitute both their cognitive potential and the limits to their understanding of this same reality of which they perceive only a historical slice. Marx and Engels state that men have always had false ideas about themselves, about what they are or should be. Why is this? The answer lies in their interpretation of ideology.

As Boudon points out, these conceptions underpin certain stimulating ideas by means of which ideological beliefs are presented as rational or understandable beliefs, in the Weberian sense: “the life-processes”, “material” life as it is here and now, suggest to the social actors categories and concepts that provide them with guidelines for analyzing and grasping reality. For instance, Boudon goes on, without the diffusion of so-called mass communications, the idea of a “society of communication” would never have been invented. It is in this type of relations that one can see how the production of ideas can be rooted in “the material activity and the material intercourse of men”.<sup>6</sup> Nevertheless, the dogma of class struggle leads Marx to an irrationalist theory of ideology. Concepts and ideas are supposed to be exploited by the dominant class in order to serve its own interests. Ideology comes from the fact that men unwittingly espouse false ideas owing to the position they occupy in the social relations.

Indeed, for Marx, every society is divided into two broad opposing classes defined by relations of power, one being dominant and the other dominated.<sup>7</sup> The division of labor is responsible for the separation be-

5 Marx with Engels, *The German Ideology*, p. 42.

6 R. Boudon, *The Analysis of Ideology*, transl. by M. Slater, Chicago, University of Chicago Press, 1989; translated from the French *L’Idéologie ou l’origine des idées reçues*, Paris, Fayard, 1986: pp. 53–64.

7 The proletariat and the bourgeoisie, into which capitalist society is seen as being divided, do not correspond to statistical categories such as they are conceived by modern sociology. They are defined by their relationship to the means of production. Members of the bourgeoisie own the means of production, while members of the proletariat do not own their labor, which they sell.

tween individual interests and the common interest. The latter exists by the very fact of individuals' mutual interdependence. In the case of ideology, members of the dominated class tend to share the ideas and values of the ruling class. However the ideas of the ruling class serve the special interests of their own class. They can be forced on the dominated class because, in owning the means of material production, the ruling class at the same time controls the means of "mental" production. Therefore "the ruling ideas are nothing more than the real expression of the dominant material relationships, the dominant material relationships grasped as ideas".<sup>8</sup> The aristocracy presented itself as deriving from the concepts of honor and loyalty, the bourgeoisie as deriving from the concepts of liberty, equality, etc. The ruling class imposes its own views at every stage in the historical process by presenting its own interests as the "common interest", as that of all members of society in general and none in particular. Furthermore, every class that aspires to dominate must first conquer political power. The State is "the form by which individuals of a ruling class assert their common interests [...] it follows that, the state mediates in the formation of all common institutions and that the institutions receive a political form".<sup>9</sup>

To the false consciousness that man has of himself, is opposed the idea that man produces himself through his labor. It is *praxis*, which combines thought and action, that gives human life meaning. By deceiving every individual about the role he actually plays, by creating a split between thought and action, the division of labor enslaves man's consciousness of himself. In effect, consciousness is a product of social relations. The man of the future is first and foremost the product of the circumstances to be created. One consequence of these ideas is the notion that the transformation of society is not brought about by criticism, by ideas, but by transformation of circumstances. The *decentering* (we have borrowed the term from the vocabulary of structuralism) of man's self-consciousness depends on the completeness of his activity, a completeness which Marx and Engels assign to the abolition of the natural division of labor. According to them, this new organization should give men a conscious

8 Cf. Marx with Engels, *The German Ideology*, Part one: Feuerbach, "Ruling Class and Ruling Ideas".

9 Cf. Marx with Engels, *The German Ideology*, Part one: Feuerbach, "The Relation of State and Law to Property".

control of the powers that, as a result of interaction between men, have dominated them. The aim is not only to liberate men from a fate that holds them in the thrall of a determined activity, but to allow them to gain a true understanding of the meaning of human life. In communist society, each can exercise the activity of his choice, according to his abilities and his needs:

... man's own deed becomes an alien power opposed to him, which enslaves him instead of being controlled by him. For as soon as the division of labour comes into being, each man has a particular exclusive sphere of activity, which is forced upon him and from which he cannot escape. He is a hunter, a fisherman, a shepherd, or a critical critic, and must remain so if he does not want to lose his means of livelihood; whereas in communist society, where nobody has one exclusive sphere of activity but each can become accomplished in any branch he wishes, society regulates the general production and thus makes it possible for me to do one thing today and another tomorrow, to hunt in the morning, fish in the afternoon, rear cattle in the evening, criticise after dinner, just as I have a mind, without ever becoming hunter, fisherman, shepherd or critic.<sup>10</sup>

It is the possibility of accomplishing every aspect of human activity in each individual, through the voluntary division of labor, that is to bring about the liberation of human consciousness. In particular, it is supposed to abolish “the possibility, nay the fact that intellectual and material activity – enjoyment and labour, production and consumption – devolve on different individuals”.<sup>11</sup> It is supposed to permit the advent of the complete man, master of his activity, who has the possibility to develop his abilities and talents to the full, and who is no longer limited by any class condition. This realization paves the way for Marx's ultimate aim, which is the formation of “socialist humanism”, the perfect “society of free men”.

10 Marx with Engels, *The German Ideology*, p. 53.

11 Cf. Marx with Engels, *The German Ideology*, Part one: Feuerbach, “History: Fundamental Conditions”.



## II. Émile Durkheim

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When he defined education as a methodical socialization of the younger generations, Émile Durkheim was expressing the mutual influence of education and society on each other.

Education is the influence exercised by adult generations on those that are not yet ready for social life. Its object is to arouse and to develop in the child a certain number of physical, intellectual and moral states which are demanded of him by both the political society as a whole and the special milieu for which he is specifically destined.<sup>1</sup>

The society for which the new generations are to be prepared already exists. It is this anteriority of the society instilling its norms in the new arrivals that appears in the idea of socialization. This socialization becomes methodical when it is performed by education, which aims to bend it towards specific goals. In this sense, education shows its own anteriority to society through the potential man has to define social goals expressed by the adjective “methodical”. The problematics of sociology and education is no doubt all the more closely intertwined in Durkheim’s work as he was led by his career in higher education to teach courses both in sociology and in education. He was in charge of a course on social science and education at the *faculté de lettres* of Bordeaux before going on to win a professorship in social science (1896). Appointed to the Sorbonne (1902), he occupied the chair of “sciences of education”, which later became the chair of “sciences of education and sociology” (1913).

The nature of the social bond through which the deep-seated relations between education and sociology are expressed is central to Durkheim’s work. On this subject, he constantly defends a key idea, which he approaches from numerous angles. One way of expressing it could read as follows: society precedes the individual while being immanent

1 É. Durkheim (1922), *Education and Sociology*, transl., and with an introduction, by Sherwood D. Fox, Foreword by Talcott Parsons, New York, The Free Press, 1956, p. 71; translated from the French: *Éducation et sociologie*, Paris, Presses Universitaires de France, 1989.

to the totality of individuals who constitute it. From the cooperation of individuals living in society, a new product emerges. This “product” is a constituent part of each and every component of society, but it exists only by virtue of the concrete totality they form. It represents, as Durkheim likes to describe it, a reality *sui generis*, one that emanates from the community of individuals and cannot be reduced to the individual elements. This reality *sui generis* in turn acts on the individuals in the form of a constraint that regulates their actions. From this constraint, Durkheim deduces in particular the concept of “social fact”:

A social fact is identifiable through the power of external coercion which it exerts or is capable of exerting upon individuals. The presence of this power is in turn recognisable because of the existence of some pre-determined sanction, or through the resistance that the fact opposes to any individual action that may threaten it.<sup>2</sup>

And the concept of “collective consciousness”:

The totality of beliefs and sentiments common to average citizens of the same society forms a determinate system which has its own life; one may call it the *collective* or common *conscience*.<sup>3</sup>

These concepts do not designate entities that exist separately from the concrete life of the society:

Whereas we had repeatedly declared that consciousness, both individual and social, did not signify for us anything substantial, but merely a collection of phenomena *sui generis*, more or less systematised, we were accused of realism and ontological thinking.<sup>4</sup>

But they convey the idea that the whole acts as a reality independent of the part as such:

2 Émile Durkheim (1895), *The Rules of Sociological Method*, edited, with an introduction, by Steven Lukes, transl. by W.D. Halls. New York, Free Press, 1982, pp. 56–57; translated from the French: *Les Règles de la méthode sociologique*, Paris, Presses Universitaires de France, 1990.

3 É. Durkheim (1893), *The Division of Labor in Society*, transl. by G. Simpson, New York, The Free Press, 1933, p. 79; translated from the French: *De la division du travail social*, Paris, Presses Universitaires de France, 1991.

4 É. Durkheim, (1895), *The Rules of Sociological Method*, p. 34.



But in order for a social fact to exist, several individuals at the very least must have interacted together and the resulting combination must have given rise to some new production.<sup>5</sup>

The idea that the whole acts as a reality independent of the parts underpins the specificity of sociological analysis and means that it is irreducible to the laws exhumed by psychology in particular. Even if each of the primary components of society, each individual, were to obey such “laws”, the shift to a new level of complexity, the social level in the present case, would cause new properties to appear that stem from the interaction between the primary components, the individuals. These properties legitimize, for their study, new generalizations, new concepts, the definition of a fully fledged scientific field. Durkheim does no more than express a general epistemological antireductionist view. In an article on individual and collective representations, he compares relations between the individual and society to relations between the “brain cell” and the psychic level.

When we said elsewhere that social facts are, in a sense, independent of the individuals and lie outside of individual consciousness, we were doing no more than stating about the social realm what we have just established concerning the psychic realm. Society rests on the totality of individuals associated therein. The system they form by their union, and which varies according to their number, their disposition within the territory, the nature and number of their means of communication constitutes the basis upon which social life is edified. The representations that form its fabric stem from the relations established between the individuals thus combined or among the secondary groups that interpose themselves between the individual and the society as a whole. Now if we do not think it in any way extraordinary that these individual representations, produced by the actions and reactions exchanged between the elements of the nervous system, are not inherent in these elements, is it so surprising that these collective representations, produced by the actions and reactions exchanged between the individual consciousnesses of which society is made, do not derive directly from them and consequently surpass them?<sup>6</sup>

The comparison of relations between the whole, society, and the parts, the individuals, with relations between the brain-cell level and the psychic level has some affinities with naturalism, which we cannot entirely

5 É. Durkheim, *The Rules of sociological Method*, p. 45.

6 É. Durkheim, “Représentations individuelles et représentations collectives”, *Revue de métaphysique et de morale*, 1898, pp. 293–294.

refuse to see in Durkheim, even if the comparison is limited to questions of method. In order to forestall any deterministic interpretations of his discourse, Durkheim adds that, the whole can no more be derived from the parts than the parts from the whole. Furthermore, all forms of collective consciousness can be interpreted in purely interactionist terms using Durkheim's argument according to which, even if truth is a social production, whatever it contains of a collective nature exists only through the individual consciousness: "Truth, Durkheim writes, exists only through the consciousness of individuals."<sup>7</sup>

In Durkheim, the constraint exerted by the "collective consciousness" as a reality *sui generis* emanating from social life appears particularly in the area of morality. Which explains why he chose to study the social bond first of all through an analysis of the "facts of moral life"; this analysis was the subject of a thesis defended in 1893, *De la division du travail social*,<sup>8</sup> initially entitled *Individu et société*. Durkheim inquires into the nature of the social bond in a society based on the division of labor. In his analysis, he opposes two ideal-types of the structuring of the social bond: mechanical solidarity (by similarity) and organic solidarity (by complementarity):

Social life comes from a double source, the likeness of consciences and the division of social labor. The individual is socialized in the first case, because, not having any real individuality, he becomes, with those whom he resembles, part of the same collective type; in the second case, because while having a physiognomy and a personal activity which distinguishes him from others, he depends upon them in the same measure that he is distinguished from them, and consequently upon the society which results from their union.<sup>9</sup>

Nevertheless, the transition from one kind of society to the other, accompanied by the growing rationalization of productive activity, does not entail a fundamental change in the nature of the constraint society exercises on the individual. Durkheim disagrees on this point with Spencer, for whom, as societies differentiate, they should gradually do away with

7 É. Durkheim, *Pragmatism and Sociology*, [an unpublished series of lectures given at the Sorbonne in 1919–1914, and reconstructed by Armand Cuvillier from students' notes] Cambridge, Cambridge university Press, 1983; translated from the French: *Pragmatisme et sociologie*, Paris, Vrin, 1955, p. 196.

8 Cf. É. Durkheim, *The Division of Labor in Society*.

9 É. Durkheim, *The Division of Labor in Society*, p. 226.

all regulatory “social action” so as not to hinder the natural self-regulation of individual interactions. However Durkheim remains prisoner of Spencer’s paradigm of social differentiation, which leads him to develop a number of dubious hypotheses about the new forms of solidarity inherently linked to the complementarity of activities of production.<sup>10</sup> Durkheim reproaches Spencer for seeing the self-regulation of individual interests as a new form of social cohesion founded on the economic-exchange model. He objects to an essentially contractual interpretation of the social bond in industrial societies. For Durkheim, relations of self-interest, as in economic exchange, do not lead to a weakening of society’s need for normative constraints. As society develops, norms of action become more abstract, and in this sense people are freer to express their individuality than in traditional societies; but social constraint is still present insofar as it predefines what behaviors are possible. From this standpoint, there is always a need to regulate conduct based on respect of collective interest, which is expressed in more abstract terms. In other words, the social actor’s virtuous character (“altruism”, here founded on deference to group values or norms), is always necessary to the equilibrium of society. And Durkheim concludes that the division of labor engenders solidarity only if it produces at the same time a legal and a moral code<sup>11</sup>.

Respect for the collective interest supposes ethical integrity and a moral sense, which are simply two facets of a single, more complex attitude. Durkheim explains in *Moral Education*, what he calls an *esprit de discipline*. Thus his analysis of the nature of the social bond paves the way for his normative presuppositions in the area of education. Social development does not make it any less necessary for individuals to submit to a supra-individual interest, even though its nature may change, since, with the development of modern individualism, it tends towards a respect for man as a human being.

10 As Philippe Besnard points out, recalling the analyses of Alessandro Pizzorno, the hypothesis that the technical interdependence of tasks is enough to produce moral interdependence is a fragile one, for the solidarity that could arise between workers would be based rather less on their relations of technical dependence than on the similarity of their working conditions and their shared interests (P. Besnard, “Les Pathologies des sociétés modernes”, in P. Besnard, M. Borlandi, P. Vogt, *Division du travail et lien social. Durkheim, un siècle après*, Paris, Presses Universitaires de France, 1993, p. 206).

11 É. Durkheim, *The Division of Labor in Society*, Part III: “Conclusion”.

Moral precepts bring pressure to bear on the individual more particularly by subjecting the child's action to a set of value judgements that instill in him the moral code of the society. Yet the normative social constraints exercised by society on the individual must respect a proper equilibrium for the well-being of the individual. This is what Durkheim attempts to show in *Suicide*, by means of an analysis of the linkage between suicide rates and social context: social malaise tends to increase wherever these constraints are either too strong or too weak.

Yet if rules of morality are specific to a given society, if they express the "collective consciousness" of this society, if education is supposed to instill this *esprit de discipline*, which calls for acceptance of the moral code as it stands, here and now, then why does Durkheim make such a point of *moral intelligence*?

To act morally, it is not enough – above all, it is no longer enough – to respect discipline and to be committed to a group. Beyond this, and whether out of deference to a rule or devotion to a collective ideal, we must have knowledge, as clear and complete an awareness as possible of the reasons for our conduct.<sup>12</sup>

By evoking the idea of an act that is chosen and not merely submitted to, in sum, by opposing the individual's control of himself through his own action to the domination of the group, does moral intelligence not at the same time ruin the idea of morality as a social fact, in other words as an external constraint brought to bear on the individual? To understand how these two ideas can be reconciled, we must recall the meaning of this constraint: it is the expression of the process by which the collective interest intervenes to limit the possibilities of individual action. It is an inherent part of the socialization of the individual. Yet it does not result from a "conditioning" of the personality by the inculcation of unconscious patterns of action. In action, morality as a constraint and morality as a reason operate on two different levels. Morality forces itself on the individual as a constraint because the moral code is immanent to society. An act, according to Durkheim, is not condemned because it is a crime, it is a crime because it is condemned. At this level, the moral code has a

12 É. Durkheim (1935), *Moral Education; A Study in the Theory and Application of the Sociology of Education*, Foreword by Paul Fauconnet; transl. by Everett K. Wilson and Herman Schnurer; edited, with a new introduction, by Everett K. Wilson. New York, Free Press, 1961, p. 120; translated from the French: *L'Éducation morale*, Paris, Presses Universitaires de France, 1992.

functional role. It serves as an axiological guide because: “ethic cannot be inferred analytically from the facts”. As he writes in a critical analysis of Rousseau’s “social contract”:

The moral order transcends the individual; it does not exist in material or immaterial nature, but must be introduced. However, it requires a foundation in some being, and since there is no being in nature that satisfies the necessary conditions, such a being must be created. This being is the social body. In other words, ethics cannot be inferred analytically from the facts. In order for de facto relationships to become moral, they must be consecrated by an authority that does not inhere in the facts. The moral order must be added to them synthetically. To effect this connection a new force is required, namely, the *general will*.<sup>13</sup>

As the action develops, it calls on rational analysis, but it is undertaken with respect to the values that guide it. Thus we see the two levels, which give rise, on the one hand, to the notions of constraint and “social fact”, and on the other, to the notions of reasons and “moral intelligence”. Moreover, from the educational standpoint, moral intelligence, contrary to wide-spread ideas on the question, stems from social constraint. Social relations favor self-control because they oblige the individual to govern his desires according to established lines of action. This distance with respect to his own impulses that is imposed on the individual by social constraint underpins the development of his will. In effect, the individual exercises his will only in the conscious control of his conduct. The social constraint represented by the moral code and control of the individual will in moral intelligence are merely two antithetical but interdependent elements in the development of the individual.

When speaking of moral intelligence, Durkheim emphasizes the importance of a conscious control of the motives of action. This mastery is all the more important when the axiological guidelines of the society are more abstract and the possibilities of action more numerous. Thus, for Durkheim, the first condition of all freedom is self-control, not independence. Social constraint, even when less visible, is always present. One of the goals of education is not to free the individual from this constraint but to teach him to act consciously. This precept of moral education

13 É. Durkheim (1918), *Montesquieu and Rousseau forerunners of sociology*, transl. by R. Mannheim, Ann Arbor, The University of Michigan Press, 1960, p. 103; translated from the French: “Le ‘contrat social’ de Rousseau”, *Revue de métaphysique et de morale*, t. XXXV, 1918.

echoes the thesis developed in *The Division of Labor in Society*, in which he argues that modern-day freedom, inherent in the development of individualism, should not be reduced to the protection of private areas of independence; it is characterized by a will rendered autonomous by the conscious domination of social constraints and of the dependency in which the individual finds himself with respect to society. Whatever is a source of solidarity, Durkheim writes, is moral. In other words, whatever is based on deference to the collective interest. Nevertheless, it may seem that the social actor has little latitude for making decisions, and that Durkheim's conception of moral education leaves one feeling unsatisfied. While an act is moral because it obeys a collective interest defined by society, there seems to be no connection between the moral codes prescribed by society and the reasons of individuals. The first appear to be "floating" in a world separate from concrete life. In the event, one does not see how these moral codes can evolve so as to respond to the evolution of the social needs they are supposed to ensure. Durkheim does not appear to remove what he saw as Rousseau's stumbling block:

The general will, for want of an intermediary, remains confined within itself, that is, it can move only in a realm of universals and cannot express itself concretely. This conception is itself a consequence of the fact that Rousseau sees only two poles of human reality, the abstract, general individual who is the agent and objective of social existence, and the concrete empirical individual who is the antagonist of all collective existence. He fails to see that, though in a sense these two poles are irreconcilable, the first without the second is no more than a logical fiction.<sup>14</sup>

The possibility of a re-evaluation of the moral code by individuals who are at the same time governed by it makes it necessary to break with the axiological relativism in which, in Durkheim's works, the submission of the moral to the social is theoretically engaged. This problem would vanish if, for example, the plurality of moral codes represented the historical products of more universal implicit values held by individuals. These values would be capable of accounting for the individual sources of protest otherwise than by the idea of "deviancy". The inconsistencies between these values and the moral code in force, generated by social change, would then explain the possibilities of re-evaluating this code with the help of that human ability whose development is the vocation of education: *moral intelligence*.

14 É. Durkheim, *Montesquieu and Rousseau*, p. 131.

### III. George H. Mead

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Mead<sup>1</sup> defines the sociological view he develops as a “social behaviorism”; he sees the fundamental project of behaviorism as being the study of experience using behavior. This goal delimits his own field of analysis, which he describes as an extension of the field of behaviorist analysis, as it was developed by John B. Watson, to the field of social experience.

An outgrowth of animal psychology, behaviorism<sup>2</sup> applied itself to explaining objectively observable individual “behaviors” by eliminating all reference to an inner experience, to a reflexive activity of consciousness. This approach rejects consciousness as a psychic essence, substance or entity. Such a rejection, Mead explains, does not require out and out negation of consciousness and its functional role in accounting for human behavior. One can be a behaviorist and still take an interest in consciousness, providing one understands it as a natural phenomenon linked with the activity of the central nervous system, but endowed with a specific role in human behavior. In this perspective, Mead distinguishes two meanings of the notion of consciousness. Consciousness, in the broad sense, psychological consciousness, is a set of

- 1 G. H. Mead (1934), *Works of George Herbert Mead*, vol. 1: *Mind, Self, and Society, from the Standpoint of a Social Behaviorist*, Edited and with an Introduction by Charles W. Morris, Chicago and London, The University of Chicago Press, 1934; paperback edition, 1967.
- 2 According to Tilquin’s analyses (1942), behaviorism is not, as its protagonist, Watson, claims, the “science of behavior”, but a philosophical and even metaphysical doctrine characterized by a few fundamental postulates. Among these we can retain materialistic deterministic monism; the reduction of the psychological fact to the interaction of the organism with its environment, and the conception of all behavior as an “adaptation”; the conception of psychology as a practical science, formulating laws by which the reaction can be predicted if one knows the stimulus, or the stimulus assigned if one knows the response; the continuity between animal life and human life and the transition from one to the other through evolution. See A. Lalande (1926), *Vocabulaire technique et critique de la philosophie*, Paris, Presses Universitaires de France, 1997, t. 1, pp. 10–111.

features that depends on the relation between the object and the organism. It corresponds to the functional relations between a particular organism and its environment. For instance, qualities and characteristics (color, odor, beauty, dangerousness, etc.) emanate from this type of relationship. The intelligent behavior proper to humans, so-called “rational” behavior, calls upon another meaning of consciousness, the nature of which Mead’s *Mind, Self, and Society* is devoted in particular to elucidating.

In Mead’s approach, it is the interaction between different organisms in the course of social action and the mutual adjustment of their conducts that underpin the process whereby human mind develops. There would be no thought if there were no internalization of the act of conversing with another. But communication with others supposes that the interacting individuals share significant symbols. It supposes mediation by symbols having the same meaning for the individuals involved. These symbols are constituted within the social process of experience during which the actions and reactions of the different organisms involved adjust to each other. The objects of the experience correspond to a set of relations constituted by this mutual adjustment of the organisms. This is a general definition of the object and is valid at all levels of abstraction. For Mead, the object is that entity to which the individual is capable of referring by virtue of the specific relationship he entertains with it, in other words by virtue of the meaning the object holds for him. Every biological organism creates the objects to which it responds by virtue of its physical-chemical structure. For instance, there would be no food without organisms capable of digesting it. The social process creates new objects out of individual actions and responses: the responses of one individual to the gestures of another constitute their meaning. This meaning potentially creates a new object or provides an old object with a new content. That is why meaning is immanent to the very experience that produces it:

Meaning is thus not to be conceived, fundamentally, as a state of consciousness or as a set of organized relations existing or subsisting mentally outside the field of experience into which they enter; on the contrary, it should be conceived objectively, as having its existence entirely within this field itself.<sup>3</sup>

3 G.H. Mead, *Mind, Self and Society*, pp. 78–79.



But meaning still does not imply consciousness of meaning:

For example, the chick's response to the cluck of the mother hen is a response to the meaning of the cluck; the cluck refers to danger or to food, as the case may be; and has thus meaning or connotation for the chick. [...] A gesture on the part of one organism in any given social act calls out a response on the part of another organism which is directly related to the action of the first organism and its outcome [...] The mechanism of meaning is thus present in the social act before the emergence of consciousness or awareness of meaning occurs. The act or adjustive response of the second organism gives to the gesture of the first organism the meaning which it has.<sup>4</sup>

Consciousness of meaning develops with communication through the agencies of symbolization and language:

Symbolization constitutes objects not constituted before, objects which would not exist except for the context of social relationships wherein symbolization occurs. Language does not simply symbolize a situation or object which is already there in advance; it makes possible the existence or the appearance of that situation or object...<sup>5</sup>

Mead suggests a formulation of consciousness of meaning, in behaviorist terms, when he says that individual organisms tend to call forth implicitly in themselves the same response that they explicitly call forth in the organism which they addresses. If a person points someone in a given direction, he simultaneously receives his own indications. In other words, the response he is supposed to elicit in others, the meaning his act is supposed to have for others, corresponds to the implicit meaning his act has for himself. The act he addresses to another reflects an expectation made possible by his capacity to put himself in another's place within the relationship involved in the interaction. This awareness or consciousness of the effect he produces is the basis of reflexive thought, which enables him to adopt the attitude of another towards himself. Insofar as he is capable of conceiving another's attitude towards himself, he potentially becomes an object for himself. This is, for Mead, a crucial phase in the development of social individuality. It reflects a distance between the individual and his self which forms the basis of rational social conduct properly speaking. It is necessary to rational behavior that the indi-

4 G. H. Mead, *Mind, Self and Society*, pp. 77–78.

5 G. H. Mead, *Mind, Self and Society*, p. 78.

vidual also adopt an objective impersonal attitude. That is what Mead means by “becoming an object for oneself”. The individual does not perceive himself directly, but only indirectly, by taking the different points of view of the other members of the same social group. And vice versa, according to Mead, the self, as an object for itself, is essentially a product of social experience.

The propensity to separate the self from the organism, in the development of rational social conduct, appears and evolves within children’s play and games. First of all in play, the child invents imaginary friends and calls out the responses in them that he too feels inwardly. His actions with respect to those created characters express an expectation, he anticipates the characters’ response. When he plays, he puts himself in their place in order to respond to the action produced. By putting himself in their place, he sees himself from the outside, as it were. He does not see himself as an organism responding to stimuli. He sees himself as following directions constituted by virtue of the relationship he creates with this imaginary friend. When he plays at being a cowboy, or a teacher, or a policeman, he is learning to be another for himself by virtue of his virtual relations with these characters. Alternating roles, he plays all the characters in the scene. This objectivization of the self with which he experiments by taking different roles is systematic in children’s play. In formal games, each role entertains a fixed relation with all the others. Each role is identified by a formal structure defined by the rules. The individual is defined by the whole set of these explicit relations that he carries on with the others. An understanding of the rules, and therefore an understanding of the role of each of the participants, forms the basis of a virtual interchangeability of the roles. The young baseball player implicitly knows the potential and institutionalized responses of each of the other players. Game playing corresponds to an important phase in the development of the social self. It is this capacity to take on each of the roles played by others with respect to oneself in the social group, and more broadly in society, that, for Mead, corresponds to consciousness of self, in the full sense of the term. This consciousness is the consciousness of one’s self as an object or an individual for others by virtue of one’s relations with others. The organized community or the social group within which the individual’s unity of self is constituted is, for the social identity of the individual, what Mead calls the “generalized other”, that is, his identity from the generalized viewpoint of the whole social group.

It is in the form of the generalized other that the social process influences the behavior of the individuals involved in it and carrying it on, i.e., that the community exercises control over the conduct of its individual members [...] what goes to make up the organized self is the organization of the attitudes which are common to the group. A person is a personality because he belongs to a community, because he takes over the institutions of that community into his own conduct. He takes its language as a medium by which he gets his personality, and then through a process of taking the different rôles that all the others furnish he comes to get the attitude of the members of the community. Such, in a certain sense, is the structure of a man's personality. [...] He is putting himself in the place of the generalized other, which represents the organized responses of all the members of the group. It is that which guides conduct controlled by principles.<sup>6</sup>

On the axiological level of social action, the stage in individual development that Mead associates with the notion of “generalized other” is the counterpart of the formal-operations phase as defined by Piaget in his genetic psychology. For Mead as for Piaget, these stages indicate an evolution of the subject's ability to manipulate objects which are literally “abstracted” from the concrete world, that is, objects identified from the relations they entertain with each other. In Mead, axiological development corresponds to a separation of the subject from the object that he represents for others within the social experience. For Piaget, but also for Mead, these developments are grounded in the individual's interactions with his environment. Furthermore, they are part of a quest for order common to all subjects. They are a response to an overall decentering of the subject – in the structuralist sense – with respect to his environment. This “decentering” is supposed to open the way to an adult type of cognitive and relational life. However this comparison between Mead's analysis of axiological development and Piaget's analysis of cognitive development also suggests that the two views have similar limits. One of these is the teleological character of the objects underpinning the basic stages of individual development.

Social institutions rely on the development of organized social activities that exercise a normative control on individual social experiences. Anticipation of others' responses, in other words anticipation of the meaning others attribute to the individual's own act, predetermine the potential forms of this act. According to Mead, the aim of education is the inculcation of institutionalized social reactions, that is the trans-

6 G.H. Mead, *Mind, Self and Society*, pp. 155 and 162.

mission of meanings. The term “meaning” is Mead’s translation of the behaviorist notion of reaction. The idea of meaning, and then of the consciousness of meaning, is central to the role Mead ascribes to consciousness in his attempt to extend the behaviorist approach. Nevertheless, the conception of education as the transmission of meanings is ambiguous. What role do these socially transmitted meanings play in the conduct of action? As Mead analyses it, the whole process of structuring the “self”, which occurs in the course of social experience, corresponds to the development of a socially integrated form of the personality. The attitudes of others, Mead writes, constitute the organized “me”, to which the individual reacts as “I”. Or to put it another way, the individual’s conduct is not *determined* by the social roles he takes, but is guided by the set of expectations this conduct arouses in others by virtue of these roles. The relations between “I” and “me”, in Mead, remain a puzzle, however. They need to be elucidated insofar as that is where the individual’s relations with society are played out.

The “me” is the more or less integrated set of attitudes and ideas of other people which we have built together as our conscious experience from which we choose roles to represent our own ideas of ourselves. Many of these are roles which we know the community has come to expect us to perform. The “I” is the self as actor or initiator, the agent of change. [...] it is in the domain of the “I” that we find the notion of responsibility, the uniqueness and coherence and waywardness of choice. Without the “I” there could not be a notion of responsibility nor could there be an expectation of novelty or unexpectedness in experience. While different aspects of “me” depend upon my social and cultural training and the particular configurations of time and place, the “I” represents the sense of self-identity in the possessor of the experiences.<sup>7</sup>

These developments clearly place the “I” at the origin of the individual’s action and attribute him with intentionality. Karl Mannheim identifies the role of Mead’s “I” with the regulatory and unifying function of the individual’s personality as his experience develops. This interpretation does nothing to elucidate the concept, however. The difficulty of grasping the relationship between the “I” and the “me” stems from the fact that we find ourselves here at the limit of Mead’s theoretical developments. Their proximity with Vygotsky’s ideas, when it comes to analy-

7 K. Mannheim, W.A.C. Stewart, *An Introduction to the Sociology of Education*, London, Routledge and Kegan Paul, 1962, p. 93.

ses of the axiological developments of the individual, may enable us to suggest a common thread. It is in his discussion of the role of play in child development (a point on which Mead's and Vygotsky's analyses "intersect") that Vygotsky draws a formal comparison between the individual's axiological development and his cognitive development. Play does not constitute an unfettered satisfaction of the child's desires. On the contrary, in play the child learns to act counter to his immediate impulses. Play obliges the child to subject himself to rules, whether they are explicit or not. But

[t]he essential attribute of play is a rule that has become a desire [...] To carry out the rule is a source of pleasure. The rule wins because it is the strongest impulse. Such a rule is an internal rule, a rule of self-restraint and self-determination, as Piaget says, and not a rule the child obeys like a physical law. In short *play gives a child a new form of desires*. It teaches her to desire by relating her desires to a fictitious "I", to her role in the game and its rules. In this way a child's greatest achievements are possible in play, achievements that tomorrow will become her basic level of real action and morality.<sup>8</sup>

The cognitive stage that accompanies the general capacity to operate with the meaning of things in Piaget's overly structural interpretation (the formal-operations phase) corresponds closely to the axiological stage that accompanies the general capacity to operate with the meaning of actions in Mead's overly totalizing interpretation (the stage of the generalized other). This relationship is explicit in Vygotsky. In order to separate the meaning of the action from the action itself (for example riding a horse), the child needs a "pivot" action that takes the place of the real action and expresses its meaning.

Just as operating with the meaning of *things* leads to abstract thought, we find that the development of will, the ability to make conscious choices, occurs when the child operates with the meaning of *actions*. In play, an action replaces another action just as an object replaces another object.<sup>9</sup>

It is the abstraction of the action meaning that justifies the differentiation between an "I" and a "me" in Mead. On the cognitive level, the mediation of thought by categories, concepts and other tools of mind

8 L. Vygotsky (1933–1935), *Mind in Society. The Development of Higher Psychological Processes*, Cambridge MA, Harvard University Press, 1978, pp. 99–100.

9 Vygotsky (1933–1935), *Mind in Society*, p. 101.

always constitutes a limit on thought that at the same time frees it from the immediate environment. On the axiological level, in play and then in life, action is abstracted from the individual's immediate desires, it acquires a meaning mediated by rules. This abstraction of the action meaning is one of the foundations of Weber's interpretation of the role of the "personality" in social action. According to Weber, the notion of personality relies on the continual inner linking of the individual's action with values. And it is the abstraction of the action meaning that makes the constancy of this link possible. The ultimate values and the meanings the individual gives his life can be expressed through various concrete goals, which depend on the social contexts in which they are embedded. The freer the action, the better the personality can express itself. Free action is defined as that which is the most based on the actor's "own considerations" when he enters into a decision "undisturbed by a 'foreign' ('external') coercion or irresistible effect".

Thus the freer the action, the more that notion of "personality" becomes validated which finds its "essence" in the meaning of its inner relation to definite ultimate "values" and life "meanings". In being pursued, these become translated into purposes, and thereby transformed into teleological action. [...] The more this is the case, Weber goes on to say, the less room there is for any sort of romantic naturalistic conception of "personality", that conception which paradoxically seeks the sacred quality of personality in an "irrationality" based upon the dull, undifferentiated, vegetative "foundation" of personal life: i. e., upon the interminglings of a mass of psycho-physical conditions of temperament and sentiment, but which in no way distinguishes the human "person" from the animal.<sup>10</sup>

10 M. Weber, "Subjectivity and Determinism", in A. Giddens (ed.), *Positivism and Sociology*, London, Heinemann, 1974, pp. 26–27.

## IV. Talcott Parsons

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Talcott Parson's analysis of the socialization processes attempts to account for the interplay between microsocial and macrosocial levels in the development of social processes. To this end, Parsons offers an interpretation of the overall dynamics of the formation of social actors through the manifold interactions in which they participate. Indeed the social system is defined as a network of systems of interaction between actors.

Reduced to the simplest possible terms, then, a social system consists in a plurality of individual actors interacting with each other in a situation which has at least a physical or environmental aspect, actors who are motivated in terms of a tendency to the "optimization of gratification" and whose relation to their situations, including each other, is defined and mediated in terms of a system of culturally structured and shared symbols.<sup>1</sup>

There is relative consensus among social actors on the meanings they attach to situations and actions. This allows them to attribute the same meaning to the same act and thus to interpret each others' responses correctly. If this were not the case, socialization would be altered. It is the gratifying or deterring effect of the actors' responses to each other that forms the basis of the processes of socialization of motivations. Ego's motivation with respect to alter translates into ego's expectation and alter's (positive or negative) sanction, and conversely regarding alter's motivation with respect to ego. The reciprocity of expectations explains the existence of stable interaction structures. These stabilized structures define institutionalized roles. Thus, stable systems of interaction rely on the actors' action-orientations as defined by institutionalized sets of roles. The actors' mutual expectations tend, in effect, to fit their roles in the interaction. Social behaviors are thus regulated by the norms reflected in the roles, which in turn are linked to the particular type of participation in the interaction. Role systems form the basis of

1 T. Parsons (1951), *The Social System*, Glencoe, The Free Press, 1964, pp. 5–6.

an implicit regulation of the interaction systems because they channel the individual motivations in such a way that these in turn reinforce the stability of the norms in question. The socialization of motivations through processes of interaction normed by institutionalized roles can be explained, in Parsons, by the fact that individual motivations respond to a basic individual need for “gratification”.

The channeling of individual motivations through social roles explains the equilibration dynamics of the social order. Stabilized structures of interaction satisfy functional requirements defined at the level of the social system. They act as a vector of satisfaction for such functional requirements and as vectors of equilibration for the social system. The socialization of individual motivations through social interaction constitutes the microsociological basis of needs defined at the macrosociological or systemic level. It is also potentially the microsociological basis for social change. But Parsons conceives “socialization” above all as the internalization of norms and patterns of action. The individual stands at the heart of a network of interaction systems by which he is shaped. The two poles (expectations/gratification) account, via the interaction systems in which the individual participates, for the constraints exercised by the social system on the shaping of his personality. The normative orientation of its action does not account for all learning, but it does correspond to what Parsons means by “socialization” properly speaking:

Learning is defined broadly as that set of processes by which new elements of action-orientation are acquired by the actor, new cognitive orientations, new values, new objects, new expressive interests. Learning is *not* confined to the early stages of the life cycle, but continues throughout life [...] The acquisition of the requisite orientations for satisfactory functioning in a role is a learning process, but it is not learning in general, but a particular part of learning. This process will be called the process of *socialization*, and the motivational processes by which it takes place, seen in terms of their functional significance to the interaction system, the *mechanisms of socialization*. These are the mechanisms involved in the processes of “normal” functioning of the social system.<sup>2</sup>

For Parsons, the principal value-orientation patterns are acquired in childhood. These patterns are the most stable and resistant of all the acquired features of personality. They constitute the core of the “basic personal-

2 T. Parsons (1951), *The Social System*, pp. 203–205.



ity structure". To a large extent personality is a function of the fundamental role structures and prevailing values of the social system. From early childhood, the socialization process builds on Sigmund Freud's development stages. It corresponds to a process of differentiation of a motivational flow grounded at the beginning in the mother-child relationship. This process depends on a continual reinvestment of the needs and dispositions, of a "motivational energy", in directions called out by the systems of interaction in which the child participates, and first of all within the context of kinship. This is the beginning of the internalization dynamics of the social values and norms that make up the basic personality structure as it articulates with the social system. From birth and from the first moment his behavior elicits particular expectations, the child is assigned a role, which itself depends on the interpretation of the child's expectations by those around him. The set of role structures marking the socialization process in the child underpins his acquisition of particular value-orientation patterns. This acquisition is a response, by way of the expectations involved in the interaction structures, to the prevailing social values. Moreover, concrete realization of the diverse interaction structures accounts for the variety of personality traits acquired in this manner. Parson's notion of role does not have the same meaning as it does in the theater, where, by definition, an actor *plays* a part and therefore finds himself in the position of an imitator, aware that he is not the character he is playing, or, as Parsons puts it: "When a person is fully socialized in the system of interaction it is not so nearly correct to say that a role is something an actor 'has' or 'plays' as that it is something that he *is*."<sup>3</sup>

In this way, the socialization process tends to bring the needs of the social system as defined in terms of roles to coincide with the orientations of the individual personalities as defined in terms of motivations.

The notion of "internalization" is worth developing here because the role of the internalized norms and values is one of the great "black boxes" of sociological analysis. For Parsons, internalization is of major importance insofar as it represents the effect, in individual development, of the interplay of the two major behavioral tendencies (the tendency to have expectations with regard to others and the tendency to

3 T. Parsons, *Family, Socialisation and Interaction Process*, Glencoe, The Free Press, 1955, p. 107.

optimize gratification), whose reciprocal orientations govern interaction. Parsons sees in the explanation of behavior – in Freud by the concept of the superego, in Durkheim by the idea of social constraint, and in Mead by the analysis of taking the role of others – a founding intellectual convergence. This convergence rests on the crucial role played by the actors’ “internalization” of social norms and values in social action. But Parsons believes that, in concentrating on analysis of the individual personality, Freud did not pay enough attention to the fact that the interactions between individuals form systems. On the other hand, in concentrating on the social system as a system, Durkheim and his followers did not draw all of the consequences of the fact that the social system is made up of interactions between personalities.<sup>4</sup> Still according to Parsons, Mead was the first to have clearly seen the complementary aspect of the types of social roles. Yet Parson’s analysis of personality structuring is in some ways closer to naturalistic behaviorism than it is to Mead’s social behaviorism. The emergence of the social personality, in Mead’s theory, corresponds to an “internalization” of norms and values that reflects a “decentering” with respect to the different social role systems. In a similar vein, Vygotsky’s notion of internalization designates the shift from processes occurring between individuals to processes occurring within the individual. This shift correlates with a stepping back from the interpersonal relations in question. In the process, the constitution of an internalized social ego indicates, not an identification with the social “roles” but, on the contrary, a distancing from spontaneous social interactions. Parsons bases his reasoning on a similar process of development of the social personality by differentiation of the social “objects”, but, in using the idea of internalization, he appeals to the acquisition of specific action-orientation patterns. He defines an internalized “object” as follows:

It is that structure in the personality which regulates the orientation of the individual to an object (or class of objects) in the situation, by defining for ego the *meanings* in the relevant respects of that object, and which has stability over time and a range of adaptability to changing conditions. [...] The pattern aspect which is internalized, then, is the *reciprocal interaction pattern*, the matched or complementary expecta-

4 Cf. particularly T. Parsons, *Social Structure and Personality*, Glencoe, The Free Press, 1964, p. 20 and id. *Family, Socialisation and Interaction Process*, p. 55.

tions in the form “if alter this, then ego that,” and vice versa, “if ego that, then alter this.” Alter as object then becomes “he who” in relation to ego under given circumstances does so and so. [...] by learning in the process of socialization *ego* comes to be *he who* in relation to alter does so and so under given conditions. *There is no other meaningful answer to the question what ego is, if ego as personality is conceived to be a system of action.*<sup>5</sup>

Internalization, Parsons explains, provides movement with its trajectory. Nevertheless, he carefully stresses the fact that the important thing in *explanation* in sociology is not so much the “natural” development of the action (from an initial *impetus*) as the change of direction. As with explanation in mechanics, one is not as interested in the continuation of a movement, ensured by the law of inertia, as in the reason for the change in the movement. However, the idea of “internalization” should only explain the direction taken by the action. If we return to the kinetic metaphor, in order for the law of inertia (as compared to the law of internalization) to have an explanatory value in the event that direction is maintained in the presence of potentially opposing “forces”, it would also have to account for an intrinsic resistance to change. The weaknesses of such a justification are evident. It is one thing to maintain a direction already taken, that is to say in the absence of effects opposing the movement; it is another to oppose a specific resistance to effects that could work against a given movement. Internalization, insofar as it is a phenomenon of “resistance to change”, is therefore, in Parson’s system” a “black box” devoid of explanatory power.

5 T. Parsons, *Family, Socialisation and Interaction Process*, pp. 56–57.



## V. Alfred Schütz

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Alfred Schütz's work is devoted to the problem of the meaning of the everyday world for the individual. He is particularly interested in the development of tools for common-sense thinking, tools the individual uses to interpret external reality and to act on it. To this end, Schütz combines Weber's comprehensive method with Edmund Husserl's phenomenological approach.

What the individual regards as the natural world rests on a set of constructs that are for the most part generalizations, more or less abstract "types" which enable him to make sense of his concrete experiences:

All our knowledge of the world, in common-sense as well as in scientific thinking, involves constructs, i. e. a set of abstractions, generalizations, idealizations specific to the respective level of thought organization. Strictly speaking, there are no such things as facts, pure and simple. All facts are from the outset facts selected from a universal context by the activities of our mind. They are, therefore, always interpreted facts, either facts looked at as detached from their context by an artificial abstraction or facts considered in their particular setting. In either case, they carry along their interpretational inner and outer horizon. This does not mean that, in daily life or in science, we are unable to grasp the reality of the world. It just means that we grasp merely certain aspects of it, namely those which are relevant to us either for carrying on our business of living or from the point of view of a body of accepted rules of procedure of thinking called the method of science.<sup>1</sup>

The individual places in front of reality an analytical grid constructed from his own experience. The relevant experiential elements are selected with regard to his present plan of action. These elements are more generic than the objects in the outside world. If this were not the case, they would have an essentially individual character. The mental patterns used by the individual in the course of the *a priori* activity in his mind are among the least conscious elements of his rational activity. The constructs that make up the individual's intellectual "tool kit" are

1 A. Schütz (1940–1955), in A. Brodersen (ed.), *Alfred Schütz. Collected Papers*, vol. I, The Hague, Martinus Nijhoff, 1962, p. 5.

used at every level of thought organization. They constitute a stock of knowledge at hand at a level available to conscious thought. But for the individual, this stock of knowledge is not organized like a system of scientific knowledge. It is a mixture<sup>2</sup> of both precise experiences and vague conjectures. Suppositions and prejudices are found side by side, Schütz tells us, with the best-founded proofs. The individual starts out with the rules and principles transmitted to him by his parents and his teachers, which he has accepted unquestioningly, and with the rules and principles gathered from his own experiences. Motives, ends and means, causes and effects link up without the individual being clearly aware of their true connections. He usually has no reason to question their overall coherence. They are not subjectively submitted to such criteria of validity as true or false, but rather those of well-founded or ill-founded. The connections they allow one to establish between events are not so much laws as patterns and relations. The ideal that serves as the reference for common-sense knowledge is not truth nor even probability in the mathematical sense, but likelihood. Schütz compares what this stock of knowledge represents for the individual with cooking recipes: as long as a pie turns out well, the individual does not ask if the recipe used is the best in the world or the most nutritionally satisfying.

Constructing these tools of mind with which the individual perceives and interprets the world, and acts is an ongoing learning process. They underpin the meaning given to present experiences, and present experiences contribute to reassessing and enriching them. Let us go back over the major stages of this construction. Schütz emphasizes that the situation of the social actor is biographically determined. It is in reality composed of the sedimentation of all his past experiences. It is the sedimentation of these experiences that explains the construct his mind activates in order to grasp the world, the possibilities for action he sees and the means he chooses for carrying out his action. As we saw, these experiences are his own as well as those passed on to him by his parents and teachers. A person's knowledge of the social or natural world is partly "inherited" and transmitted through education, and partly independently constructed by the individual out of his own life-experiences. This situation is defined as biographical by Schütz and therefore as essentially

2 A. Schütz, in A. Brodersen (ed.), vol. II, pp. 72–73.

individual; it determines which relevant elements of the actor's present situation are capable of sustaining his future action. Thus the set of possibles open to him is delimited by his past experiences, experiences that govern his perception and his interpretation of the facts, and from which he draws the rules for conducting his action. Based on the outcome of his present action, he enriches his stock of experiences and the knowledge that goes with it. Depending on the results, the individual can reappraise his action principles. This more or less conscious adjustment enables him to correct the assumptions on which his expectations are based by endowing them with more or less generality. But this is only a partial enrichment. It depends on the way the individual interprets the world in the course of his action; this interpretation singles out only a certain number of relevant elements. It is these elements that now underpin the actualization of his cognitive tools and which in particular provide the basis for future generalizations or particularizations. In sum, learning is selective. Moreover, it is also partly endogenous.

The question that now arises is how the cognitive *a priori*, the stocks of experience and knowledge, in short all the tools of mind developed in the course of the experiences each individual personally undergoes, how all these can coincide, i.e. become intersubjective, in such a way that life in society is possible. The fundamental question Schütz is asking is: to what extent can the mental constructs described here account for social life? To what extent can the constructs developed by each individual from essentially individual situations enable each social actor to arrive at comprehensive attitude towards the Other? To what extent, therefore, do these mental constructs enable the actors to take the behavior of the other social actors into consideration and to orient their own action in accordance with this behavior? In questioning the nature of the social bond, Schütz is in substance asking a more specific question. He is asking how communication, in the broad sense, is possible.

But how does it happen that mutual understanding and communication are possible at all? How is it possible that man accomplishes meaningful acts, purposively or habitually, that he is guided by ends to be attained and motivated by certain experiences? Do not the concepts of meaning, of motives, of ends, of acts, refer to a certain structure of consciousness, a certain arrangement of all the experiences in inner time, a certain type of sedimentation? And does not interpretation of the Other's meaning and of the meaning of his acts and the results of these acts presuppose a self-interpretation of the observer or partner? How can I, in my attitude as a man

among other men or as a social scientist, find an approach to all this if not by recourse to a stock of pre-interpreted experiences built up by sedimentation within my own conscious life?<sup>3</sup>

According to Schütz, it is the tools of mind that people share which enable them to understand each other. The individual and subjective character of learning about the world sets limits on this understanding, which can be overcome only because of a certain number of conditions. First of all, the interacting individuals are conscious of their own subjectivity and that of others. In spite of the cognitive differences that distinguish their worldviews and of which they are aware, a tacit agreement between them makes the interaction possible. On the one hand, they implicitly assume that the differences in their respective approaches to the world are not relevant to the elements they share and on which their interaction is based. On the other hand, they implicitly assume that they control the differences in their respective approaches to the world as far as the specific elements of this interaction are concerned. They thus have an awareness of the social distribution of knowledge. They call upon their knowledge of this distribution when they consult an expert, a doctor, for instance. The assurance that a shared world exists and that they have relative control of their cognitive differences places them *a priori* in a position to understand the action of the Other. But they must still be justified in positing the universality of the set of common-sense rules and knowledge that upholds their grasp of the world.

The existence of an intersubjective world raises the problem of the socialization of knowledge. The share of an individual's knowledge about the world that comes from strictly personal experience is minor, Schütz writes.<sup>4</sup> The major part has been passed on to him by his parents, teachers and his teachers' teachers. This social transmission concerns not only knowledge of his environment but also life-styles and all the methods enabling him to link up means and ends in given situations. This transmission constitutes the community of culture the individual shares with his conspecifics. Last of all, this world is not his own private world. The others, his fellowmen, are also a part of it, and not only as objects of his experiences but as *alter ego*, in other words as subjectivities us-

3 A. Schütz, in A. Brodersen (ed.), vol. I, p. 13.

4 A. Schütz, in A. Brodersen (ed.), vol. I, p. 13.



ing the same activities of consciousness as he in constructing their own tools of mind.

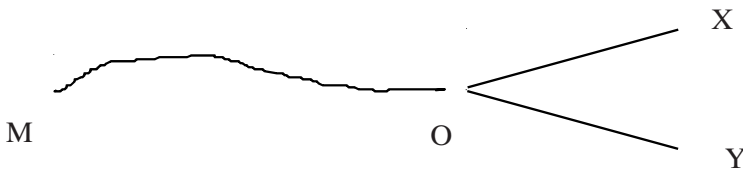
Based on these developments devoted to subjective learning about the world, Schütz answers the question of the foundations of social action in the following way. The term “action”, he explains, designates a human conduct governed by expectations on the part of the actor, in other words, based on a preconceived project. Such actions, he stresses, can be mental acts as well as acts performed on the outside world. Every act is based on anticipation of the behavior to come through imagination. The individual first has the idea for a certain act he wants to accomplish, an act supposed to be the outcome of the action he intends to undertake. Starting from the idea of this act, he reconstructs each step that will allow him to accomplish it. To do this, he calls on his knowledge of similar acts performed in the past, and on his knowledge of the specific features of the situation in which the planned action is to occur. This situation includes his own personal situation. Using the notion of motive, Schütz distinguishes the actor’s reasons for acting that are teleological, that are future-oriented, “in order to motives”, and the reasons for acting that are based on the actor’s past experiences, “because motives”. A murderer will be said to have murdered his victim to take his money, for example; but it will be said that, if he killed for this motive, it is because he lived in a certain environment and that certain experiences drove him to act this way. There were other alternatives to murder. His personal situation and his life-story are called upon to explain the choice of a particular means.<sup>5</sup> For the individual, the action is subjectively founded on teleological reasons, on “in order to motives”, whereas an outside observer might perceive the factors that act as causes linked with the actor’s past experiences. These factors account for the intellectual tools at hand, which he uses to grasp his situation. He is not aware of his action thus being determined by his past experiences because these form his intellectual horizon. Although this distinction applies more particularly to the instrumental level of action, it can, in a preliminary phase, be compared with Mead’s distinction between a socialized “me” and an intentional “I”. Schütz distinguishes, on the one hand, the role of the cognitive tools that operate at more or less con-

5 A. Schütz, *in* A. Brodersen (ed.), vol. I, pp. 69–70.

scious levels and lay down a sediment over the course of the numerous experiences of the individual and, on the other hand, the role of reflexive consciousness, which he sees as more specifically intentional. One of the fundamental points he makes is that identification of the “because motives” is essentially a retrospective process. No one can identify the elements of the actor’s past experiences that fall into the category of “because motives” before the action has occurred. If there are alternatives, it is because the actor calls them into existence. Causes do not appear as such until the action has been carried out, retrospectively. To throw more light on his conceptions, Schütz refers to Henri Bergson’s interpretation on this subject in *Time and Free Will, An Essay on the Immediate Data of Consciousness*.<sup>6</sup>

Bergson attacks the teleological illusion for believing that the alternatives envisaged after the fact by an outside observer already existed as such at a time when all possibilities were still open. If the last act performed is taken as the goal, the past alternatives are artificially reconstructed with hindsight. In the course of the action that brings the actor’s project to maturation, there is no deliberation between alternatives defined beforehand, there is only a dynamic progress in which the self and its motives, like real living beings, are in a constant state of becoming.<sup>7</sup>

Figure 1. Retrospective illusion of the alternatives of action according to Bergson.<sup>8</sup>



6 A. Schütz, in A. Brodersen (ed.), vol. I, pp. 85–88.

7 H. Bergson (1889), *Time and Free Will. An Essay on the Immediate Data of Consciousness*, authorized transl. by F. L. Pogson, Mineola NY, Dover Publications, 2001, p. 183; translated from the French: *Essais sur les données immédiates de la conscience*, Paris, Presses Universitaires de France, 1927.

8 “[...] the figure, which is really a splitting of our psychic activity in space, is purely symbolical, and, as such, cannot be constructed unless we adopt the hypothesis that our deliberation is finished and our mind made up. If you trace it before hand, you assume that you have reached the end and are present in imagination at the final act.

Bergson conjures up two characters, one, Peter, who has an important decision to make, and the other, Paul, who tries to put himself in Peter's place and to predict his choice with certainty. For such a prediction to be possible, Bergson tells us, either Paul knows Peter's life so well that he can become one with Peter at the moment of decision, that he knows then all his past and present sensation, that he finally is Peter because, "the deeper psychic states, those which are translated by free acts, express and sum up the whole of our past history". Or Paul knows Peter's final act in advance and can thus

be able to supplement his mental image of the successive states through which Peter is going to pass by some indication of their value in relation to the whole of Peter's story [...] for the most common-place events have their importance in a life-story; and even supposing that they have not, you cannot decide that they are insignificant except in relation to the final act, which, by hypothesis, is not given.<sup>9</sup>

Yet in capturing the states of consciousness in what he calls the "pure duration", Bergson still does not account for the specific role of reflexive consciousness in the action dynamics.

Let us keep in mind that, for Schütz, it is crucial that the "because motives" are identified retrospectively. If not, the result would be a determinist perspective, which is clearly not the case. Yet the action

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In short this figure does not show me the deed in the doing but the deed already done. Do not ask me then whether the self, having traversed the path M O and decided in favour of X, could or could not choose Y: I should answer that the question is meaningless, because there is no line M O, no point O, no path O X, no direction O Y. To ask such a question is to admit the possibility of adequately representing time by space and a succession by a simultaneity. It is to ascribe to the figure we have traced the value of a description, and not merely of a symbol; it is to believe that it is possible to follow the process of psychic activity on this figure like the march of an army on a map. We have been present at the deliberation of the self in all its phases until the act was performed: then, recapitulating the terms of the series, we perceive succession under the form of simultaneity, we project time into space, and we base our reasoning, consciously or unconsciously, on this geometrical figure. But this figure represents a *thing* and not a *progress*; it corresponds to its inertness, to a kind of stereotyped memory of the whole process of deliberation and the final decision arrived at: how could it give us the least idea of the concrete movement, the dynamic progress by which the deliberation issued in the act?" (H. Bergson, *Time and Free Will*, pp. 180–181).

9 H. Bergson, *Time and Free Will*, pp. 185, 187–188.

dynamics does not rest on the specific character of the set of individual experiences. The cognitive tools the individual has developed over his lifetime are specific to him. But they tend to detach his action from the particularity of his individual situation. The elements of the individual situations act as reasons with respect to what, in social action, stems from the actors' properly intentional reflexive activity. The broader conceptions of rationality, which appeal, for example, to the notion of cognitive rationality, dissipate the ambiguity of Schütz's two orders of explanation. They account for the fact that actors act and react with regard to situations for "good reasons", even if these reasons are always "situated".

## VI. Raymond Boudon

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This chapter envisages the relationship between education and action in the framework of *methodological individualism*, through the impact of the processes of education and socialization on the actors' reasons for acting. The effects of these processes, insofar as they are imputed to an internalization of modes of thinking and acting that can be assimilated to unconscious conditioning, have no explanatory power in this perspective of analysis. On the other hand, such effects are considered whenever they impinge on the development of the actors' reasoning processes, in other words whenever they serve to explain the reasoning carried out consciously or "metaconsciously" by the actors.

The primacy given to actors' *reasons* by proponents of methodological individualism is a consequence of the initial hypothesis that social-action dynamics rests on individual actions. Yet it does not lead to an interpretative atomism that would gloss over the effects of social factors on these actions. However these social factors are taken into account because they are *frameworks* for the actions and not their intrinsic *causes*. Conversely, the slightest interest to the question of actors' rationality is tantamount to giving primacy to unconscious processes akin to automatic reflexes, to social logics that govern their actions and, in a more general fashion, to processes operating independently of what goes on at the level of the individual consciousness. This lesser interest is thus the equivalent of supposing that social phenomena depend above all on the effect of factors that act as explanatory "causes". It leads to making the individual the instrument of these causes. The importance given by the proponents of methodological individualism to the idea of rational action, and hence to actors' "reasons", is thus methodically opposed to holistic interpretations. This does not mean that they view social actors as apprentice logicians who reason out their every behavior. But they do consider that the scientific fecundity of sociological analysis depends on its capacity to account for the rational justifications of social actions, even though these may appear to be unreasonable, stereotypic, ineffective, absurd, illogical or irrational.

The notion of rationality is central to explanation in this perspective. It expresses the existence of a relationship, which is not determined but which is comprehensible, between the actor's situation and his action. The social actor possesses what is called a "limited", "subjective", "procedural", "cognitive", etc. rationality. These qualifiers convey the idea that the actors' reasons depend on a set of constraints, on predefined frameworks, on specific kinds of knowledge, and that they are imbedded in time. They express the idea that these reasons are "situated".

Here is the general frame of sociological explanations according to methodological individualism:

To explain a phenomenon  $M$  means:

1. To make  $M$  the aggregate result of a set of individual actions, in other words, to show that  $M$  is the product – resulting from the behavior or the attitudes – of a set of social actors. In mathematical terms:  $M$  is a function  $M(mi, mj)$  of the behaviors  $mi$  of the actors of category  $i$  and the behaviors  $mj$  of the actors  $j$  (assuming that the two social categories  $i$  and  $j$  need to be distinguished in the problem under consideration):

$$M = M(mi, mj).$$

2. To show that the behaviors  $mi$  and  $mj$  are *comprehensible*, given the situation in which the two categories of actors find themselves, situation  $Si$  for the first and  $Sj$  for the second, *situation* must be understood not only as the data characterizing the environment of the two categories of actors, but also as the data characterizing the actors themselves insofar as these data influence their control or their perception of their environment... In sum, behavior  $mi$  must be made a function of situation  $Si$  and  $mj$  a function of  $Sj$ :

$$mi = mi(Si) \text{ and } mj = mj(Sj).$$

3. In most cases, the analyst will also need to show that the situation in which a given category of actors finds itself results from the action of factor  $P$  situated at the level of the social system or at least at a level higher than that of the individual:

$$Si = Si(Pi) \text{ and } Sj = Sj(Pj).^1$$

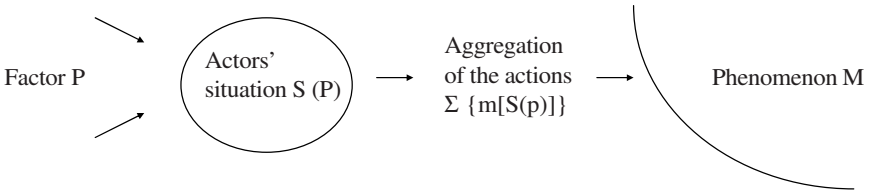
1 R. Boudon, "Explication, interpretation, idéologie", in A.J. Jacob (dir.), *L'Univers philosophique*, Paris, Presses Universitaires de France, 1989, p. 242.

According to Boudon’s formalization, the structure of the explanation of a phenomenon M is described by the formula

$$M = M\{m[S(P)]\}.$$

It can also be described by the diagram in Figure 2.

Figure 2. Typical diagram of the explanation according to methodological individualism



It is clear, after the foregoing and without seeking to be paradoxical, that, following Durkheim’s teaching, one “cause” of a social phenomenon is another social phenomenon. In other words, actors always act with respect to socially constituted situations. But methodological individualism deliberately distances itself from all brands of “methodological holism” when it refuses to by-pass the level of individual actions, considering that it is a level of reality essential to the analysis. At this level, the “connection” between the elements, the individuals, does not occur “mechanically” but in part through the individuals’ own interpretations of reality. While accrediting the idea that specific phenomena can appear at the collective level, for example socially constituted cognitive tools and, more generally, all the effects of aggregate individual actions, of which one kind is identified by the concept of *perverse effects* (those effects that are unintended but not necessarily harmful), methodological individualism refuses to consider social phenomena separately from what goes on at the level of the individual consciousnesses for the above-stated theoretical reasons.

A parenthetical remark is in order here, since the concept of situation is an equivocal one. Karl Popper’s principle of rationality states that the actions of individuals are usually adapted to the situation *such as they perceive it*. The extended definition of situation found in Popper, which includes all elements that mediate reasoning in situational contexts, has the disadvantage of weakening the analytical effectiveness of the rationality principle.

I have elsewhere proposed that we can construct our models by means of *situational analysis*, which provides us with models (rough and ready models to be sure) of typical social situations. [...] First of all, in our situational analysis itself we *replace* concrete psychological experiences (or desires, hopes, tendencies) by abstract and typical situational elements, such as “aims” and “knowledge”. Secondly, it is the central point of situational analysis that we need, in order to “animate” it, no more than the assumption that the various persons or agents involved act *adequately*, or *appropriately*; that is to say, in accordance with the situation. Here we must remember, of course, that the situation, as I use the term, already contains all the relevant aims and all the available relevant knowledge, especially that of possible means for realizing these aims.<sup>2</sup>

The interpretation of Freud’s theory of childhood neurosis put forward by Popper illustrates this extension of the concept of situation: Freud, according to Popper, explains a neurosis as being an attitude adopted in early childhood because it constituted the best available solution for escaping from a situation the child was incapable of understanding or coping with. According to Popper, the child’s act is rational because it corresponds to “the immediately or obviously preferable or the less intolerable choice” between two alternatives that present themselves to him, given the child’s situation.<sup>3</sup>

Such a definition of situation establishes a hierarchy between a strong rationality (when beliefs and actions are rational) and a weak rationality (when only actions are subjectively rational) that, in the present case, tends to blur the dividing line between insanity and reason. While opening up some interesting perspectives, it fails to invite one to adopt the actor’s point of view strongly enough when explaining the action and, in so doing, to account for the rationality of his beliefs, his motives, even his values, given his situation. The problems inherent in defining the concept of situation recede if one accepts that the role of the rationality principle is not to classify actions according to whether they are more or less adapted to the actors’ situation, seen through the eyes of an outside observer, for example, but to permit to choice between different explanatory models of actions. From this standpoint, the concept of situation entails identifying the elements underlying the reasoning that will account for the actor’s behavior. Thus a model that explains the action as

2 K. Popper (1967), “The Rationality Principle”, in D. Miller (ed.), *Popper Selections*, Princeton, Princeton University Press, 1985, pp. 358–359.

3 K. Popper, “The Rationality Principle”, p. 364.



being adapted to the actor's situation, such as he perceives it, turns out to be better than one that, implicitly or not, appeals to a form of unconscious conditioning or to some irrational motive or other. Boudon's explanation of the child's behavior, in the example given by Spencer and Durkheim of the puppet, illustrates the role the rationality principle can play in evaluating explanatory models. A child treats his puppet as if it were a human being: he speaks to it, punishes it, cajoles it, flatters it, preaches to it. He uses his mother as a witness to the puppet's bad character.

A banal evolutionary interpretation: the child does not yet distinguish clearly the different categories of beings. An interactionist sociological interpretation: the child acts *as if* the puppet were a living being; his mother agrees to play the game. The social conditions are, therefore, united so that the child is able to treat the puppet as a living being in front of his mother. Hence, if the father were to appear, the game would then be brutally interrupted and the puppet would find itself relegated to a corner as the vulgar collection of pieces of material that it is. In fact, the child never believed that it was anything else, for he would have been very surprised if the puppet to whom he preached had suddenly become really alive, starting to scratch him and pinch him.<sup>4</sup>

But the rationality principle is a matter of methodology. It does not exclude the possibility that reason could provide justifications for simple feelings and, more generally, for motives devoid of objective grounds, or that many actions may be performed without calling forth an explicitly conscious analysis. This is true of reactions to problems already resolved in the past. Such actions can be regarded as following predefined, unquestioned patterns. Alternatively, reflection enters the picture whenever there is a new problem to be solved, whenever past experience does not provide an adequate solution. The actor's reflexive activity, his "reasons", then explain the way he carries out his action. From this standpoint, his past experience, his knowledge and his beliefs, the whole set of tools that mediate his thinking, are part and parcel of the reasoning process he sets in motion in order to make choices and decisions.

Of all the approaches to the relationship between human consciousness and the social order already envisaged, this perspective is the only

4 R. Boudon, *The Logic of Social Action: an introduction to social analysis*, transl. by David Silberman with the assistance of Gillian Silverman, London/Boston, Routledge and Kegan Paul, 1981, p. xv; translated from the French: *La Logique du social*, Paris, Hachette, 1979.

one that makes it possible to explain social action in terms of creative action. It is not used to understand how the socially defined circumstances channel individual actions; instead it is used to understand how the actors respond to these circumstances. The elements of the individual paths and the social constructs are all part of the actors' situation. To this situation, which brings together the elements of the problems that confront them, including the means at their disposal for solving the problems, the actors respond by using their reasoning powers to carry out their actions. It is the reasons for acting that define the crucial moment of the action. The actors are confronted with social structures, institutional structures and so forth, and they make their decisions in a movement that is dynamized by the effects of the interdependence of their actions. In other words, actions are not the pure products of actors' situations, at least they are not the direct products of their situations; they are the rational products. This approach thus accounts for the specific role of conscious thought in the conduct of action. It is more particularly when the actor is faced with new situations that he uses his reason to the full. Innovation does not depend specifically on the distinctive features of the individual paths, even if these features are a factor of innovation. It depends on the exercise of reflexive thought that comes up with solutions to the problems encountered. Conversely, reflexive thought accounts for social actors' ability to detach themselves from the distinctive features of their individual situations.

Education and socialization offer individuals means to define the meaning of their situation. But in themselves, they do not explain the reason for the action in a problem context. They are an integral part of a problem-solving process that gives rise to the action. Moreover, potential agreement between actors does not rest on cultural similarities regarded as conventional, but fundamentally on reasons. The social order is not upheld by a shared culture of which individuals are a part. It does not rest directly on those cultural elements that merely mediate the reasoning process of the individual members. From this standpoint, the social bond does not depend primarily on what individuals have in common and share, but on their rational assent to the values and norms of the action.

However the fact that acceptance of values is rational does not make it instrumental. Let us bear in mind Weber's definition of axiological rationality:

Examples of pure value rational orientation would be the actions of persons who, regardless of possible cost to themselves, act to put into practice their convictions of what seems to them to be required by duty, honor, the pursuit of beauty, a religious call, personal loyalty, or the importance of some “cause” no matter in what it consists.<sup>5</sup>

Axiological reasons refer to the appreciation of an end but without any consideration as to effectiveness. They are opposed to instrumental reasons, which link means and ends with an operational aim.

However, if we consider that moral judgments are based essentially on principles, it becomes difficult to explain why the social actor believes in the values he defends. We are confronted with “Munchhausen’s trilemma”, formulated by the German philosopher and sociologist, Hans Albert, writing on epistemology. Let there be any theory; it will necessarily be based on first principles. In that case, one of three things is true:

1. we decide not to defend these principles and treat them as unprovable;
2. we seek to prove these principles using other principles, and so on, until such time as we get come back to the first case;
3. or we seek a circular proof of these principles based on their consequences.

Boudon explains that whoever wants to achieve certainty is in the position of Baron Munchhausen who, according to legend, sought to extricate himself from the pond into which he had fallen by pulling himself up by his hair. Yet we must not conclude that no certainty, even a scientific one, is grounded. Nevertheless, we must admit that knowledge looks “circular”. We evaluate the underlying principles, whose validity is a matter of conjecture, in large part in light of their consequences. If he considers that a set of these consequences is unacceptable, the social actor is then brought to rethink the original principles. But here, too, there is no absolute difference between principles and consequences. Nothing says that reasons cannot precede in one argument and follow in another. Our knowledge must in reality be conceived as a complex

5 M. Weber (1921), *Economy and Society. An Outline of Interpretive Sociology*,, edited by Guenther Roth and Claus Wittich, transl. by Ephraim Fischhoff [and others], New York, Bedminster Press, 1965, p. 25.

network of arguments such that an argument that acts as a principle in one reasoning can be a consequence in another. The same is true of axiological beliefs, which are just as complex as positive beliefs and are constructed in basically the same way.

Thus value judgments are neither irrational nor arbitrary. Nor are they based essentially on universal rules. They are based, according to Boudon, on systems of reasons in which factual propositions and axiological principles, universal propositions and contextual ones are intertwined. They are like solutions to systems of equations. Each equation can be regarded as universal, but the systems and the parameters involved lead to variable solutions depending on the time and the place.<sup>6</sup>

The social actor's assent to the norms and values of action is not given *a priori*. It is not imposed on the individual as a burdensome constraint, in the image of Durkheim's "collective consciousness" or his moral code. It may constitute a more natural slope than rebellion or deviancy. In effect the social actor does not spontaneously raise all of the questions to which he might apply his reflection. Durkheim is the first to insist on this. All cultures "rationalize" their moral beliefs. And yet, as Boudon writes, the fact that science has a history does not mean that there are no scientific truths; the same is true of moral truths.

In *The Division of Labor in Society*, Durkheim writes in substance that it is not because the social bond, with the evolution of society, is founded on complementary ties between individuals, on an organic solidarity rather than on ties of resemblance, on a mechanical solidarity, that it need any the less be founded on values, on a morality. To this, we can add, continuing in Boudon's line of thinking, that it is not because the social bond is founded on values that these values are any the less founded on reasons. Boudon suggests the reversal expressed by the idea that "it is not consensus that founds values but the solidity of the reasons underpinning the values which creates consensus".<sup>7</sup> All theories, Boudon explains, that of the "polytheism of values like all those (positivism, empiricism, Freudianism, existentialism, sociology, etc.) which, despite their mutual

6 See R. Boudon, *Le Juste et le vrai. Études sur l'objectivité des valeurs et de la connaissance*, Paris, Fayard, 1995; R. Boudon, *The Origin of Values: Philosophy and Sociology of Beliefs*, Piscataway, Transaction Publisher, 2001, translated from the French: *Le sens des valeurs*, Paris, PUF, 1999.

7 R. Boudon, *Le Juste et le vrai*, p. 197.

contradictions, agree on the irrationality of values, thus appear directly to contradict the fact of moral conviction and the reality of moral feelings.” Besides the trends in social and human sciences that see values as the products of non-rational causes and interpret them as the mechanical effects of socialization or as deriving from more or less conjectural affective, sociological or biological causes, there are other currents, such as pragmatist-type theories, that see values as the products of reasons, but of reasons stemming essentially from instrumental rationality. Yet these currents, according to Boudon, cannot claim to explain axiological beliefs in general.

To sum up, this viewpoint highlights an aspect of the social bond that has been considerably neglected by the other social-action approaches in sociology. For these others, the social bond is built above all on an *a priori* consensus among the actors that stems from socialization processes. But we see here that this consensus is potentially subject to continual challenges because it is grounded, to use Durkheim’s terminology, not so much in the *esprit de discipline* as in *moral intelligence*. In this perspective, the social order is constantly being redefined; it is perpetually unstable. It is made up of contradictions and of counter-productive processes. It depends fundamentally on the social, institutional and organizational structures that go into defining the actors’ situations. Furthermore it depends on the actors’ tools of mind, which they use in responding to these situations<sup>8</sup>.

In his excursus on the question: “How is society possible?”, Georg A. Simmel asks himself how the activity of individuals, guided by the behavior of their fellowmen, in the infinite flow of the relations they entertain with each other, can account for the possibility of society. The sociologist seeks to exhume the *a priori* forms of social activity that make the individual into a *socialized* being, in other words, a constituent element of the social unit. Simmel replies that these *a priori* forms that make society possible reside not only in socialization as the transmission of ways of seeing, thinking and acting but, more essentially, in the very consciousness individuals have of being associated, or *socialized*. Or to put it another way, the effects of socialization do not act as a mechanism that itself ensures the adjustment of the individual actions.

8 For an overview of Boudon’s works see *Boudon, un sociologue classique*, by Jean-Michel Morin. Paris, L’Harmattan, 2006.

This consciousness of socialization that is a constituent element of the social bond is not a consciousness of the Other as a mere socialized being, but as a socialized *consciousness*.<sup>9</sup>

9 “The a priori of the empirical social life is that the life is not entirely social. We form our interrelationships not alone under the negative reservation of a part of our personality which does not enter into them; this portion affects the social occurrences in the soul not alone through general psychological combinations, but precisely the formal fact that influence exerts itself outside of these determines the nature of this interworking” (G. Simmel, “How is Society Possible?”, *Journal of Sociology*, 1910, XVI, 3, pp. 372–391).

*Part Three*  
*Sociological approaches*  
*to formal education*





*An analytical framework for an overview of theoretical approaches*

Part Three presents the major approaches to formal education developed by sociology of education in the form of an analytical framework showing the different perspectives on the role played by education in social action (see Figure 3).

The explanations of social action are situated first of all between two poles: a “social/normative” pole and an “individual/interactionist” pole. At the “social/normative” pole, social factors involved in education and socialization processes tend to play a causal role in explaining action, while, at the individual/interactionist pole, social factors play a situational role. The differentiation of the “social/normative” and “individual/interactionist” poles needs further explanation here for, depending on the criteria used, one or another sociological approach can change positions on the axis they define.

The approaches situated at the “individual/interactionist” end of the spectrum are characterized by reciprocity of the relations they establish between social factors and individuals, in other words by taking account of the individuals-oriented relations and of the situations-oriented relations when explaining social action.

Alternatively, precedence given to situations-oriented relations in sociological explanation means that the situations themselves are enough to account for the action,<sup>1</sup> which means here that the individuals’ own actions underpinned by the individuals-oriented relations are negligible. In other words, in the course of their actions and interactions, individuals are supposed to actualize the features of the social situation that alone are essential for understanding the phenomenon under study. Three types of approaches come under the heading of precedence given to the situations-oriented relations: the approaches qualified as determinist in the strict sense, the approaches qualified as determinist from an essentially

1 Reasons can also be “causes” of action. The purposive, conscious actions of social actors, in that they constitute a rational adjustment of means and ends, are as though determined by the problem-situation confronting the actor. The precedence of situations-oriented relations in this case is a methodological simplification ready to be abandoned whenever the actors’ situation makes it necessary to question these situational determinations.

methodological standpoint and the classic approaches to socialization<sup>2</sup>. The theories belonging to the family of determinist paradigms<sup>3</sup> explain social phenomena as the exclusive results of behaviors in the sense defined above. According to this definition, the great majority of sociological work falls into the category of interactionist paradigms, though a certain number of studies in the sociology of education remain close to the category of determinist paradigms. The analyses developed in such a context have a purely descriptive interest, and we will not dwell on them here.

The approaches that adopt some version of methodological determinism examine the relations between “input” variables (causes) and “output” variables (effects) without opening the “black box” situated between these variables. In this case, the causal relations established in the situations-oriented direction have a purely descriptive value; the determinism they uphold is therefore termed methodological. In other words, for this first family of approaches, which encompasses numer-

- 2 This typological breakdown is based in part on the semantic distinction proposed by Boudon, which opposes *actions* as goal-oriented acts, that is as *purposive* acts, and *behaviors* as acts resulting exclusively from elements that *come before*. Methodological determinism is defined as “a paradigm in which only propositions obeying the determinist syntax are used (propositions of the type: ‘A (prior to B) explains B’), without these propositions being interpreted as incompatible with an interactionist interpretation. To take a simple example, let us imagine that I have calculated the regression coefficient of the socio-professional level on educational attainment. Supposing that the regression coefficient is positive and that its value lies above a certain threshold, nothing prevents me from saying that the ‘educational attainment’ (lower than the socio-professional level) explains the socio-professional level.” But a semantic problem arises at this point. Either I interpret the relation I observe in *realistic* terms. In which case I have to place alongside my statistical relation a hyperculturalist, hyperfunctionalist interpretation or one stemming from totalitarian realism. Or I interpret the relation as a summary, as a sum of actions whose logic I will try to understand at some later stage. In this case, I will regard the statistical relation as an item of descriptive data that needs explaining. The explanation will then be obtained by constructing a generative model of the interactionist type” (R. Boudon, *The Unintended Consequences of Social Action*, New York, MacMillan, 1982, pp. 242–243).
- 3 The concept of paradigm is not used here exactly in Kuhn’s sense, as a set of propositions forming a basis of agreement upon which a tradition of scientific research can be built up, but as a language in which the theories or eventually large subsets of theories produced in the context of a discipline are formulated.

ous empirical analyses in sociology of education, the social processes capable of explaining the phenomenon under study are not implied in the precedence given to the situations-oriented relations.

Finally, at the “social/normative” pole, we find all the classical approaches to socialization. These are not determinist approaches properly speaking, but they do regard certain parameters of social action as being determined (even if the links in question are merely statistical) through the processes of socialization of individuals.

Before going any further, we propose an overview of the sociological approaches according to a second analytical grid that will be used to clarify the criteria underpinning the distinction between the “social/normative” and the “individual/interactionist” poles. Sociological approaches can in effect be classified according to the importance they attribute to one of the three dimensions of social action corresponding to classical categories of socialization:<sup>4</sup> the axiological or motivational dimension, the cognitive or logical dimension and the symbolic or expressive dimension.

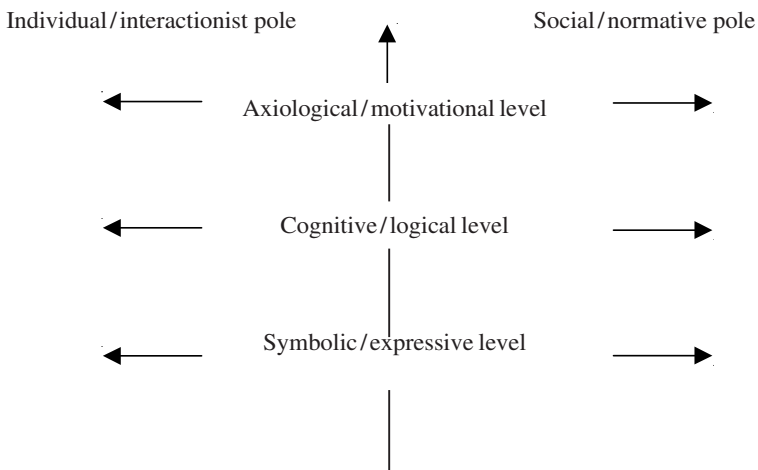
Those processes that have to do with the determination of the ends and values that orient social action are regarded as belonging to the “axiological/motivational” level of action. These ends and values are characterized by the fact that they do not stem from an instrumental logic, at least not in the framework of the portion of reality isolated by the analysis: they represent the ultimate data for the explanation. Those processes that concern choice of means in view of the ends pursued belong to the “cognitive/logical” level of action. They appeal to knowledge, beliefs, notions, inductive and deductive logical procedures in view of determining the action to undertake given the ends pursued. Lastly, those processes that have to do with the features of the action that have no value in themselves but are important for what they mean for individuals in a given social context (e.g. all the conventional signs, codes, symbols, etc.) are regarded as belonging to the “symbolic/expressive” level of action.

Now that these three levels of social action have been identified, we are ready to clarify the position of the sociological approaches with respect to the “social/normative” and “individual/interactionist” poles

4 These levels are linked and considered differently depending on the sociological approaches.

defined above. At the “social/normative” pole, we find the approaches according to which, with regard to one of the levels of social action considered above – i. e. the axiological/motivational, the cognitive/logical and the symbolic/expressive levels – individuals, in the course of their actions and interactions, unwittingly actualize certain social forms that underpin their actions.

Figure 3. Education and social action. Analytical framework for an overview of the theoretical approaches



## *The social/normative pole*

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### *Structuralism and education*

For approaches to social action in which individuals actualize features of social totalities in the course of their actions and interactions, structural analysis offered a privileged paradigm. The model originated in Ferdinand de Saussure's work, published from students' notes taken in his lectures at the University of Geneva between 1907 and 1911. The idea of applying structural analysis to anthropology came to Lévi-Strauss, the leading proponent of structuralism in social anthropology, in particular through developments in linguistics. The general aim of his work is in effect to explain the meaning of human activity through its symbolic function. To this end, Lévi-Strauss defines culture – be it language, kinship rules, mythology, art or economics – as a set of symbolic systems. Without attempting to reduce society or culture to language, he believed that a Copernican revolution was under way that consisted in interpreting society as a whole on the basis of a theory of communication.<sup>1</sup>

Lévi-Strauss' approach to structural analysis seeks to construct abstract models from relations between social phenomena. More specifically, these models should uncover the structures that are thought to dictate the unconscious relations governing human mental life. These structures fulfill the role of *a priori* general forms that can be applied to different experience contents. They are like invisible constants expressing themselves through the social life and cultural productions of groups and should enable these to be made intelligible.

The object studied by structural analysis is a functional whole, a system whose parts are considered “in their synchronous solidarity”. Nevertheless, it is important to distinguish theoretical contexts in which the notion of structure is merely *intentional* and aimed at describing an

1 C. Lévi-Strauss, *Structural Anthropology*, transl. Claire Jacobson and Brooke Grundfest Schoepf, New York, Basic Books, 2000; translated from the French: *Anthropologie structurale*, Paris, Plon, 1974, p. 95.

object as a system from the theoretical contexts characteristic of structural analysis proper, in which the notion of structure is effective and aimed at accounting for the systematic character of an object. In this second type of context, the “object as system” should be comparable to the objects of the natural sciences. When this is the case, the structures take on a reality such that one is led to believe it possible to approach them as closely as one wishes, as with an essence underlying phenomenal appearances.<sup>2</sup> An understanding of the object as a system underpins this second major idea of structuralism, namely that the identity of the elements proceeds from the relations they entertain with each other. In Saussure, for example, the oppositions arising from the relations between components of a system are a source of meaning rather than these components being a reference to some external reality. As a consequence of these two ideas, when structuralism is applied to social phenomena, it produces what, in its technical vocabulary, corresponds to a “decentering of the subject”. The latter is no longer “the measure of all things”, but an element in a system whose parts have less meaning than the whole.

Analyses of the structural kind also make use of the ideas of self-regulation and transformation,<sup>3</sup> as illustrated by the process of equilibration of the cognitive structures in Piaget’s theory. Nevertheless, the interpretation of structural change as the adaptive passage from one equilibrium to another in accordance with the “law of the whole” has little explanatory value. In fact it accounts for the major limitations of the structuralist interpretation.

2 R. Boudon, *The Uses of Structuralism*, Portsmouth, Heinemann, 1971; translated from the French: *À quoi sert la notion de “structure” dans les sciences humaines*, Paris, Gallimard, 1968, p. 35.

3 See R. Gibson, *Structuralism and Education*, London, Hodder and Stoughton, 1984.

# I. The axiological/motivational level

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## Cultural explanations

The question asked by the cultural approaches in the strict sense of the term is how “natural” individuals become men and women adapted to the lifestyle of a particular society. They seek the answer in the socialization processes: internalization of specific cultural models is supposed to determine the personality structure of the individual living in a given culture system. In these approaches, the notion of culture refers to the fundamental value system of a society. Every society tends to constitute an original cultural totality organized around a number of elements (a set of models, institutions and rules) that correspond to certain dominant and fairly coherent values. These elements form an essentially symbolic reference system for the individuals living in the society. The values, norms and tools of mind that are internalized and used by them to perceive, evaluate and act are supposed to give rise to similar forms of behavior. The cultural approaches are in fact linked to a unitary theory of human instinct, in which drives and needs may be satisfied in a variety of ways in accordance with each society’s own culture system. That is why, in these theories, each culture system is said to correspond to a “basic personality type”.

This sort of theoretical approach is no longer used, but initially it was employed by cultural anthropology in the study of primitive societies. It led, as with Margaret Mead,<sup>1</sup> to the study of education in industrial societies. Transposed to the analysis of American society, the cultural approach abandoned the idea of cultural unity on which it had based its analysis of socialization in primitive societies and, keeping the notion of culture as a relatively closed value system, turned to the

1 M. Mead, “Our Educational Emphasis in Primitive Perspective”, *American Journal of Sociology*, 48, 1953, pp. 633–636; *The School in American Culture*, Cambridge MA, Harvard University Press, 1951.

notion of cultural diversity. William Warner's school<sup>2</sup> concerned itself with analysis of the impact of class origins on socialization and education. For Albert K. Cohen, the contradiction between the lower-class subculture and the middle-class subculture is at the root of the compromise, in the psychoanalytical sense, reflected by the formation of a subculture of delinquency.<sup>3</sup>

More generally, all the approaches that today identify to a greater or lesser extent with "culturalism" interpret each culture as a closed totality. Cultural norms are held to be irreducible because their meaning is bound up with a systemic logic. The interpretation of academic achievement according to family background calls, for example as in Joseph Kahl<sup>4</sup> or Herbert Hyman<sup>5</sup>, on value systems differentiated according to sociocultural backgrounds. These value systems are supposed, among other things, to account for the fact that academic achievement changes with family social status. In this approach, the value assigned to school achievement varies as a function of cultural subsystems. Yet, as Suzanne Keller and Marisa Zavalloni have argued,<sup>6</sup> differences in family attitudes towards school achievement can stem from the same kinds of aspirations. It is the families' ways of fulfilling their aspirations, in particular their relative levels of satisfaction, that differ in accordance with their concrete situations. In this interpretation, the differences in the families' conducts are not justified in terms of supposedly irreducible value systems but in terms of situational variables.

2 See for example, A. Davis and J. Dollard, *Children of Bondage*, Harper Torch Book, 1940.

3 A. Cohen, *Delinquent Boys*, New York, The Free Press, 1955.

4 J. Kahl, *The American Class Structure*, New York, Rinehart, 1953; "Educational and Occupational Aspirations of 'Common Man' Boys", *Harvard Educational Review*, XXIII, 1953, pp. 186–203.

5 H. Hyman (1953), "The Value Systems of Different Classes: A Social Psychological Contribution to the Analysis of Stratification", in R. Bendix and S.M. Lipset (eds), *Clan, Status and Power*, New York, The Free Press, 1953.

6 S. Keller and M. Zavalloni, "Ambition and Social Class: a Respecification", *Social Forces*, 43, 1964, pp. 58–70; originally published as: "Classe sociale, ambition et réussite", *Sociologie du travail*, n° 4, 1962, pp. 1–14.



## Functional explanations

Despite their kinship with cultural approaches, functional approaches are not based primarily on a search for overarching cultural models but on analysis of the mechanisms behind differentiation and fulfillment of the social roles found in given societies. The notion of social institution is central to this approach. It was set out by the Durkheimian sociologists, and developed by Parsons. Institutions can be defined as ways of doing, feeling and thinking that are more or less constant, restricting and distinctive of a given social group. This area includes all activities governed by stable and mutual expectations. Institutions are normative systems in which the evaluation and interpretation of the performance are just as important as the performance itself.<sup>7</sup> Functional approaches are preoccupied with the question of social equilibrium. In this perspective, they situate their analysis of social action at the axiological level, seeking the fit between individual values and social norms. This explains their primary focus, as far as education is concerned, on how society instills motivations in individuals that serve its general functioning. This is the problem that the idea of social-roles learning tries to solve. Parsons is the principal theorist of this approach, which, until 1960 when he dropped the term, was called “structural-functionalism”.

“Structural-functionalism” is *par excellence* the anthropologist’s approach to social analysis. The notion of social equilibrium is central to this view of society, which is then regarded as a system, rather than as a conative whole, as an entity rather than as a process – or if a process, then as a process of a special kind in which education, for instance, is seen simply as one term of a relationship which is supposed to reproduce itself in a dynamic equilibrium. The structural-functionalist is preoccupied with social integration based on shared values – that is, with consensus – and he conducts his analysis solely in terms of the motivated actions of individuals. For him, therefore, education is a means of motivating individuals to behave in ways appropriate to maintain the society in a state of equilibrium.<sup>8</sup>

- 7 R. Boudon and F. Bourricaud, “Institutions”, *Critical Dictionary of Sociology*, transl. P. Hamilton, Chicago, University of Chicago Press; translated from the French: *Dictionnaire critique de la sociologie*, Paris, Presses Universitaires de France, 1982.
- 8 J. Floud and A.-H. Hasley, “The Sociology of Education. A Trend Report and Bibliography”, *Current Sociology*, VII, 3, 1958, p. 171.

In opposition to cultural approaches, what interests functionalists when it comes to the idea of socialization, is the diversity of human behaviors within a society. For them it is the differentiation of action-orientations according to the manifold individual systems of interaction that underpins the regulation of individuals' conducts. This regulation is not based on social-group membership but on a logic of participation in networks of social relations. It depends on the roles constructed by the systems of interaction in which individuals participate. More specifically, the roles are not intrinsically defined but are based on the reciprocity relationships established between the actors in the systems of interaction. The doctor's behavior, for example, does not follow a predefined code; it is guided by the expectations of the different individuals with whom he relates in the course of his professional practice. Socialization is closely related to individuals' learning of the implicit norms underlying the structures of interaction and which translate into expectations the actors have of each other.

Among the principal agencies of socialization in contemporary American society, Parsons distinguishes the family, the school and the peer group. Socialization is supposed to ensure individual internalization of the roles and skills that are the essential prerequisites for the fulfillment of his future roles. The school-aged child escapes from his parents' influence for a certain number of hours in the day, during which time he is subjected to other systems of rewards and punishments. These prepare his transition from the position he occupies in his family to his future social roles. Peer groups are voluntary associations of individuals of equal status. This equality, as well as their independence with respect to any kind of authority or adult control, allows the child and the adolescent to participate in new kinds of interaction structures. In particular they allow a reorganization of motivational-orientations on the basis of egalitarian and no longer hierarchical relations. At school, the process of identification with the teacher is closely related to the process of learning the pupil role. It is reflected, for example, as Parson explains, in the desire to do well in order to please the teacher. When these processes are completed, and depending on individual characters, the two interacting roles are internalized to the advantage of the socializing or the socialized agent. This is what happens in the parent-child relation at an earlier stage of development: the "independent" child tends to identify his role with that of the parent, while the "de-

pendent” child instead identifies with the role of the child with regard to the parent.

The school<sup>9</sup> in addition regulates the assignment of social roles according to criteria of success, even though this function concerns not only individual success factors (achievement factors) but also socially inherited factors (ascribed factors). Parsons compares the school situation, in virtue of certain of its aspects, to a competition. Pupils are in a position of formal equality, required to perform the same set of tasks, and identically subjected to a systematic evaluation of their performances. Unlike the parent, the teacher is not oriented primarily to the “child’s needs”, but to universal standards of achievement. The evaluation uses a system of rewards and punishments that constitute both a process of motivation-orientation and a selection process according to the norms and values defined by adult society. These norms and values are distributed according to two main dimensions. The first is cognitive and calls upon transmission of knowledge and acquisition of cognitive abilities and dispositions. The second is moral, and involves principles of cooperation, respect, responsibilities, work, etc., by calling, for example, on the notion of citizenship. At the primary-school level, these dimensions are hardly differentiated. A “good” pupil is defined at once by intellectual and motivational criteria. This is much less so at the secondary-school level. The student’s position on the achievement axis is a vector of his progressive socialization towards potential future professional statuses. Differentiation within the class on the achievement axis tends to “bring about a status system in the class in which not only the immediate results of school work but a whole series of influences converge to consolidate different expectations that may be thought of as the children’s ‘levels of aspiration’”<sup>10</sup>.

9 See T. Parsons, “The School Class as a Social System: Some of Its Functions in American Society”, *Harvard Educational Review*, 29, 4, 1959, pp. 297–318.

10 T. Parsons, “The School Class as a Social System: Some of Its Functions in American Society”.

## Conflict theories and the “hidden curriculum”

A change of perspective occurred in sociology of education brought about by changes in the school institution. In the two decades following World War Two, sociology of education concentrated on the expansion of various types of schooling. The problem education posed to society was defined as a quantitative one. Education was assimilated to a commodity, and was measured by quantitative criteria in much the same way as it was formalized by the theories of human capital in economics of education. Social inequalities were therefore expressed in terms of the quantity of the educational commodity one possessed. However evidence of a relative stability of social mobility, advanced by statistical analyses carried out in the 1950s and 60s, despite the expansion of schooling and the rising economic level of all social categories, sparked a renewal of analysis problematics. Sociologists were called upon to provide interpretations capable of supporting educational policies intent on increasing equality of social opportunities through education.

As their number increased at the end of the 1960s and throughout the 70s, neo-Marxist approaches took the lead formerly held by functionalist approaches. This change corresponded to a skewing of the functional paradigm. Such approaches develop the same type of explanation by final causes combined with the impact of structural logics on the processes of socialization of individuals. However, socialization processes are reinterpreted as being dedicated to satisfaction of dominant social-group interests. In addition, differences between social groups are interpreted not so much in terms of economics and motivations as in terms of culture. In this view, social classes are usually characterized by their relationship to the means of cultural production.

The neo-Marxist approaches challenged the social order that is supposed to be upheld in part by the socialization of pupils' and students' motivations. The notion of a “hidden curriculum” applies to the implicit role played by the school in the transition from family life to life in the world of work and the public space. It sees the processes of socialization by education as instilling the values and norms of society in pupils. These processes are described as a “hidden curriculum” because this socialization does not take place at the level of explicit activities and objectives but on another level. The implicit action of socialization

by education operates at the level of the relations these activities establish between individuals, between individual and organization, between individual and knowledge, etc. In functional approaches, such relations contribute to the development, differentiated in accordance with the future social roles, of attitudes adapted to the institutions of the society, whether they be productive, social, political, etc. In conflict approaches (notably the neo-Marxist versions), the school contributes primarily to the development of attitudes adapted to the individual's future relations to political power and to the system of production. But the differentiated processes of socialization of individuals are no longer predicated on logics of social effectiveness and equilibrium. They depend on the division of the social order into groups having antagonistic interests. In the neo-Marxist approaches, differentiated socialization of individuals by the agency of the school institution ensures the reproduction of power relations between the social classes. In particular, the sorting of students in the education system into tracks, streams, sections or curricula, or into school sectors, forms the basis of the differentiation of individual socializations. As this distribution is linked to social factors, the school is supposed in this way to develop different kinds of attitudes in accordance with pupils' social origins.

Jean Anyon's analyses are based, for example, on a study carried out on a sample of five American primary schools that, given their school sector, have socially differentiated school clienteles.<sup>11</sup> Anyon shows that the social dominants of the school populations influence the teaching dispensed in each of the schools. In predominantly working-class schools, the work expected of the students is of a mechanical type. Rules are presented as steps to be followed without giving students the means to understand and to dominate them. Emphasis is on learning narrowly defined techniques. Alternatively, characteristics such as intelligent understanding of rules and relations, intellectual analysis and problem-solving, active participation and self-expression, responsibility and creativity become progressively more characteristic of the teaching as the school's clientele rises on the social ladder. The links between social dominant of the school population and characteristics of the teaching

11 J. Anyon, "Social Class and the Hidden Curriculum of Work", *Journal of Education*, 162, 1, 1980, pp. 67-92.

are supposed to stem in part from teachers' expectations about students' future needs.

According to the neo-Marxist approach developed by Samuel Bowles and Herbert Gintis in *Schooling in Capitalist America*, it is primarily the structure of the social relations involved in the education process that ensures individuals will be socialized in accordance with the needs of the capitalist production system. The relations between administrators and teachers, between teachers and pupils, between pupils, and between pupils and their work are the vectors of reproduction of the hierarchical organization of labor:

Alienated labor is reflected in the student's lack of control over his or her education, the alienation of the student from the curriculum content, and the motivation of school work, through a system of grades and other external rewards rather than the student's integration with either the process (learning) or the outcome (knowledge) of the educational "production process". Fragmentation in work is reflected in the institutionalized and often destructive competition among students through continual and ostensibly meritocratic ranking and evaluation. By attuning young people to a set of social relationships similar to those of the work place, schooling attempts to gear the development of personal needs to its requirements.<sup>12</sup>

12 S. Bowles and H. Gintis, *Schooling in Capitalist America, Educational Reform and the Contradictions of Economic Life*, New York, Basic Books, 1976, p. 131.

## II. The logical/cognitive level

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### Culture and modes of thought

The analyses in sociology of education that focus on its cognitive or logical dimension while ascribing a decisive role in accounting for social action to social factors call upon processes of thought regulation, such as mentalities, modes of thought or codes, regarded as being specific to the societies or social groups under consideration. The question of the extent to which cognitive differences can be imputed to the subcultures of different social groups is crucial for sociology of education, as it arises time and again in explanation of the strong probabilities that children from socially disadvantaged backgrounds will encounter problems in school. The relationship between school culture and middle-class culture is purported to account for the inability of children from disadvantaged groups to adapt to the teaching dispensed in the schools. This failure to adjust was reflected in the first wave of analyses on this subject, in the early 1960s, by the idea of cultural deficiency. Subsequently it tended to be attributed to different and irreducible thought and value systems.

The importance ascribed to the impact of differences in cognitive socialization is a common feature of many neo-Marxist studies in sociology of education. By attributing a determining role in the reproduction of the social order to cultural differences, these studies set themselves apart from orthodox Marxist doctrine. In *The German Ideology*, Marx sought to explain the middle class's cognitive domination of society as a whole by the power relations inherent in the economic organization of labor. Determinism operates from the "material" to the "conceptual": the processes of idea production are determined by real life in its historical situation. This causal orientation was thrown into question when the circumstances in numerous industrialized countries with a large proletariat did not engender the evolution announced by Marxist doctrine. One of the major ways of reinterpreting Marxism was to con-

sider that capitalism was the product not only of the economic organization of labor but of the ideological-cultural system as well.

As Michael Apple, who offered his own radical social analysis of schooling, stresses, cultural struggles and conflicts were now seen not to be merely epiphenomenal but real and essential to understanding the continuing power of capitalism: “Cultural, ideological, and political relations took center stage as well.” Apple goes on to say that, over the last three decades of the twentieth century,

the most creative research on how dominance works has focused on one specific set of institutions – the school. The curriculum (overt and hidden), the pedagogy, and the forms of evaluation have all been investigated to see how they represent the relations of domination and exploitation in the larger society.<sup>1</sup>

The close relationship between school culture and so-called middle-class culture was blamed for both the reproduction of the existing social order and its legitimization. The process involved is roughly the following: The ranking of academic achievements is assumed to be linked to the relative distances of the various social categories from the school culture. Thus the educational system ensures a function of social reproduction by converting social hierarchies into academic hierarchies. In the course of this process, children from the dominated classes are socialized by the culture of the dominant classes, imposed as the common culture. The dominant classes thus ensure the legitimization of the existing social order and the social control of the dominated classes through schooling.

## Basil Bernstein’s theory

Bernstein’s work was central to the numerous sociological approaches that, in the 1960s, undertook a critical study of curriculum as socially, politically and ideologically biased. From his early work on language to his theory of codes and his work on curricula and pedagogical practice, the British sociologist’s project was to develop a systematic structuralist

1 M. Apple, “Education, Culture, and Class Power: Basil Bernstein and the Neo-Marxist Sociology of Education”, *Educational Theory*, vol. 42, n° 2, 1992, p. 127.



theory that would provide an analytical description of the linkage between the education system and the division of social labor. His analyses, which deal with general sociological questions, have maintained a Durkheimian-structuralist position, revealing points in common with the neo-Marxist approaches, with Weber's conflict theory, with the interactionist approaches and with the "new sociology of education".

Bernstein concentrated on constructing a theoretical corpus that articulates three levels of analysis likely to account for the links between school achievement by children from the different social classes and structures of society. These are, respectively, the macro-sociological level (social and institutional structures), the sociological level (interaction structures within the family and the school, curriculum structures and transmitted knowledge, pedagogical relations), and the psychological level (individual cognitive orientations). This theoretical corpus is supposed to explain not so much causal relations as those of "characteristic co-occurrence" between the structures studied at the different levels of analysis. These structures are described by Bernstein in terms of Weber's ideal-types, which provide dual representations of the social and psychological forms examined at the different levels of analysis. The relations established by the constructed ideal-types are supposed in particular to account for the role of the school in reproducing of social classes.

The main ideal-typical structures studied by Bernstein entertain relations based on the following overall process:

1. Social-class division is characterized by opposition between the middle class and the working class.
2. The social division of labor reflects two major types of solidarity as defined by Durkheim: mechanical solidarity and organic solidarity.

The mechanical-solidarity model, in which group identity takes precedence over individual identity, is characteristic of interpersonal relations within the traditional working-class family. This kind of solidarity is explained in part by the need of working-class people to build community ties, given that their economic and social status require group support. It is further explained by the collective nature of the tasks performed by members of the working class in the workplace. The organic-solidarity model, in which individual identity takes precedence over group identity, is characteristic, on the other hand, of social relations within the middle-class family.

3. The interpersonal relations within the family oppose positional to person-oriented families.

When decision-making is based on family members' determined status (adult, parent, age or sex of the child, etc.), these families are said to be positional. Separation of roles and of areas of responsibility is clearly established. The interpersonal relations typical of positional families crystallize around rigid patterns and assign the individual a predetermined status. This status depends on the authority relations established within the family. According to Bernstein, the subordinate relations of working-class people in the workplace tend to turn into authoritarian relations within the family. This relative rigidity of interpersonal relations has the effect of undermining and closing the communication systems underlying the socialization processes. The socialization of working-class children thus occurs largely within their peer group.

When decision-making and judgments no longer reflect a determined status of the family members, but their personal qualities, the families are said to be person oriented. In this case the family system adapts to the interests and dispositions of its members. Interpersonal relations in middle-class families tend towards interaction structures that are varied and open. In these interaction structures, individuals are on a more equal footing, and role differentiation is therefore based on personal qualities rather than on assigned status. This flexibility has the effect of enriching and opening the communication systems underlying the socialization processes. Socialization of middle-class children does not depend essentially on the peer group.

Family types (positional/person oriented) and kinds of solidarity (mechanical/organic) are in part linked. This linkage has to do with the relationship between kinds of solidarity and dominant modes of social-role assignment. In societies characterized by mechanical solidarity, social status tends, according to Parsons' terminology, to be ascribed, while in societies characterized by organic solidarity, social status tends to be achieved. The same approach to defining social roles underpins Bernstein's family types. Through his ideal-types, Bernstein seeks more specifically to characterize traditional working-class systems of communication. Nevertheless, so-called positional families are increasingly hard to find in these milieus, owing to the influence of various factors: mass media, geographic mobility,

the changing status of women and attitudes towards education, the impact of rising living standards on forms of solidarity relations, etc.

4. Interaction structures within the family are regulated by general “codes” that structure the individual cognitive processes. In Bernstein’s early studies, these codes oppose two ways of mediating cognitive processes through language: public language and formal language.

Each of these types of language is characterized by a set of inter-linking features. Public language uses short, often incomplete sentences with simple grammatical constructions. Logical relations are expressed by repetitive recourse to conjunctions. Use of adjectives and adverbs is rigid and limited, symbolism has a low level of generality, recourse to idiomatic expressions is frequent. Formal language, on the other hand, has recourse to a precise grammatical organization and syntax. Logical relations are expressed by complex constructions, and so on.

The two types of language are not opposed as two linguistic forms applied to potentially similar contents. They are inherently bound up with the types of communication that engender them and which they convey. Not only is public language based on the elements that bind the group together, it is also dedicated to strengthening these bonds. It encourages immediate interactions. Formal language, on the contrary, is based on the differentiation of experiences, and encourages mediation of social interactions by more highly developed argumentation and verbal exchanges. It is the very use of language, in conjunction with the structure of interaction, which leads the speaker to manipulate concrete concepts based on the descriptive contents of the objects and events (public language) or to manipulate abstract concepts based on the relations between objects and events (formal language).

5. In the early 1960s, the linguistic forms of social mediation of cognitive processes identified by Bernstein – public language and formal language – gave way to the concepts of restricted code and elaborated code. These two types of code are supposed to underlie the individual cognitive orientations expressed by the types of language.

Code is the most general pivot supposed to provide the link between social structures and modes of cognitive expression through the form of the structures of interaction,

[...] the form of the social relationship or, more generally, the quality of the social structure. This would allow the following postulate: the form of the social relationship acts selectively on the type of code which then becomes a symbolic expression of the relationship and proceeds to regulate the nature of the interaction. Simply, the consequences of the form of the social relationship are transmitted and sustained by the code on a psychological level.<sup>2</sup>

Restricted code appears in a communication context dominated by a common experience underlying in particular shared expectations, interests, knowledge and meanings. This kind of code arises when the subculture raises “we” over “I”, as in the peer group or between husband and wife. It values social solidarity over verbal elaboration of individual experiences. As the motives and knowledge of the speakers are assumed to be shared, the many elements underpinning the speaker’s thought do not need to be made explicit. Speech here has a strong descriptive dimension and a weak argumentative dimension. The logical structure of its syntax is sketchy. It is highly metaphorical and inherently tied to the speech context. Communication is based in particular on a set of non-verbal means, choice of expressions, tone, silences, the meaning of which is implicit and accessible to group members only.

Alternatively, when the culture or subculture emphasizes the “I” over “we”, an elaborated code is supposed to emerge. As the intentions and expectations of the speakers cannot be taken for granted, they must make them explicit and develop the arguments that support their judgments. This supposes stepping back from the implicit *a priori* that appeal to individual experiences. This kind of speech has a strong argumentative dimension that produces an elaborated syntax and a relatively rich vocabulary. Each speaker is obliged to put himself in the other speakers’ place and to anticipate the interpretations of his speech, which obliges him to make it more formal and universalistic. Codes thus appear as regulators that control the speaker’s potential domain of discretion. They delineate the areas of relevance that mark out what must be said and what can be left unsaid, and the form and the register of what is expressed.

2 B. Bernstein, *Class, Codes and Control*, London, Routledge and Kegan Paul, 1971, vol. 1, p. 81.

- In positional families, the determined nature of the role system does little to encourage the verbal elaboration of judgments, their basis and their consequences, or of the intentions and reasons behind them. The roles offer few alternatives and thus little individual freedom in choosing them. Alternatively in person-oriented families, the explicit formulation of judgments, motives and reasons facilitates the process of decentering the individual “ego”, as described by Mead. The individual is therefore at ease with role switches and in situations in which the interaction involves ambiguous or ambivalent roles.
6. Differences in the school achievement of students from the different social classes rest not on intellectual potential but on codes of communication linked with the forms of the interaction structures through which the students are socialized in their family settings. The type of cognitive orientation appealed to by school is that of middle-class children. The problems encountered by working-class children, and the selection they undergo at school, stem, according to the foregoing theoretical hypotheses, from the social structures themselves.

To sum up, the interaction structures within family settings call forth specific types of cognitive orientation in the individual members, owing to the communication needs these structures generate. To be more specific, the interaction structures determine the areas of implicit and explicit communication in verbal exchanges. The processes of explicit communication are supposed to be a driving force in cognitive education. It is the motives for acting, generated by specific problem contexts, that favor the form of cognitive development essential to formal education. Thus education does not rest on the simple transmission of a “culture”, but on the cognitive needs that the social contexts engender. These contexts nevertheless come down almost exclusively to communication contexts in Bernstein’s theory.

Bernstein’s theory is interesting in that it ties in not only with general sociological questions but also with important socio-cognitive issues. That is why we can raise the question of the possible linkage between Bernstein’s restricted and elaborated codes, Piaget’s concrete operational and formal operational stages, or between Lévi-Strauss’ savage and domesticated minds; or of the status of the concept of code in Bernstein’s theory as a tool for cognitive mediation as compared with Vygotsky’s work.

It is important to remember that application of the mind to concrete objects, in other words to the contents of perceptions rather than to the relations between these contents, in the image of Lévi-Strauss' savage mind, is not a sign of a lack of logic. Lévi-Strauss does not oppose mythic thought to positive thought so much in virtue of the nature of the intellectual operations involved as in virtue of the elements that are the subject of these operations. The mediating role of language is less prominent in the savage mind because, in a world of shared meanings, beliefs and values, simple designation satisfies the needs of communication. The message carried by the myth is implicit, codified through the symbolic system. Nor do Bernstein's codes refer to hierarchically ordered modes of thought, as in Piaget's opposition between stages of intellectual development.<sup>3</sup> They are ranked differently according to the criteria of efficiency applied to them. One can agree or not with Piaget that, although the "savage mind" is still with us, it represents a lower level of cognitive efficiency than that of scientific thought.<sup>4</sup> Contrary to William Labov, who, basing his arguments on the study of vernaculars such as Black American speech, offers a relativistic interpretation of language differences, Bernstein is often associated with the cultural-deficiency theorists. Bernstein objects to this association. The qualitative differences between the codes he proposes is supposed to enhance their distinctive features and inherent values. For Bernstein, the fluidity characteristic of the oral expression of restricted-code users is comparable to the qualities attributed to the vernacular languages studied by Labov. Yet Bernstein defines restricted code largely in terms of criteria that place it in a position of inferiority with respect to elaborated code. Furthermore, while

3 Bernstein, however, did draw a comparison: "The development stages described by Piaget, which go from concrete operations to formal operations, are not necessarily completed by children restricted to public language, who may well never go beyond concrete operations" (B. Bernstein, "Développement linguistique et classe sociale: une théorie sociologique de l'apprentissage", in *Langage et classes sociales*, Paris, Editions de Minuit (coll. "Le Sens commun"), 1975, p. 56, note 14). It is interesting to note that, for Piaget, language does not play a primordial role in cognitive development, and yet social background and education can nevertheless influence the rapidity with which the child goes through the stages of cognitive development defined by Piaget.

4 Cf. J. Piaget, *Structuralism*, transl. and ed. by Chaninah Maschler, New York, Basic Books, 1970; translated from the French: *Le Structuralisme*, Paris, Presses Universitaires de France, 1968, p. 149.

individual differences in performance are not to be interpreted as an expression of different intellectual potentials, one of the touchstones of Bernstein's theory, the mastery of elaborated code, conditions the cognitive potential useful in formal education, namely the capacity to learn. This explains Bernstein's criticism of the use of the concept of compensatory education. He argues that this concept shifts the responsibility for the child's failure from the school onto deficiencies attributed to the child's family background. However, according to Bernstein, "[t]he introduction of the child to the universalistic meanings of public forms of thought is not compensatory education – *it is education*".<sup>5</sup>

Whereas, for Bernstein, school fulfills a function of social reproduction in virtue of the specific forms of consciousness developed by the different social types of cognitive socialization, for Vygotsky, on the contrary, it plays an intellectually liberating role. In Bernstein, the impact of the teacher's discourse varies with the social origins of the students. According to him, the fact that Vygotsky does not include the effects of social contexts in his theoretical corpus results in a simplification of the concept of social interaction by regarding the speaker and the listener as culturally transparent.<sup>6</sup> But Vygotsky stresses the specificity of formal education as opposed to any other kind of cultural transmission. In this respect, there is a fundamental kinship between his conceptions and those of Bernstein. Bernstein's elaborated code is based on the development of conscious and voluntary efforts at communication, which is characteristic of the forms of thought developed by tools of cognitive mediation, and particularly formal education, in Vygotsky. However, from a functional standpoint, Bernstein's codes do not play the same role as Vygotsky's mediating cognitive tools. They are general operators, which, with respect to Vygotsky's theory, have a more descriptive than explanatory bearing. These differences have potentially opposite pedagogical consequences. In formal education, mediating cognitive tools depend on a certain degree of conceptualization and systematization of the knowledge taught. That is why the psychologist would certainly not see, as Bernstein does, the development of "integrated" curricula (in which boundaries between the subjects taught are blurred and the relations entertained between them open), as opposed to "collection"-type

5 B. Bernstein, *Class, Codes and Control*, 1971, vol. 1, p. 199.

6 B. Bernstein, *Class, Codes and Control*, 1990, vol. 4, p. 48.

curricula (in which boundaries between the subjects taught are rigid, and the subjects ranked more or less hierarchically), as a response to modern social needs for flexibility and adaptation. With respect to Vygotsky's work, it is the structure and the cumulative character of the subjects taught that are supposed to respond to these needs, and not the didactic amorphism suggested by the idea of integrated curricula in Bernstein.

Findings of experiments<sup>7</sup> carried out in the wake of Bernstein's work tend to highlight effective differences in the use of spoken language by children from different social backgrounds, but they do not justify identifying these differences with any "cognitive styles" specific to the social backgrounds in question. In particular, the differences turn out to be strongly dependent on the speech situation. Bernstein's "codes" do not seem to correspond to "autonomous linguistic systems" that rest on stable systems of rules. Indeed middle-class children do tend to have a more elaborated oral language, in the lexical and syntactical sense of the criteria defined by Bernstein, than working-class children. But

as soon as one varies the conditions of language use (topic, task, relationship between the speakers, familiarity with the context), the single reality described by the term code seems to split into a large number of linguistic behaviors depending first of all on these situational variations.<sup>8</sup>

The differences observed in the linguistic behavior of children from different social backgrounds therefore do not result from fundamental differences in individual cognitive orientations. It is more likely that they stem from differences in the ways individuals manage their linguistic behaviors according to the interaction situations, and the ways they perceive these situations. Furthermore, social-class differences are smaller when it comes to written language, and when they do appear, they are reflected only in terms of the syntactical complexity level of the language used. In short, the investigations do not make it possible to distinguish "typical" linguistic behaviors for each social class. Nor do the variations observed in the linguistic behaviors allow the attribution of their cause to "codes" corresponding to stable systems for regulating the cognitive processes involved.

7 For a discussion, see in particular É. Esperet, *Langage et origine sociale des élèves*, Berne, Peter Lang, 1979.

8 É. Esperet, *Langage et origine sociale des élèves*, p. 93.



### III. The symbolic/expressive level

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#### Social reproduction and Pierre Bourdieu's theory

Pierre Bourdieu's ambition, as he set it out in *Choses dites*, was to introduce agents back into explanations after they had been excluded by the structuralist theses, which regarded them as "simple epiphenomena of structure". Matrimonial "strategies", for instance, replaced processes determined by kinship rules, with the aid of the concept of *habitus*. *Habitus* refers to "a system of acquired patterns functioning in practice as categories of perception and appreciation or as classification rules as well as rules for organizing action". Bourdieu's theoretical model based on the concept of *habitus* is thus organized around an axiological-cognitive-symbolic perspective on social action. It is the symbolic dimension, however, that dominates and regulates the cognitive and axiological dimensions of action. When he acts, the actor actualizes implicit symbolic relations linked to the structures underlying social reality. For these reasons "behaviors can be goal oriented without consciously being directed towards or by these goals".

For Bourdieu, to Freud's three "narcissistic wounds, inflicted on humankind by Copernicus, Darwin and Freud himself, must be added that imposed on us by sociology".<sup>1</sup> Bourdieu's theory intends to unveil a fundamental dimension of human heteronomy: the unconscious well-springs of social action. Like psychoanalytic theory, it proposes a totalizing conceptual construction rooted in biological and cultural evolution. Like Freud, and without cynicism, Pierre Bourdieu wants to reveal the dark, hidden side of human action, whose basic structure, he maintains, rests on self-interested relations divided between forms of domination and submission.

In Bourdieu's theory, the relational structures linking social objects supposedly stem from a process of gradual differentiation of society.

1 P. Bourdieu, L. Wacquant, *An Invitation to Reflexive Sociology*, Chicago, University of Chicago Press, 1992.

Within the “social space” they define different, relatively autonomous “fields”. These social spheres or microcosms, like the solar system, the State, the Church, political parties or unions, obey specific and irreducible laws because they are the sites of particular forms of interests. The individual relative positions of strength within the social space inform the symbolic structures that define “objects of common sense”. A parallel can be drawn between relative positions and symbolic systems (i.e. language, manners, forms, styles and all of the signs that express tastes, ideas and feelings) because the differences associated with the positions (differences in material and cultural resources) operate in each society, according to Bourdieu, precisely like the differences constitutive of symbolic systems, in other words, like the phonemes of a language, as distinctive features. For example, what we call “distinction”, generally held to be a natural quality, is in fact merely a relational quality that exists only “in and through relations to other properties”.

Bourdieu’s sociology thus revolves around the symbolic construction of social life. This symbolic construction is the structuring component. It is tied to the preconstructs on which communication between members of the same social class is based. Culture is

as a common code, that which enables all those in possession of this code to attach the same meanings to the same words, the same behaviors and the same works, and vice versa, to express the same signifying intention by the same words, the same behaviors and the same works.<sup>2</sup>

The social construction of reality matches the action with a culturally situated meaning. But this culturally situated meaning does more than enable one to discriminate actions in virtue of what they express. It also works as a determiner of action, as its motive. Hence the simultaneously symbolic, cognitive and axiological roles of the *habitus*. The *habitus* is the vector that integrates a social group on these three levels, which are so intimately involved with relations of meaning that they are as one. It represents a stable system of “patterns of perception, thought and action”, and thus acts as an operator linking together social structures, class cultures and individual actions. *Habitus*, as a structure that is both structuring and itself structured, Bourdieu goes on to explain, involves,

2 P. Bourdieu, “Systèmes d’enseignement et systèmes de pensée”, *Revue internationale des sciences sociales*, vol. XIX, n° 3, 1967.

in practice and in thought, practical patterns arising from incorporation through the historical process of socialization – ontogenesis – social structures themselves stemming from the historical work of successive generations – phylogenesis. Bourdieu does not claim to be proposing a genetic psychology of the development of *habitus*, but this notion implies an implementation of the genetic mode of thinking, which is supposed to explain the fit between internal organic relations and relations in the external environment. Bourdieu thus identifies the problem of “the genesis of the socialized biological individual” with the problem of “the social conditions of the formation and acquisition of the preference-generating structures that make up the *habitus* as an embodied social entity”. Yet for logical reasons, this process is relatively irreversible, Bourdieu explains: all of the conditioning stimuli and experiences are, at every moment, perceived through categories that have already been constructed by former experiences. Hence the importance of original experiences and, therefore, a relative closure of the system of dispositions constitutive of *habitus*.

It follows from these hypotheses that social action depends on cultural preconstructs, which maintain a world of illusions. In particular, the real common-sense object is preconstructed by language. Because the members of different social classes use different languages, their experiences of the world, Bourdieu argues, are essentially different. The problems of communication that arise between people from different social classes stem not so much from lexical questions as from problems of reference worlds. Common sense tends to regard as real those meanings that refer to essentially relational characteristics of the components of reality. Because social life is based on symbolic foundations, some members of society, who form the dominant class and because they form this class, have the power to impose their own interests on the other members of society, who thus form the dominated class. Indeed, they exercise this power by imposing their own reality as the *only* reality. They thus force their own meanings on the other members of society. This imposition of socially constructed meanings is interpreted by Bourdieu as a form of violence exercised at a symbolic level. The power struggle translates into a struggle for meaning, which in turn enables the dominant classes to maintain their position by blocking out the purely symbolic foundations of their domination. This is a subtle form of domination since it does not present itself as what it is but as the

consequences of reality. The mechanisms of the reproduction of social structures are rooted in the culture that legitimizes an arbitrary social order. It is the vehicle of the categories of perception and thought that predefine the way the members of a given culture think about reality, transposing the structure of their social relations into an unrecognizable form, and so making it seem natural to the actors.

If sociology is to be a scientific discipline, it needs to protect itself against such illusions.<sup>3</sup> For Bourdieu, as for Louis Althusser and Michel Foucault, who adopt Bachelard's notion of "epistemological break (or rupture)", the scientific object, applied here to the human and social sciences, is an object that has been constructed by breaking with common-sense thinking because it needs to correspond to an "expressly constructed" system of relations. It is only by isolating himself from the world of appearances distorted by cultural *a priori*, according to Bourdieu, that the sociologist can gain a scientific knowledge of social life.

The members of the dominant class possess in particular a "cultural capital" that, in the process of the transmission of social status and with the rise in living standards and the expansion of education, has taken over the role formerly played by economic capital. Like economic capital, cultural capital is inherited within the class that possesses it. Through the process of cultural inheritance, the contemporary education system plays a leading role in the reproduction of the social order.

Every institutionalized educational system owes the specific characteristics of its structure and functioning to the fact that, by the means proper to the institution, it has to produce and reproduce the institutional conditions whose existence and persistence (self-reproduction of the system) are necessary both to the exercise of its essential function of inculcation and to the fulfilment of its function of reproducing a cultural arbitrary which it does not produce (cultural reproduction), the reproduction of which contributes to the reproduction of the relations between the groups or classes (social reproduction).<sup>4</sup>

3 Cf. P. Bourdieu, J. Chamboredon, J.-C. Passeron, *Le Métier de sociologue*, Paris, La Haye, Mouton, 1973.

4 P. Bourdieu and J.-C. Passeron, *Reproduction in Education, Society and Culture*, transl. by Richard Nice, with a foreword by Tom Bottomore, London, Beverly Hills, Sage Publications, 1977, p. 54; translated from the French: *La Reproduction. Éléments pour une théorie du système d'enseignement*, Paris, Éd. de Minuit, 1970.

First of all, the education system selects in favor of the inheritors of cultural capital, regarding the selection as a result of merit. Teachers are the unconscious agents of social reproduction. They see themselves as impartial, whereas they judge using the thought categories of the dominant class. Selection in the schools ensures that the relative positions of the respective members of the dominant and dominated social classes are maintained by creating the illusion of fairness, in other words that selection is based on the natural talents of the children from these social classes. Secondly, by making the dominant-class culture the legitimate culture, the education system confers an institutional legitimacy on the *reality* of the dominant classes, that is to say on their subjective world. Following these lines of force, Bourdieu develops a neo-Marxist interpretation of the reproduction of the social order based on the unequal distribution of cultural capital. It is through culture, which is bound up with symbolic preconstructs in general, with language and its “style”, and with all its expressions in the form of art, religion, science, etc., that the system of social relations is structured and reproduced.

The work articulated around these major lines left its imprint on sociology in the Seventies. Among the not only theoretical but also empirical problems it raises, we observe that the relational properties underlying social reality are defined by the preconstructed theoretical model as an a priori system of interpretation without any real scientific validation. This enables Bourdieu to reduce, without any apparent difficulty, the cognitive and axiological levels of action to the level of symbolic relations. Ultimately, we are not convinced that the theoretical material helps bring out more than a superficial and tightly circumscribed aspect of social life. In particular, the fecundity of the interpretive model centered on the attribution of unconscious motives to social agents desirous of maintaining their relations of domination is not elaborated in proportion to the general importance claimed for it.

The inevitable participation of individuals in an unconscious struggle for life, reflected in an unconscious general struggle of symbolic interests and power, has Darwinian overtones. More generally, the, largely implicit, reference to the biological model of evolution underpins the scientific aim of the construction but it also marks its limits. In particular, the faculty of conscious, reflexive thought in all likelihood signals a break with the biological adaptation to the environment on which the concept of *habitus* is modeled. If we consider it to be an integral part of

a specifically human process of adapting to the world, we must then agree that it should offer, in the development of social action, quite other potentialities than that of understanding the mechanisms that determine it.

Social actions and interactions do not provide social reality with a new form of meaning. That is why the symbolic structures defined at the societal level govern the course of social action, even if they work through the *habitus*, which constitutes a system of individual dispositions for social agents. Bourdieu's vision of society is a static one. In particular, the relations between forms of consciousness and social structures are unfailingly seen from a deterministic standpoint in which the ultimate meaning of the individual actions is determined by the social structures.<sup>5</sup>

## The new sociology of education in Great Britain

The “new sociology of education”, which appeared in Great Britain in the early 1970s, claimed to provide sociology of education with a new paradigm. On the basis of its most representative contributions, it could be described as combining a neo-Marxist interpretation of the relations between school and society with a methodological perspective inspired by the phenomenology of Schütz. But the reality is more complex, given in particular the movement's lack of theoretical foundations. Indeed it covers everything from simple ethnographic analyses to general considerations on the relationship between school curricula and social and institutional contexts. The movement crystallized around a founding work whose title sums up the project: *Knowledge and Control: New Directions for the Sociology of Education*.<sup>6</sup> It is a collection of articles,

5 See J. Alexander, “The Reality of Reduction: The Failed Synthesis of Pierre Bourdieu”, in *Fin de Siècle Social Theory. Relativism, Reduction and the Problem of Reason*, Verso, 1995; N. Bulle (2002), “Pierre Bourdieu”, *L'Année sociologique*, vol. 52, 2, 2002, pp. 231–237; J. Kenneth, “The Sociology of Pierre Bourdieu”, *Educational Review*, 1974, pp. 237–249.

6 M. Young (ed.), *Knowledge and Control: New Directions for the Sociology of Education*, London, Collier-MacMillan, 1971.

among which those by Bourdieu and Bernstein, which are more marginal owing to their relative theoretical autonomy. The project to provide sociology of education with a new direction, as defended in the book, is based on the idea that school practices and knowledge rest on socially constructed meanings which are tailored to the interests of the dominant classes. Britain's new sociology of education therefore calls for suspension of the founding categories of school organization, which are generally taken for granted. These are such familiar categories as teacher and pupil, those that underpin the curriculum and the teaching methods, those that define what is regarded as education, and what is meant by aptitude and success, etc. The aim is to call into question what had until then been considered as data in the analysis of how schools function. According to Young, owing to the implicit meanings conveyed, school knowledge is a tool of political interests. The new sociology of education feels duty-bound to denounce the political nature of the social construction of the meanings underlying the elaboration and ranking of school knowledge. The power relations in society, it is argued, inform the way knowledge is organized, transmitted and evaluated in schools. From this standpoint, sociology of education is one with sociology of knowledge.

If logic, "good" reasoning, asking questions, and all the various sets of activities prescribed for the learner, are conceived of from one perspective as sets of social conventions which have meanings common to the prescribers, then the failure to comply with the prescriptions can be conceived, not as in the everyday world of the teacher as "wring", "bad spelling or grammar", or "poorly argued and expressed", but as forms of deviance. This does not imply anything about the absolute "rightness" or "wrongness" of the teachers' or pupils' statements, but does suggest that the interaction involved is in part a product of the dominant defining categories which are taken for granted by the teacher. Thus the direction of research for a sociology of educational knowledge becomes to explore how and why certain dominant categories persist and the nature of their possible links to sets of interests or activities such as occupational groupings.<sup>7</sup>

The research program set out in these broad lines presents a number of theoretical and methodological weaknesses that go a long way towards explaining its failure. First of all, an approach that examines the meanings prevailing in school from a phenomenological standpoint is incapable of accounting for the role played by power groups in the control

7 M. Young, *Knowledge and Control*, pp. 5–6.

of these meanings.<sup>8</sup> The result is a general split in the studies between analysis of the subjective social construction of the school situation by the actors at a micro-sociological level and analysis of the interplay of macro-social factors supposed to influence interactions within the school. Furthermore, although the socially constructed character of school situations is regarded as problematical, it is from a relativistic perspective of rejection of all normative justification of curricula.

“[T]he new sociology of education” starts by rejecting the assumption of any superiority of education or “academic” knowledge over the everyday commonsense knowledge available to people as being in the world. There is no doubt that teachers’ practices – lecturing, syllabus construction, examining, writing textbooks etc. – are predicated on just the assumption of the superiority of academic knowledge that is being called into question.<sup>9</sup>

Although, as far as the observations are concerned, their criticism is aimed at social institutions, the analyses do not go beyond the micro-sociological level of social action. At this level, analyses of the construction of the implicit meanings underpinning everyday social life can be made to fit more or less radical relativistic or constructionist tendencies. Relativism is an inherent bias for those members of the movement who defend a libertarian form of society with an approach to schooling that is non structured and free from all external control.<sup>10</sup>

8 For discussion and criticism, see J. Demaine, *Contemporary Theories in the Sociology of Education*, London, Macmillan, 1981; G. Whitty, *Sociology and School Knowledge*, London, Methuen, 1985, pp. 55–56.

9 M. Young, “Taking Sides Against the Probable, Problems of Relativism and Commitment in Teaching and the Sociology of Knowledge”, *Educational Review*, vol. 25, n° 3, 1973, p. 214.

10 See D. Reynolds and M. Sullivan, “Towards a New Socialist Sociology of Education”, in L. Barton, R. Meighan and S. Walker (eds), *Schooling, Ideology and the Curriculum*, London, The Falmer Press, 1980, p. 175.



## *The individual/interactionist pole*

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### *Action and interaction in sociology of education*

Those approaches to social action that regard relations between the “individual” and the “social” levels on the whole as relations of mutual construction are located at the individual/interactionist pole. The social conditions together with all of the elements mediating action define the situations of the social actors. In return, the effects of the actions and interactions and those of the aggregation of individual actions act on the social conditions and on the elements mediating action. At the social/normative pole of action, a circular causal relationship appears between situations-oriented and individuals-oriented relations. Through their actions and interactions, individuals tend unwittingly to reproduce the features of the social situations determining their action on at least one of the three main levels of action: the axiological/motivational level, the cognitive/logical level or the symbolic/expressive level. On the other hand, at the individual/interactionist pole, a mutual construction dynamics develops that, at each of the three levels of action cited above, induces in the situations-oriented and the individuals-oriented relations a movement that tends to take on a spiral form. Each situation supposes the existence of a framework situating the action which, on the basis of individuals’ conscious, rational activity, sets the situations-oriented and the individuals-oriented relations turning in a no more strictly circular dynamics. Such a dynamics depends on conditions that often intervene on the fringes of individual consciousness, and which provide the basis for the development of actions, reasoning processes and meanings. This was clearly explained for each of the action dimensions, respectively, by William Thomas, and later by Robert Merton, Boudon and Gregory Bateson in the area of mental pathology. Furthermore, this dynamics is a constituent of the analyses of Weber, Simmel and Durkheim, to mention only a few. Because the relationship between situations-oriented and individuals-oriented relations comes under the heading of conscious activities, it underpins a creative thrust

in the production of action. In this respect, as long as we consider that individual actions reproduce social forms, we are led almost logically to relativize values and to abandon the notion of objectivity. Alternatively, as soon as we consider that individuals can avail themselves of these social forms, in other words, as soon as we consider the specific role of consciousness in the development of social action, the questions of justice and objectivity appear in a new light.

# I. The axiological/motivational level

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## Formal education, values and modernity

Among the founding fathers of sociology, only Weber and Durkheim made major theoretical contributions on formal education as a social institution. Furthermore, there is a visible convergence of the principal preoccupations of the two sociologists. Both were concerned by the moral consequences of the secularization that is a feature of the development of modern Western societies. Indeed Weber and Durkheim were particularly preoccupied by the quest for modern substitutes for religion as a source of values that would lend meaning to social action.

Durkheim contests the diminished mediating role played in social action by institutionalized systems of norms, transmitted in particular by education. Schools, as they appeared at the turn of the twentieth century, in this respect were and should be no less a social institution than they had been before.<sup>1</sup> What is true of moral education is also true of intellectual education. In his *Evolution of Educational Thought*,<sup>2</sup> Durkheim shows that the Christian ideal focused on Man and, when it

- 1 “Everyone readily sees that in Rome, in Greece, the unique object of education was to make Greeks and Romans and, consequently, education was harmonious with the whole pattern of political, moral, economic and religious institutions. But we are pleased to believe that our modern education is an exception to the common law, that from now on it is less directly dependent upon social contingencies and that it is called upon to free itself from them completely in the future. Do we not repeat endlessly that we want to make men of our children even before making citizens of them, and does it not seem that our human quality is naturally independent of collective influences since it is logically prior to them?” (É. Durkheim (1922), *Education and Sociology*, transl. by Sherwood D. Fox, New York, The Free press, 1956, p. 120; translated from the French: *Éducation et sociologie*, Paris, Presses Universitaires de France, 1989).
- 2 É. Durkheim (1938), *The Evolution of Educational Thought: Lectures on the Formation and Development of Secondary Education in France*, transl. by Peter Collins, London/Boston, Routledge and Kegan Paul, 1977; translated from the French: *L'Évolution pédagogique en France*, Paris, Presses Universitaires de France, 1990.

came to education, aimed to shape his mind. That is why the educational principles it inspired are all of a rationalistic type and contain a certain degree of formalism. Indeed, it was less important to transmit useful knowledge than to discipline the mind so as to make it capable of pure and general thought. The means of such training varied over time, in particular with the prevailing epistemology, but the fundamental ends were similar. In the era of humanism, teaching of the humanities corresponded to a social demand to which the Jesuits responded as part of their strategy. But they imbued their humanistic education with the moral and intellectual discipline required by their religious ideals. Although collective ideals have changed in the secularization process characteristic of modernity, some of the educational principles they inspired remain essential. According to Durkheim, it is crucial to train the mind in speculative thinking, just as it is crucial to give the child a moral upbringing. Shaping the mind and moral formation are, moreover, linked in the models of education that unite the good and the true or which apply intellectual education to the intelligence of dogma. A modern version of this linkage appears in the emphasis on the rational aspect of morality, as well as in the forging of the will associated with intellectual education.

The impact of secularization and rationalization process characteristic of modernity on the values of social action is a fundamental issue for Max Weber. In his *Protestant Ethic and the Spirit of Capitalism*, which has been widely discussed and criticized, Weber reverses Marx's viewpoint that ideas are determined by circumstances, and instead analyses the impact of new forms of religious consciousness on the formation of modern Western civilization. The notion of *Beruf*, which designates both a task and a calling, was absent, he remarks, in peoples where the Catholic religion was predominant, while it existed in all peoples where Protestantism was predominant. The notion originates with Luther. The more positive appreciation of temporal tasks was not entirely new. But the Reformation (in particular the Calvinist doctrine of predestination) provided material activity with a moral justification through the idea that one performs ones duty in temporal affairs, and this constitutes the most elevated moral activity that man can allot himself on earth. Yet according to Weber, "secular asceticism" was merely a catalyst for the formation of modern Western attitudes.

One of the fundamental elements of the spirit of modern capitalism, and not only of that but of all modern culture: rational conduct on the basis of the idea of the calling (*Beruf*), was born – that is what this discussion has sought to demonstrate – from the spirit of Christian asceticism [...] To-day the spirit of religious asceticism – whether finally, who knows? – has escaped from the cage. But victorious capitalism, since it rests on mechanical foundations, needs its support no longer.<sup>3</sup>

Weber is less confident than Durkheim in the substitution of ethical rules and a secular morality for religious ideals. The rationalization of the world, linked with the specialization of professional tasks, subjects social activity to an impersonal, abstract regulation in the image of the bureaucratic organization of the workplace. Bureaucratic rules are purely instrumental. They place the emphasis on processes. They do not themselves make reference to any ultimate value. When such rules are put in place, social relations become less human and more instrumental. That is what Weber meant by “disenchantment of the world”.

It is no longer a matter for us, as it is for the savage who believes in the action of these powers, of appealing to magical means to gain control over the spirits or of imploring them, but of making use of technics and forecasting. This is the essential meaning of intellectualization, which raises another question: Do this process of disenchantment carried out over the thousands of years of Western civilization and, more generally, this ‘progress’ in which science participates as both component and driving force, have a meaning which goes beyond this pure practice and this pure technic?<sup>4</sup>

Weber finds that, for modern man, the answer is No. Science and religion are henceforth separated in his mind. The forms of rational consciousness have become detached from the meaning of life: he no longer expects them to reveal eternal truths. The search for this meaning now finds expression in a quest for “life-experiences”. Modern man asks nothing more of thought than it provide him with the means of attaining goals that are of use to him. The young American, for instance, sees his professor as someone who sells knowledge and methods (not conceptions of the world) in exchange for his father’s money. Does science have any meaning other than as an instrument? To be sure, Weber explains, it brings us the means of controlling reality, but also thinking

3 M. Weber (1904–1905), *The Protestant Ethic and the Spirit of Capitalism*, transl. Talcott Parsons, New York, Routledge, 1972, pp. 122–125.

4 M. Weber (1919), “Science As a Vocation” in H. H. Gerth and C. W. Mills, *From Max Weber: Essays in Sociology*, New York, Oxford University Press, 1958.

methods, instruments and a discipline. Furthermore, it contributes to a process of clarification, it enables us to know what god we serve, depending on the positions we take. But it does not summon any prophet to tell us what god to choose. In other words, science can shape and train man, that is the human being as a responsible being endowed with a degree of intellectual skill and a certain clear-sightedness in carrying out his action. Weber is particularly close to Durkheim here. There is room, in the passage from a social order founded on religious values to the modern social order dominated by economic issues, for an ethic of responsibility that does not render the values formerly carried by faith any less essential. But when Durkheim exhorts the modern educationist to transmit to the child the meaning of good, of duty, of being conscious of his action, Weber sees the effacement of transcendent issues as the slope the modern world is most sure to follow. “The destiny of our time, characterized by rationalization, by intellectualization and above all by the disenchantment of the world, has led humans to banish the most sublime of values from public life.”<sup>5</sup>

## The construction of individual destinies and the “Thomas theorem”

People do not act with respect to situations as they are, but with respect to the meanings the situations hold for them. This fact is the counterpart, on an axiological and motivational level, of semi-circular reasoning on the cognitive and logical level, whose consequences for the formation of beliefs and false ideas have been analyzed by Boudon.<sup>6</sup> The meaning that the actors attribute *a priori* to situations influences the course of the social action through the rational considerations developed by the actors. This meaning may lead them to direct their actions

5 M. Weber (1919), “Science As a Vocation”, 1958, p. 96.

6 R. Boudon (1990), *The Art of Self-Persuasion: The Social Explanation of False Beliefs*, transl. Malcom Slater, Cambridge UK and MA, Polity, 1994; translated from the French: *L'Art de se persuader. Des idées douteuses, fragiles ou fausses*, Paris, Fayard, 1990.

in such a way that they are confirmed by the consequence of these very actions. Thus subjective beliefs become facts. In this respect, Merton<sup>7</sup> has analyzed the social processes by which “prophecies” come to fulfill themselves. He classes these social phenomena under the “theorem” formulated by the American sociologist Thomas<sup>8</sup>: “If men define situations as real, they are real in their consequences.” The “definition” of a social situation lays the groundwork for the possibilities of acting offered by the situation. At the outset, Merton explains, a self-fulfilling prophecy is “when a *false* definition of the situation evokes a new behavior which makes the originally false conception come true”. The belief in the “natural” character of certain features of the situations in question engenders the social actions and interactions that cause these features to appear. This appearance then constitutes a socially maintained illusion. Once these features become a social reality, there is a spontaneous tendency to attribute them to the nature of things and thus to keep up the illusion. There is no need to stress the importance of this phenomenon for sociology of education. Moreover, it can be found in many analyses inspired by the neo-Marxist movement, even though these tend to reduce such constructions of social reality to symbolic relations mechanically reproduced by the social actors. But these interpretations lead precisely to *defining* the situations they object to on the basis of a false or limited meaning and may therefore contribute to producing them.

The teacher perceives a set of personal facts concerning a student (school performance, extracurricular activities, socio-economic background, etc.), some of which – the signals – can be altered (individuals have some latitude to vary their identity signals), and some of which – the indices – cannot be altered (gender, race, age, etc.), as in the case of the employer interviewing a job-seeker in the micro-economic model set out by Michael Spence.<sup>9</sup> Let us suppose that initially, or for lack of

7 R. K. Merton, *Social Theory and Social Structure*, Glencoe IL, The Free Press, 1957, chap. XI: “The Self-Fulfilling Prophecy”, pp. 421–436.

8 W. I. Thomas is representative of the Chicago School, as are Park and Burgess; see especially W. I. Thomas, and F. Znaniecki (1918–1920), *The Polish Peasant in Europe and America*, New York, Knopf, 1927.

9 See M. A. Spence, *Market Signaling, Informational Transfer in Hiring and Related Screening Processes*, Cambridge MA, Harvard University Press, 1974 and “Job Market Signaling”, *Quarterly Journal of Economics*, Aug. 1973, n° 3, vol. 87, pp. 355–374.

information, the teacher relies on experience to get an idea of his students' level, interests and needs by intuitively calculating the conditional probabilities for various combinations of signals and indices. The individuals (identified by their signals and indices) can thus be the subject of different expectations about their school performance which are based on the performances, aspirations and social destinies associated with the different groups with which they are identified.

Robert Rosenthal and Lenore Jacobson's classic experiment (1968), conducted in an elementary school in San Francisco, is predicated on this idea. The purpose of the experiment was to test the influence of teacher expectations on pupil success.<sup>10</sup> The children of Oak School, a public elementary school in a disadvantaged area of San Francisco, were first given standard IQ tests. Based on the test results, the experimenters predicted an imminent intellectual "take-off" for twenty per cent of the pupils, whom they indicated to their teacher. In reality, these pupils had been picked at random, so that the forecast was entirely arbitrary. They spent their first year in the class of the teacher who knew about the list of pupils likely to make rapid progress, and the second year in the class of a teacher who had not been informed. After the first year of the experiment, the designated children really had made better progress than their test results could have allowed one to predict. The relative progress of the children in the lowest grades turned out to be the most visible. During the second year, the youngest pupils lost their advantage, while the older ones, who had made less significant progress in the first year, managed to keep the advantage they had gained. The experiment concluded that younger children have more need than older children for expectations to be maintained in order to keep up their performance. The older children, it was concluded, were more autonomous, and so their results were less affected by expectations, but the influence of the expectations was longer lasting.

Rosenthal and Jacobson's research has been widely discussed. Similar experiments<sup>11</sup> were carried out in numerous other contexts with par-

10 R. A. Rosenthal and L. Jacobson, *Pygmalion in the Classroom; Teacher Expectation and Pupil's Intellectual Development*, New York, Holt, Rinehart and Winston, 1968.

11 See H.M. Cooper and T.L. Good, *Pygmalion Grows Up: Studies in the Expectation Communication Process*, New York, Longman, 1983.



tially contradictory findings. Nevertheless, no one questions the existence of an impact of teacher expectations on pupil attitudes and achievements. But just as the “Thomas theorem” predicts, the impact of expectations is effective only when these are based on the idea of a reality to which one must necessarily adapt, in other words when the expectations are rigid. Prophecies are all the more likely to be fulfilled when the expected performances are attributed to determinisms, whether of a genetic or a cultural nature. Belief in cultural determinisms, from a pedagogical standpoint, has the same effect as belief in genetic determinism. This argument was defended in particular by the psychologist, Kenneth Clark, against the “cultural deficiency”<sup>12</sup> theories popular in the United States in the 1960s.<sup>13</sup>

The psychological and social processes at the source of the effect of teacher expectations on pupil performance are ill-known. On this subject, Rosenthal and Jacobson’s interpretations are particularly vague and conjectural. According to them, because of what he said, and how and when he said it (expression, gestures, etc.) the teacher communicated to the children in the experimental group that he hoped to see an improvement in their intellectual performance. He may have also more or less modified his teaching techniques. That is why the idea that the child had of himself and his abilities could change, and his motivation increase. As a consequence, these factors had a positive effect on his learning and on the development of his abilities.<sup>14</sup>

12 See, e. g. one of the most influential works on this topic, F. Riessman, *The Culturally Deprived Child*, New York, Harper and Row, 1962.

13 “Looked at one way, it seems the epitome of common sense – and certainly compassion – to be convinced that a child who never has had toys to play with, or books to read, who has never visited a museum or a zoo or attended a concert, who has no room of his own, or even a pencil he can call his own, ought not be expected to achieve in school on a level to match a more fortunate child. His image of himself is certain to be poor, his motivation weak, his vision of the world outside the ghetto distorted. But common sense and compassion may not tell the whole story. The evidence of the pilot projects in ‘deprived schools’ – odd though it may appear to many – seems to indicate that a child who is expected by a school to learn does so; the child of whom little is expected produces little [...] The assumption of inferiority might be the controlling fact which restricts the educational responsiveness of children to the alleged educational experience. In this regard, racial inferiority and cultural inferiority have identical practical educational consequences” (K. B. Clark, *Dark Ghetto, Dilemmas of Social Power*, New York, Harper & Row, 1965, pp. 130–147).

14 R. A. Rosenthal and L. Jacobson, *Pygmalion in the Classroom*, p. 253.

Use of praise can be counter-productive. Praise works only if it is fairly rare and appropriate. Teacher satisfaction is only one component of the interaction with the pupil. It can have a negative impact if it represents low expectations of the pupil. The effect of teacher expectations on pupil behavior depends on the pupil's subjective interpretation of their meaning. In the evaluation of the pupil's results, the teacher represents an objective agency of evaluation in virtue of his experience, his competence and his knowledge of other pupils' results. The pupil is another objective agency of evaluation in virtue of his past experience, his successes and failures, his knowledge of his real efforts, the help he receives, or any personal problems he may have, etc. The teacher-pupil interaction is based on a situation over which each has partial control. Moreover, like the subjects of some of the experiments conducted by Rosenthal and Jacobson, the pupil can intuitively influence the teacher's expectations. He can provoke the attitude in the teacher that will lead him increasingly to behave in the predicted way.<sup>15</sup>

One set of studies has concentrated on the impact of teacher expectations on the differentiation of girls' and boys' academic identities.<sup>16</sup> In secondary school, for example, teachers tend to complement girls less on fundamental matters (e.g. quality of performance) than on matters of form (work, respect for norms). Conversely teachers tend to compliment boys on fundamental issues and criticize them on questions of form. Rationally more sensitive to remarks on the quality of their performance, girls and boys have different interpretations of the meaning of praise and the criticism they receive. The girls show a tendency to attribute their relatively good results to factors independent of stable inner qualities such as their work, and their less good results to just such qualities. The boys, on the contrary, tend to attribute their relatively good results to their stable inner qualities, and their less good results to factors independent of these qualities. For these reasons, although they are criticized more often, boys are likely to develop a better image of their intellectual potential.

15 R. A. Rosenthal and L. Jacobson, *Pygmalion in the Classroom*, p. 59.

16 See J.E. Brophy and T.L. Good, "Teacher Behavior and Student Achievement", in M.C. Wittrock (ed.), *Handbook of Research on Teaching*, New York, Macmillan, 1986, pp. 328-375; J.E. Brophy, "Teacher Praise, a Functional Analysis", *Review of Educational Research*, vol. 51, n° 1, 1981, pp. 5-32.

The foregoing often makes us forget that the primordial impact of the definition of school situations is related to the definition of school teaching. In other words, it is not the expectations with respect to each pupil in accordance with the features that differentiate them but the expectations with respect to the whole group as the object of teaching which in all likelihood entails major cognitive and motivational consequences. These consequences have been observed, for instance by James Coleman,<sup>17</sup> and attributed to the educational proficiency of the student body. Most of the time the teacher addresses himself to the whole class. Classroom activities are usually common to everyone. The pupils live what is largely a collective experience, which therefore rests, in the beginning, on the institutional definition of the school situations. This definition concerns all pupils in a class, a school, a track, an age grade, a period of time, etc. It is based on evaluation of proficiencies and on more or less long-term anticipation of the needs and interests of the pupils at whom the teaching is aimed. This definition, however, is “false” at the outset. Or more accurately, it regards as “real” abilities, needs and interests that can be verified only through processes in which it is fully involved. It can act as a self-fulfilling prophecy. In particular, by dividing pupils into groups, the educational structures lead to identifying the specific needs and interests which serve to define the kind of teaching dispensed. On the one hand, the pupil is a malleable being engaged in an ongoing process, whose needs and interests are determined as he develops and, in particular, as he learns. These are generated in part by his education. On the other hand, society too is engaged in an ongoing process, and social needs are created in accordance with the individual members. These needs depend on the education of these same individuals. In the end, largely “invented” school situations emerge from the set of ongoing social processes.

The orientation of students into scientific sections and literary sections, as it occurs in secondary education in France, for instance, is an illustration of the impact of school structures on the formation of social identities. This differentiation identifies *scientifiques* and *littéraires*, whose proficiencies are supposed to correspond to a natural distribution of aptitudes, and even to a distribution of social needs. To a certain

17 J.S. Coleman, *Equality of Educational Opportunity*, Washington DC, US Department of Health, Education and Welfare, 1966.

extent, students adapt to the expectations defined by the different curricula and academic programs. Moreover, their own professional aspirations and orientations depend to a great extent on the structure of the educational choices they are confronted with. This structure then goes on to fuel a process that reinforces beliefs about the way natural aptitudes and social needs are divided up.<sup>18</sup>

The history of the changing behavior of the adolescent in the United States provides another illustration of the “Thomas theorem”.<sup>19</sup> In the first decades of the twentieth century, new ways of thinking about adolescence, inspired by works such as those of Hall<sup>20</sup> in psychology, gave rise to a veritable social institutionalization of the adolescent character. A change occurred in other countries as well, in particular in Europe, but the American experience is paradigmatic. At the time, the United States was experiencing a rapid expansion and democratization of their secondary school system. The new genetic theories on the psychogenesis of adolescent development were being used to legitimize the changes in the education system. The idea that the child and the adolescent go through a more or less autonomous process of psychic maturation fit with the social ideals held by American educators and education theorists. The importance given to the psychogenesis of psychic development made it possible to detach the adolescent’s needs and interests from his social, cultural and ethnic particularities, and to subordinate them to a universal maturation experience. Age-groups became, ideologically, a democratic means of identifying individuals. They underpinned a peer-group loyalty that was supposed to continue on into adult life in the exercise of one’s civic duties. Central to this change is the image of the adolescent as vulnerable, difficult, endowed with a limited potential owing to the maturation process he is undergoing, but at the same time an object of praise, the embodiment of the renewal and promise of the species. According to Joseph Kett, the American adolescent has evolved in a direc-

18 See N. Bulle, *La Rationalité des décisions scolaires. Analyse comparée de l'évolution de l'enseignement secondaire français et américain au cours du XX<sup>e</sup> siècle*, Paris, Presses Universitaires de France, 1999.

19 J.F. Kett, *Rites of Passage. Adolescence in America 1790 to the Present*, New York, Basic Books, 1977, chap. 8: “The Invention of the Adolescent”.

20 G.S. Hall, *Adolescence: Its Psychology and Its Relation to Anthropology, Sociology, Sex, Crime, Religion, and Education*, New York, 1905, 2 vols.

tion determined by the theoretical figure that was assumed to characterize him. The social processes at the origin of this change are rooted in the social definition of adolescence as a period of youth characterized by a process of maturation. They stem from the development of new attitudes to youth. Secondary education reoriented its tasks towards socializing youth, conceived as a specific time of life. The new attitudes towards young people were put into practice through a thorough overhaul of education and teaching methods, through the development of group activities, sports and clubs, and institutions devoted to youth, such as scouting. The idea of the “invention” of adolescence reflects a pattern of behavior “imposed” on young people, not one that is inherent to adolescence. This is a behavior that is conformist, valuing cooperation among peers and the worship of stars and heroes. It is hostile to all things intellectual, and basically passive, despite the educational rhetoric extolling it (adolescent combativeness, for instance, tends to be channeled into highly regulated sports activities)<sup>21</sup>.

Little analysis proper has been done of how definitions of situations lead, through their consequences, to fulfillment of the expectations on which they are founded. The second half of the “Thomas theorem” is validated in functional interpretations by the hypothesis that individuals internalize social norms. This internalization is ensured, for example, by the effects, in terms of rewards and punishments, of others’ expectations. But if the processes involved are considered to be based to a large extent on individuals’ reflexive activity, in what circumstances do the “definitions” of the situations lead to their realization? One answer is that individuals rationally adjust their own objectives to outside expectations. Individual motivations develop along two general paths, described by Willard Waller. On the one hand, the goals assigned to the students become the means to attain higher goals as they progress. The students adjust their level of aspiration from one stage to the next, and thus evolve towards greater autonomy of action. But these same goals also constitute the limits of their experience and the limits of the opportunities for acting offered to them. These opportunities are redefined, extended or diminished at each new stage of the individual’s education

21 On adolescents see J.S. Coleman et al., *The Adolescent Society: The Social Life of the Teenager and its Impact on Education*, New York, The Free Press, 1966.

in accordance with the successive groups with which he is identified. For these reasons, individual destinies are a step-by-step construction that depends on the successive structures of the situations of the individual choices and on the progressive adjustment of the individual's aspirations to these situations.

A typical model of the construction of individual destinies and, with it, of the role played by choice structures in these destinies is given by Boudon in *Education, Opportunity, and Social Inequality*.<sup>22</sup> Boudon's model makes it possible to simulate the cumulative effects of the succession of educational and professional choices made by individuals in accordance with their social origins. The various social categories are distinguished, on the one hand, by the differential levels of academic achievement of their children and, on the other hand, by their aspirations as a function of their children's academic achievement. The social differentiation in aspirations for the same level of achievement reflects, in particular, families' aversion to downward social mobility. The effects of this differentiation are reiterated each time a choice of orientation is made. In other words, with each choice, the differentiated behaviors of the families with respect to education tend to produce greater divergence in the average destinies of the social categories. That is why, according to the results produced by the model, the causes of inequality of educational opportunities are not so much cultural (the effects of cultural transmission are supposed to affect academic performance) as situational (the differentiated decisions result from the relationship between aspirations and situations). If one disregards this procedural aspect of the elaboration rationality of individual achievement, one is tempted to take the point of arrival, social achievement, as the more or less unconscious initial target and, abandoning the rationality principle, to conclude that children from different social classes "internalize" class values or a "class destiny".

22 R. Boudon (1973), *Education, Opportunity, and Social Inequality; Changing Prospects in Western Society*, New York, Wiley, 1974; translated from the French: *L'Inégalité des chances*, Paris, A. Colin, 1973.

## Willard Waller and ecology of the classroom

Waller's classic work, *The Sociology of Teaching*, published in 1932, offers a pioneering, interactionist conception of the educational process in schools. Like Durkheim and Parsons, Waller sees the school as a micro-society. But, for Durkheim and Parsons, if the school is a prefiguration of society, it is because it is, by its socializing action, an institution that prepares individuals for society at large. In this respect, Durkheim lays the stress on transmission of a moral order, and Parsons on learning future social roles. For Waller, preparation for life in society rests primarily on the role played by the school in cognition, that is on the transmission of knowledge and skills. The problem Waller poses is not what social function the school assumes in doing this. It is the question of the social order at the level of the school as an institution. This perspective has its intellectual roots in the Chicago School. Waller was, in particular, a student of Robert Park and Ernest Burgess in Chicago. "Human ecology, he writes, is the study of the distribution of men and institutions in space and time as determined by the process of competition."<sup>23</sup> In its essence, the question Waller poses at the scale of the school is similar to the question Simmel asks at the scale of the whole society, which is: What makes school society possible? On what kind of equilibrium does it rest? From this standpoint, school no longer constitutes *a priori* an answer to the question of social order. On the contrary, in this regard, and taking into account the special cognitive function assigned to it, it once again raises the sociological question of order (not the question of discipline). Waller turns the problem around in such a way that, instead of supporting the overall social order, the equilibrium of the classroom rests in part on models borrowed from society at large. For instance, identifying the teacher with one or more images of positive social types – the father or mother, a social or cultural ideal, the officer or gentleman, the patriarch, the kindly adult, the love object, etc. – is supposed to endow the teacher's status with a favorable meaning.<sup>24</sup> The question of the equilibrium of the relationship established in the

23 W. Waller (1932), *The Sociology of Teaching*, New York, John Wiley and Sons, 1967, p. 161.

24 W. Waller, *The Sociology of Teaching*, p. 248.

classroom is crucial, given the school's cognitive mission. In effect, the success of this mission does not depend entirely on the institution itself. Furthermore, it is opposed on two important levels to the natural or spontaneous course of events. Not only does the knowledge transmitted not correspond *a priori* to the students' immediate needs and interests, but the teacher's function, which is to transmit knowledge, also creates potentially conflictual relations between him and his students. Effectively, the students are the "raw material" with which the teacher must produce results. In this sense, they are tools for him, whereas for themselves they are ends, who want to fulfill themselves in their own way. The formal definition of each one's role so offends the students' natural aspirations that it invites transgression. In Waller, the classroom is never more than a setting within which personalities affront each other. Whatever occurs of importance in school stems from the interaction between these personalities. As the sociologist writes:

Children and teachers are not disembodied intelligences, not instructing machines and learning machines, but whole human beings tied together in a complex maze of social interconnections. The school is a social world because human beings live in it.<sup>25</sup>

Consequently, the school constitutes a specific medium in which personalities interact, with more or less success. The personalities in question represent complex motivational structures, which develop in the course of their interactions. The concept of personality here refers to all of the motivational dispositions characteristic of an individual at a given time in his life.

School is not a place for socialization, where individuals internalize a predefined order based on systems of established roles. This also explains why Waller poses the problem of social order at the scale of the school. His views on socialization shed some light on the set of issues he develops. The social roles taken on by an individual act upon the development of his personality, but their influence is not based on any kind of social learning in which the individual, as he responds to external expectations, gradually identifies with his social roles. First of all, the social roles have a hand in defining the social situations the individual experiences and therefore in subjectively determining his possi-

25 W. Waller, *The Sociology of Teaching*, p. 1.



bilities of acting. The process of defining the situation can be clarified with the help in particular of the analyses conducted by Schütz and Mead. The individual defines his action in large part on a preconscious level, within an implicit axiological framework. This framework defines what actions are possible according to his inner motives and ends, and in so doing determines the meaning attributed by the individual to his behavior. Secondly, social roles also have a hand in actually determining the social situation the individual experiences, and therefore in objectively defining his possibilities of acting. This influence of assumed roles on the formation of the social personality is part, as we saw above, of the procedural character of the development rationality of individual motivations and goals. Determination of the individual's motives for acting depends on the successive decisions he makes in the situations in which he finds himself. The roles he assumes thus impinge on the development of his personality in virtue of the situations to which he must react and which contribute to the formation of his objectives and his capital of experience. The notion of "internalization" takes on a special meaning here. Social norms and values tend to channel individual actions in a certain direction not because they are assimilated by the individuals but because they contribute, in accordance with the processes described above, to structuring their experience.

Once a rôle has been accepted, it is internalized and made meaningful by a process of dynamic elaboration. In the drama of life every man writes his own lines and revises them from moment to moment. The check on this process is conformity to the reality principle. As a rôle is made meaningful, it comes to be itself one of the aims of existence, one of the criteria by which other possible rôles are judged. [...] A rôle which has thus been internalized may become one of the chief drives of the personality [...] The general tendency in human process is for ends to turn into means, and this probably favors a healthy growth of personality and of society. Our achievements range themselves on different levels, and we readjust our standards as we pass from one level to another. But there is an opposite tendency which transforms means into ends; means are at first sub-wholes in greater wholes, but the greater whole fades out and leaves nothing but the part. Then the part is the whole.<sup>26</sup>

At the first level of analysis, the institutional setting provided by the school formally defines the protagonists' roles. But the meaning of the social roles, as defined at the formal level of the institution, cannot be

26 W. Waller, *The Sociology of Teaching*, pp. 324 and 443.

questioned because of the institutional power struggles of which the protagonists are conscious. What is provided at this level does not explain the make-up of the school order proper. This order is established at the higher levels of action, that is precisely at the non-formal levels of the institution, and that is where the conditions of successful teaching are played out. At these non-formal levels, the actors define the implicit meaning of the classroom situations. What matters in this regard is what the individuals do within the constraints on action that are handed to them. The potential conflicts between teacher and pupils are no threat to the formal positions conferred by the institution because they would be doomed to fail. That is why the tensions in classroom situations arise on a second level. It is not the actions but the meaning of these actions that are at stake in the latent struggle for control. The reality of this control rests on the interaction between the personalities inside the framework defined by the institution. The stable teacher dominates the definition of the classroom situations, which he never calls into question. Alternatively, a number of strategies can underlie a take-over of the classroom situation by the students: the implicit conversion of acquired advantages to rights, or forms of latent rebellion. Whatever rules the teacher lays down, for instance, the students tend to empty of their meaning either by obeying them mechanically or by openly flouting them, or by engaging in various activities behind the teacher's back.<sup>27</sup>

Thus the teacher never actually succeeds in fulfilling his task unless he can control the definitions of the classroom situations. But this control is not automatically granted by simply defining the formal roles. In this perspective, Waller distinguishes two kinds of leadership exercised by the teacher: institutional and personal. Leadership is defined as control by an individual of the behavior of others. Leadership is said to be institutional when the personalities are obliged to conform to a preexisting model. Leadership is said to be personal when it is the qualities of the personalities engaging in the interaction that determine the model of the social interaction. Institutional and personal leadership work together to legitimize the teacher's position.

Various teacher strategies are associated with institutional leadership. Respect for rules rests on an ethic of discipline. Orders are not justified, for that would place the action on the level of argumentation.

27 W. Waller, *The Sociology of Teaching*, p. 196.

Use of management strategies are also based on the teacher's use of his institutional position, for instance bringing a latent conflict to a head before the student is emotionally ready, or manipulating the student's social relations to avoid his ganging up with others, etc. The teacher can also play on the social distance between them to touch the student. Or he can try to manipulate him by appealing to values he holds such as parental aspirations, fair play, honesty, etc. Formalism is also a compromise that allows the teacher to maintain a dominant position he would otherwise not be able to gain. By placing less emphasis on relations between personalities and attributing the asymmetry of the teacher-student relationship to institutional rules and practices, formalism reduces the psychological unpleasantness of the subordinate position. But insofar as recourse to formalism represents a failure of personal leadership, there is a good chance, Waller writes, that it hides a rebellion against the teacher.

Personal leadership rests on the students' consent to a "control" of the classroom situation by the teacher that is based on the teacher's own personality. The student's recognition and acceptance of the teacher's personal leadership does not necessarily stem from a conscious and explicit analysis on their part, but Waller's arguments show that they are rationally justified. A preliminary condition for the students' respect for the teacher and his teaching is the teacher's respect for the students' own personalities (as they are and if possible as they see themselves) and for the subject matter he teaches. Respect for the students' personalities requires human intelligence, which is reflected in the teacher's capacity to understand situations. It also requires impartiality on his part. Respect for institutional relations is part of the respect for the personalities who interact on the basis of these relations. Furthermore the teacher must have respect for the subject matter he teaches, since he would be unable to make his students understand that something is important for them if it is not important for him. In spite of the repetitive nature of his formal task, his motivation is maintained by his interest in the personality of his students. The teacher's personal leadership also rests on the intellectual, cognitive and motivational advance he has over his students. In virtue of his knowledge and his experience, he introduces his students into a world that is unknown to them and which has ceased to be complex for him. In spite of their ignorance of the subject taught, students are usually capable of assessing their teacher's

competence. Finally, because of his social experience, his personality is more complex, which gives him the advantage of being unpredictable (this is, Waller adds, a complexity in organization and not in disorganization).

In the end, the equilibrium that comes out of the interaction between the individual personalities in the classroom, which conditions the quality of the learning that goes on in school, rests, for Waller, on a power struggle that is principally intellectual and moral. This power struggle unfolds on the fringes of the institutionalized positions and rests on the reasons the actors have for subscribing or not subscribing to the pre-defined social order. Teacher–student relations, at the institutional level, have changed since Waller carried out his analyses. Nevertheless, his findings will continue to be relevant because, at the level at which the real power struggles occur, these involve primarily not institutional relations but the confrontation of individual personalities. It is at this level that true relations are determined. Thus, successful teaching depends crucially on the personal and intellectual qualities of the teacher.

## II. The cognitive/logical level

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### Cognitive tools and mind

The historical-cultural school,<sup>1</sup> which is in part a continuation of Vygotsky's work, occupies a prominent position in the area of intercultural research on the relationship between cognitive tools and mind. Vygotsky's writings are put to diverse uses, however. The Russian psychologist did not write about culture as such. In his work, culture provides the mind with the intellectual mediating tools out of which the "higher mental functions" develop. He rejected the biologically inspired conceptions of intellectual development in favor of the *sui generis* character of the development of the human mind. In this respect, culture plays an active part in the intellectualization of thought processes. It constitutes a particular set of cognitive tools that underpins the development of the mental processes specific to humans. Like Piaget, Vygotsky was interested in the general logical features of reasoning processes, but, unlike Piaget, he connected these with the formal properties of the intellectual tools developed by the individual rather than those of general cognitive structures.

The question of whether mental processes, which are mediated by culturally constituted cognitive tools, differentiate kinds of thinking as such has never received a convincing answer or an unambiguous interpretation. The potential sources of the variations in the reasoning processes of the subjects observed are immense. All too often studies have tested the subjects' capacity for logical reasoning as though they were

1 See e. g. M. Cole, "The Zone of Proximal Development: Where Culture and Cognition Create Each Other", in J. V. Wertsch (ed.), *Culture, Communication and Cognition: Vygotskian Perspectives I*, New York, Cambridge University Press, 1985, pp. 146–161; J. V. Wertsch, *Vytotsky and the Social Formation of Mind*, Cambridge MA, Harvard University Press, 1985; J. V. Wertsch, *Voices of Mind: A Sociocultural Approach to Mediated Action*, Cambridge MA, Harvard University Press, 1991.

testing properties of the mind and not the results of processes. However it turns out that differences in intellectual performance rest not so much on the nature of the cognitive processes involved as on the cognitive tools manipulated by the subjects.<sup>2</sup>

The cognitive tools constituted by language, beliefs, skills and hypotheses are, in Boudon's works, elements of a universal character that enter into the explanations of reasoning processes. Analysis of the actor's cognitive behavior thus does not resort to specific *modes of thought* as part of its method. The intellectual tools manipulated by social actors account for the conditions and the limits of all knowledge produced. There is not one, ultimate truth with respect to which the actors' reasoning processes would appear as more or less limited or deviant.

Historians from different social backgrounds have every chance of seeing the causality of an event in different ways, he explains (Simmel, 1892): one will perhaps attribute it to the causal chain *YabX*, a second to *ZbX*, a third to *ZgdX*. For the complexity of the networks of causality with which the historian is confronted is so great that no one can piece them together entirely. But nothing prevents the three theories, *YabX*, *ZbX*, *ZgdX*, from all being true.<sup>3</sup>

Broadly speaking, the categories and forms of knowledge enable us to gain knowledge of a reality, in itself inaccessible, that is more complete and detailed. But the cognitive tools a person has developed are confronted with this reality. The fact that knowledge is dependent on social factors in no way leads to relativism. Not all cognitive tools are equally valid or effective. Some points of view can turn out to be sounder or more fundamental than others. In the event, if certain intellectual constructs have a social origin, they can develop independently. What is arbitrary from a symbolic point of view may not be so from a cognitive or a logical standpoint. The crucial character of this point cannot be overemphasized for Boudon's sociological theory. It can be summed up as follows: intellectual tools and mind do not stand in a one-to-one relation. That is why reflexive consciousness plays a particular role in the conduct of action.

2 See M. Cole and R. Scribner, *Culture & Thought*, New York, John Wiley and Sons, 1974.

3 R. Boudon, in R. Boudon and M. Clavelin, *Le Relativisme est-il résistant? Regards sur la sociologie des sciences*, Paris, Presses Universitaires de France, 1994, p. 19.

In *The Analysis of Ideology*,<sup>4</sup> Boudon distinguishes between effects of *position* and effects of *disposition*. The actors' *position* is the source of effects of *perspective*. An effect of perspective exists when the same object can be perceived from different points of view, and the images corresponding to these different points of view are themselves different. The social position occupied by the individuals can, for example, be considered to produce effects of perspective insofar as it affects their perception of social reality. Effects of "disposition" manifest themselves in an infinite variety of ways. They are roughly defined by the fact that, in interpreting any phenomenon, we call upon previously acquired experience and knowledge (which can equally facilitate or inhibit understanding of the phenomenon). A banker, Boudon explains, is likely to perceive monetary phenomena differently from a professor of Greek, and he will interpret them differently depending on whether or not he has been exposed to the ideas of John Keynes. These tools of mind are the counterpart of the *a priori* perception frames represented by *intentionalities* in the domain of phenomenology. But, Boudon goes on to say, the application by Schütz and his continuers, Peter Berger and Thomas Luckmann, of Husserl's analyses to social perception concerns the *symbolic* dimension of social life, not its *cognitive* dimension. The cognitive dispositions of the social actors may *objectively* increase their potential for analysis and improve the soundness and pertinence of their reasoning.

Boudon details the role played by cognitive *a priori* in reasoning more particularly in *The Art of Self-Persuasion*.<sup>5</sup> The thinking process takes place against a background of presuppositions about which the actor forgets or of which he is unaware, and which, unbeknown to him, set limits on his reasoning. What we find in reality, without our being entirely conscious of it, is above all what we have put there. In other words, all reasoning follows a curve that can ultimately come full circle. Referring to what he calls "Simmel's model", although Simmel himself

4 R. Boudon, *The Analysis of Ideology*, Chicago/Cambridge, The University of Chicago Press/Polity, 1989; original French title: *Idéologie ou l'origine des idées reçues*, Paris, Fayard, 1986.

5 R. Boudon, *The Art of Self Persuasion. The Social Explanaiton of False Beliefs*, transl. Malcom Slater, Cambridge, Polity Press, 1994; translated from the French: *L'Art de se persuader des idées douteuses, fragiles ou fausses*, Paris, Fayard, 1990.

merely alludes to it, Boudon points out the link between these presuppositions and analytical reasoning procedures.

If we reflect on the huge number of presuppositions on which all defined knowledge depends for its content, it seems perfectly feasible for us to prove statement A by statement B, but that B, through the truth of C, D, E, etc., is in the end provable only by the truth of statement A. There merely needs to be a sufficiently long chain of reasoning – C, D, E, etc. – for the return to the starting point to elude our awareness, just as the size of the earth conceals its spherical shape from immediate sight, creating the illusion that we can move to infinity along a straight line.<sup>6</sup>

The problem with circular reasoning can be put as follows.<sup>7</sup> A series of conscious statements  $p$ ,  $q$ ,  $r$  are linked by logical implications such as, if  $p$  is true then  $q$  is true, and if  $q$  is true, then  $r$  is true. Knowing that  $p$  is true, one deduces the truth of  $r$ . Yet the truth of  $p$  can depend on metaconscious statements such as “ $r$  is true” and “if  $r$  is true, then  $p$  is true”. “Metaconscious” refers to an order of reasoning that is more or less outside conscious awareness, but which serves as a logical support for the conscious processes. We see, then, that the conscious deduction of  $r$  from  $p$  rests on the implicit *a priori* hypothesis that  $r$  is true. Boudon gives a first illustration of the limits, which are ill controlled by the subjects, on the validity of their reasoning by calling up the classic problem of induction. The repeated observation of a connection between two phenomena naturally tends to reinforce the belief in causal links between the phenomena. But this belief rests on the idea that the repeated observation of a connection between two phenomena *proves* the existence of a causal link between them. Such inferences are common in everyday thinking and are at the root of both true and false beliefs. False beliefs are not the result of some hybrid logic, of a “prelogical” mentality; they stem from the normal monopolization of implicit hypotheses that are not always suited to the contexts in which they are used. In this case, the role played by unconscious or “metaconscious” *a priori* in conscious inferences becomes clearer. While they constitute the invisible molds without which reality could not be apprehended, there may be a discrepancy between the reasoning of the knowing subject as it is and as the subject

6 G. Simmel (1900), *The Philosophy of Money*, Routledge and Kegan Paul, London, 1978; cited in R. Boudon (1990), *The Art of Self-Persuasion*.

7 Boudon, *The Art of Self-Persuasion*, pp. 111–112.



*perceives* it to be. It is for such reasons and to different degrees that the social actor can be mistaken about the true validity of his reasoning. His conscious mind is in effect more generally attuned, as Simmel stresses, to the external information it examines than to its own activity. The reasonings developed rest on valid inferences, but they lead to false beliefs or to beliefs whose limits are not controlled by the social actor.

These analyses lead to the question of the role of cognitive tools transmitted through formal education in the ways individuals apprehend reality, and in particular in the definition of specific problematic worlds. Sociological analysis of school curricula and the knowledge they transmit has unfortunately been dominated by conflict theorists, and more particularly by neo-Marxists. Their hypotheses have been restricted to the general relations between curricula and ideology, or between curricula and particular cultures. Curricula and school learning have, from this standpoint, been very generally apprehended at a symbolic level. Too little attention has been paid to their role in cognition. Such a role was illustrated in Weber by the relationship between language and thought in classical China,<sup>8</sup> and in Durkheim, throughout his analysis of the development of educational thought in France.

The ancient written language of China was essentially pictorial. The literary product was meant for the eyes as well as the ears, Weber writes, but particularly for the eyes. It had the particularity of not coinciding with the spoken language: reading the classics aloud was in itself a translation of ideograms into words. The written language, based on the old ideograms, was of an entirely different nature from Western languages, which followed a syntactical logic. The special nature of the classical language strongly influenced the characteristics of Chinese thought, which remained dominated by the features that stemmed from the mediation of the written language. One explanation of this state of affairs is that the stock of written words was much greater than the stock of monosyllabic spoken words. The spoken language did not have the same literary potential as the written. That is why writing and reading were so highly valued for their artistic qualities: "In China, the very finest blossoms of the literary culture lingered, so to speak, deaf and

8 H. H. Gerth and C. W. Mills, *From Max Weber: Essays in Sociology*, New York, Oxford University Press, 1958, "The Chinese Literati", p. 426.

mute in their silken splendor.”<sup>9</sup> This stands in contrast to Hellenic culture, which valued the art of argumentation and considered that “the style of the dialogue was the adequate form of all experience and contemplation”.<sup>10</sup> The literary value ascribed to the written word left Chinese thought prisoner of pictorial forms and description, and curbed the development of the logical qualities of the language. It was ill suited to reasoning. Chinese philosophy itself was not of a speculative or systematic nature. It did not give rise to a scholastic style of teaching because it was not committed to logic as were the Western and Middle-Eastern philosophies, both based on Hellenic thought. Chinese philosophy, Weber explains, remained alien to logic as such since it was limited by the written language; it did not take a dialectic form but remained governed by purely practical problems and by the status interests of the patrimonial bureaucracy.

Durkheim’s interpretation of the medieval Quarrel of Universals offers another illustration of the role of curricula in cognition. It is in the importance assumed by the teaching of grammar, particularly at the time of the Carolingian renaissance, that Durkheim locates the origins of the great controversy which, from the twelfth century, almost single-handedly fuelled the intellectual life of the Middle Ages: the problem of Universals. The question under debate was whether abstract, general ideas, such as whiteness, goodness, humanness, had a concrete reality of their own, independent of the individual elements that represented them, or whether they were merely intellectual constructions. If this problem so monopolized philosophical thought in the Middle Ages, it is because the relationship between words and things was rooted in the question of the signification of grammatical forms. It was important to know if the substantive always corresponds, as its name indicates, to a substance. The grammatical categories, as Durkheim explains, thus opened onto questions of ontology. The core of the teachings of Pierre Abelard, one of the most prestigious figures of the Middle Ages, was a thesis on Universals. This problem spoke directly to the moral and religious consciousness of the time. Faith itself was at stake in this controversy, not that doubt had taken hold, but because of the need particular to scholasticism to understand and to rationalize dogma. This task of

9 H. H. Gerth and C. W. Mills, *From Max Weber*, p. 430.

10 H. H. Gerth and C. W. Mills, *From Max Weber*, p. 430.

understanding was expressed in terms of the intellectual tools at the disposal of the enterprise. Grammar constituted the prism through which the question of reality was viewed.

## Schooling and the transmission of knowledge

If there is one area of research that is of particular interest to the analysis of the transmission of academic knowledge, it is that of cognitive science, understood broadly as the scientific study of thought. It is therefore not limited, as it tended too unilaterally to be in its beginnings, to the modeling of thinking processes as systems of rules. The general starting point of the cognitive sciences is predicated on the existence of a mental level of description of the thought processes that presents an intrinsic interest for scientific analysis. Since the 1970s, teaching experiments have flourished.<sup>11</sup> This research is interested in the changes in the way students assimilate and “accommodate” information, form new concepts, interpret new ideas in the light of previous knowledge, etc. The essence of all teaching activity is thus supposed to lie in the active role played by the learning subject. The notion of activity translates the fact that the student does not simply take in what is taught in its “raw” form, but grasps it and transforms it using the intellectual tools he has at hand. In this respect, the learning subject’s ability to understand and remember depends on how well his cognitive tools fit the information received.

According to the psychologist David Ausubel, changes in the organization of the subjects’ conceptual structures do not occur as a result of general development stages but through growing differentiation and integration of concepts.<sup>12</sup> Knowledge is structured in the mind by the formation of links between old and new elements acting on the concep-

- 11 C. Bereiter and M. Scardamalia, “Cognition and Curriculum”, in P.-W. Jackson (ed.), *Handbook of Research on Curriculum*, New York, Macmillan Publishing Company, 1992, pp. 519–569; see also M.C. Wittrock (ed.), *Handbook of Research on Teaching*, New York, Macmillan Publishing Company, 1980.
- 12 See D.P. Ausubel, *The Psychology of Meaningful Verbal Learning*, New York, Grune and Stratton, 1963; J. D. Novak, *A Theory of Education*, Ithaca NY and London, Cornell University Press, 1977.

tual hierarchy. Depending on the subjects' particular conceptual structures, the pieces of knowledge are interpreted with the help of "relevant subsuming concepts" having an appropriate level of inclusiveness. In Ausubel's theory, the more unfamiliar the learning task, i.e., the more undifferentiated the learner background of relevant concepts, the more inclusive or highly generalized the subsuming concepts must be to be proximate. Thus the introduction of concepts at a higher level of abstraction, generality and inclusiveness than the learning task should procure the cognitive tools permitting the understanding and retention of more detailed and differentiated elements. That is why, according to these conceptions, intelligent assimilation of knowledge improves if the core ideas of a discipline, those that have the widest explanatory power, are transmitted before the more peripheral concepts and information are introduced.

In a similar perspective, research has been growing on the cognitive sources of the "expert's" skill, as compared to that of the "novice", in tasks that can be assimilated to problem-solving, in particular in the areas of chess<sup>13</sup> and physics.<sup>14</sup> Playing chess requires the use of heuristic models to determine the choice of a move. Therefore, instead of studying the limited consequences of all possible moves, the chess player studies the more or less long-range consequences of a limited number of moves. The heuristic models the player uses to solve the problems he is faced with are more or less effective depending on the subject. Their quality shows the efficiency of "experts" compared with "novices". When, for example, graduate and undergraduate students in physics are asked to rank a list of physics problems, the graduate students use the general laws operating in the problems, while the undergraduates use the objects and key-words common to the different problems. The graduate students reason not only on the basis of broader underlying knowledge but also using higher levels of abstraction ranked in more detail and organized differently. This holds even though both groups have learned the same physics principles. Mastery of knowledge and problem-

13 See in particular A. Newell and H. A. Simon, *Human Problem-Solving*, Englewood Cliffs NJ, Prentice Hall, 1972; and H. A. Simon, *Models of Bounded Rationality*, vol. 2, Cambridge MA, The MIT press, 1982.

14 See M. Chi, P. Feltovitch and R. Glaser, "Categorization and Representation of Physics Problems by Experts and Novices", *Cognitive Science*, 5, 1981, pp. 121–152, and especially the journal *Science Education*.

solving ability are, from this standpoint, maximized when beginners are guided by experienced individuals who first model the solutions for them and then gradually leave them more latitude as their mastery of the problems increases. Generally speaking, if we consider that both rational processes and knowledge constitute the basis of the representation of thought processes,<sup>15</sup> then acquired knowledge tends to have the edge, according to this type of analysis, over inference processes when looking for solutions. However this research applies to solving the kind of problems that fit the paradigmatic model of the chess player. Such a model is likely to prove unsuitable or too limited for analyzing the creation and development of knowledge.

Preoccupation with metacognition, which here is knowledge of the second degree, knowledge about knowledge, is a more recent direction in cognitive research on education. The term metacognition does not refer only to the subject's awareness of his own cognitive activities. It also applies to the management of cognitive activities as developed through education. There is no such thing as passive learning because students are always engaged in some activity of interpretation. But comprehensive learning, which is a metacognitive activity, involves an entirely different kind of effort. Students always develop more or less relevant metacognitive strategies for managing the intellectual tasks they are to carry out. Yet the metacognitive efforts produced are highly differentiated. Research shows that students often neglect understanding in favor of rote learning, and that they generally do not have a clear idea of the nature and objectives of what is being taught. In this respect, some metacognitive elements of understanding can in certain cases be provided by including epistemological perspectives in what is being taught. It should be noted that the differences in the ability to manage activities of a metacognitive nature are linked to student achievement. The highest achievers in particular see understanding as problematic.

Finally, let us note that the idea of "learning to learn" is inseparable from the idea of learning. One needs knowledge to acquire knowledge, to know what one needs to know. A mind that rested on processes alone could not construct any kind of knowledge nor could it understand anything.

15 See M. Y. Small, *Cognitive Development*, New York, Harcourt Brace Jovanovich Publishers, 1990, chap. 9: "The Development of Problem-Solving Skills".



### III. The symbolic/expressive level

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#### Interpretive approaches

Herbert Blumer<sup>1</sup> develops the principle of interactionism, according to which the dynamics of social life arise from the actions and reactions of individuals interacting with each other. To this he opposes the conceptions of classical sociology, which do not regard interaction as being of specific importance: for classical sociology, interaction is simply the medium through which the determinants of behavior produce the behavior. Thus, he argues, in classical sociology perspectives, social action is ascribed to such factors as “status position, cultural prescriptions, norms, values, sanctions, role demands and social system requirements”:<sup>2</sup> the process of structuring social reality is not taken into account. It is this process, however, considered as creative of meanings for the actors, that is the object of symbolic interactionist analysis. Blumer derived his initial premises from Mead’s work. Social meaning arises in the process of interaction between individuals. The meaning of something for an individual arises from the way other individuals act towards this individual with respect to this thing. Meanings are the outcome of social actions and, conversely, social actions are meaningful. They have meaning because of a socially established relation with the intention they express, as Mead states.

Other people’s intentions can be understood only if the rules through which they are expressed are known. Culture is a system of mediating meanings that makes it possible to link up intentions and actions. But these meanings are not stable; they depend on interaction situations and arise from them. The individual’s interpretation of reality depends on his past experience of these situations. This experience is made up of elements that are both subjective and intersubjective. The individual’s interpretation of reality rests on elements of analysis that are transmit-

1 H. Blumer, *Symbolic Interactionism. Perspective and Method*, Englewood Cliffs NJ, Prentice-Hall Inc., 1969.

2 H. Blumer, *Symbolic Interactionism*, p. 7.

ted to him, on shared meanings and on elements he himself induces based on his own experience. For these reasons, the individual is in a perpetual learning situation. His learning is not an explicit learning of rules that are themselves explicit, like the rules of a linguistic code. It is a partly implicit learning of implicit rules that goes on at a metaconscious level, as Bateson shows. Meanings may be reinterpreted in the course of interaction, while actions translate intentions in a potentially creative way. In this perspective, the individual is a creator of meaning. Let us add that he is a creator of *marginal* meaning, in the economic-theoretical sense. That is to say, he creates meanings in the margins of a process in which all individuals are involved. His interpretation of social reality and the meaning he assigns his action constitute his marginal contribution to the meaning of social life.

The “interpretive” approaches to education emerged in the United States in the wake of an earlier interactionist tradition, but more specifically in the field of ethnomethodology<sup>3</sup> with, in particular, the work of Aaron Cicourel and of Hugh Mehan. This research, like the ethnographic approaches to sociology of education in France, analyses processes at a local level; it is more concerned with the way individuals understand and act in particular social contexts than with generalizing interpretations. Although interpretive approaches share certain insights with the British “new sociology of education”, they differ in that they do not take an *a priori* political stand against the role played by school in society. This difference of interpretation is reflected in their treatment of social structures not as macrosociological givens determined by relations of power but as phenomena that arise from actors’ concrete social experiences. For proponents of ethnomethodology, it is at the level of actors’ everyday interactions that structures appear and disappear, and constrain the actors’ behavior. The structural aspects of society “are not pale reflections of large-scale institutional and historical forces; they are contingent outcomes of people’s practical activity”.<sup>4</sup> The creation of the rules that inform social life is compared to “constitutive action”, which

3 Ethnomethodology is defined as the “science” of “ethnomethods”, that is procedures that constitute what Harold Garfinkel, founder of the movement and “inventor” of the word, calls “practical sociological reasoning”.

4 H. Mehan, “Understanding Inequality in Schools; the Contribution of Interpretive Studies”, *Sociology of Education*, vol. 65, n° 1, 1992, pp. 1–20; p. 16.



defines the meaning of objects and events through elaborate enactments of cultural conventions, institutional practices, and constitutive rules. Constitutive rules, in turn, are those rules that create the very possibility of human activities and the rights and duties of the people associated with them.<sup>5</sup>

Constitutive studies operate on the interactional premise that social structures are social accomplishments. The central tenet of constitutive studies of the school is that “objective social facts” such as students’ intelligence, scholastic achievement, or career patterns, and “routine patterns of behavior”, such as classroom organization, are accomplished in the interaction between teachers and students, testers and students, principals and teachers. Rather than merely describe recurrent patterns of behavior or seek correlations among variables, constitutive analysts study the structuring activities that construct the social facts of education.<sup>6</sup>

Interpretive approaches dwell on their opposition to the positivist aspects of functionalism and the quasi-determinism of neo-Marxist sociology: social actors are held no longer to be confined to a passive role, dictated exclusively by structural forces over which they have no control. They do not act exclusively according to a system of norms: they actively produce “meaning”. No “socialization” of individuals occurs, in the sense that they are supposed, in the course of their social interaction, to learn predefined norms and rules. The norm is immanent in the interactions themselves. In this case, socialization is part of learning to interpret the other social actors. It becomes a process of learning interpretive procedures.<sup>7</sup> This kind of learning is supposed to rest, for example, on the creation of interpretative and evolutive patterns. *Ego* interprets *alter* based on these patterns and changes them in light of the actual behavior of *alter*:

The underlying pattern itself is identified through its individual concrete appearances, so that the appearances reflecting the pattern and the pattern itself mutually determine one another in the same way that the “part” and the “whole” mutually determine each other in gestalt phenomena.<sup>8</sup>

5 H. Mehan, “Understanding Inequality in Schools”, p. 10.

6 H. Mehan, “Structuring School Structure”, *Harvard Educational Review*, vol. 48, n° 1, 1978, p. 36.

7 See A. Cicourel, *Cognitive Sociology: Language and Meaning in Social Interaction*, New York, The Free Press, 1972.

8 P. Wilson, “Normative and Interpretive Paradigms in Sociology”, in J.D. Douglas (ed.), *Understanding Everyday Life*, Chicago, Aldine Publishing Company, 1970, p. 68.

Likewise, the notion of role demands does not refer to a norm enacted by the social actors but to the *a priori* meaning given to an organized set of behaviors. The contents of the social roles thus emerge imperceptibly through the actions and reactions of *ego* based on the roles assigned to *alter*.

Nevertheless, criticism of the normative approach to socialization does not *ipso facto* justify all of the interpretive approaches advanced. Indeed, these approaches apprehend the unfolding of social action in a framework of generalized communication. In this framework, the axiological and cognitive dimensions of social action are subordinated to its symbolic dimension. Ultimately, it is as though no part of the social world existed independently of the social actors' mental representations of it. That is why cognitive constructs play the role mainly of symbolic or linguistic forms, of means of communication serving to conjure up for others certain mental states or dispositions to act. In this context, the paradigmatic model of society is that of a huge playground where rules of conduct are constantly emerging. Socialization is not only part of the process of learning to interpret, but also of learning how to play the "game" played by the social actors.<sup>9</sup>

In analyses of school situations, creation of inequalities is interpreted as the effect of the contingent processes of constructing the meaning of social reality:

We must collapse the macro–micro, agency–structural dualism by showing how the social fact of inequality emerges from structuring activities to become external and constraining on social actors... Doing so encourages us to demonstrate the situated relevance of social structures in the practical activities of people in social interaction, rather than to treat social structures as a reified abstraction and social processes in situated and historical isolation.<sup>10</sup>

Identification of academic handicaps appears as the social construction of a reality comprised solely of subjective relations and of situated processes. Series of microevents are thus supposed to account for substantial differences in school careers. Academic inequalities are no longer seen as cultural features that can be ascribed to differentiated "linguis-

9 Cf. W. Feinberg and J.F. Soltis, *School and Society*, New York, Teachers College Press, 1992, p. 80.

10 H. Mehan, "Understanding Inequality in Schools", p. 17.

tic codes”, as Bernstein does for example, but to institutional processes that create the differentiations among actors. Students’ school careers are in this case explained by the interplay between students’ background characteristics and the institutional practices of the school.

The school institution thus constitutes a set of implicit evolving rules that individuals follow according to differentiated adaptation dynamics. The able student is thus one who is designated as such. He is identified as an expert on institutional codes: a student becomes able when he learns to identify the codes implicit in intellectual work, when he hears what is not said, when he sees what is not pointed out. The absence of exteriority in the social activities analyzed here shows up at the level of what is taught and learned in school. These things are apprehended essentially through the specific codes on which they rest, that is to say, at a symbolic level.

## Gregory Bateson and the Palo Alto Group

The Palo Alto Group takes us out of the field of school analyses and into the field of psychiatry, which may seem an odd detour. Nevertheless, this side trip leads us to an area of research on precisely the question of the limitations of formal education.

Bateson’s studies in areas as different as zoology, anthropology and psychiatry underpin a more general investigation devoted to communication theory. Bateson is the founder of the Palo Alto Group, which renovated psychotherapy in the 1950s. The Palo Alto Group’s view on psychiatry is built around the idea of interaction, in which the patient is considered to be part of a *system*, of the “family system”, in particular. Antipsychiatrists start from the premise that the mental patient is a normal individual who is the victim of a pathogenic family or social milieu. When antipsychiatry was introduced to the general public in France, in the late 1960s, Bateson’s name was associated almost exclusively with the “double bind” theory. But the interest of Bateson’s analyses of schizophrenia attaches more generally to the interpretation of schizophrenia as a pathology of communication. More specifically, schizophrenia is interpreted as a disorder affecting the learning of “codes”, a code being un-

derstood as a corpus of implicit rules governing social interactions. The underlying question in all of Bateson's work, as he himself says, is, what are the necessary conditions and the limitations of the experience of communication, structure and order? This question applies to the tendency of social interactions to engender self-repeating patterns in different contexts as well as to engender new models. The heart of the issue is not the problem of how communication rules are constructed but how they can be learned. Bateson shows that communicating and learning to communicate go hand in hand. In other words, communication involves continually learning to communicate. In effect, communication is not merely a matter of transmitting a message that, in its raw state, cannot be interpreted. Communication always carries a "message about the message", a "metacommunication" supposed to tell the receiver something about the framework in which the communication is taking place. However this second message is usually unspoken, implicit. It is conveyed by the choice of words, tone, intonation, gestures, etc.

As an illustration, below is an excerpt from a play, in which the interpretations of the latent meanings of the speakers' words are indicated in the second column.<sup>11</sup>

<i>Text of the play</i>	<i>Parallel motives</i>
SOPHYA: O, Chatsky, but I am glad you've come	Tries to hide her confusion
CHATSKY: You are glad, that's very nice.	Tries to make her feel guilty by teasing her.
But gladness such as yours not easily one tells. It rather seems to me, all told, That making man and horse catch cold I've pleased myself and no one else.	Aren't you ashamed of yourself! Tries to force her to be frank.
LIZA: There, sir, and if you'd stood on the same landing here Five minutes, no, not five ago You'd heard your name clear as clear. You say, Miss! Tell him it was so.	Tries to calm him. Tries to help Sophya in a difficult situation.

11 L. Vygotsky (1934), *Thought and Language*, translation newly revised and edited by Alex Kozulin, Cambridge MA, The MIT Press, 1986, pp. 252–253.

SOPHYA:

And always so, no less, no more.  
No, as to that, I'm sure you can't  
reproach me.

Tries to reassure Chatsky. I am not  
guilty of anything!

CHATSKY:

Well, let's suppose it's so.  
Thrice blessed who believes.  
Believing warms the heart.

Let's stop this conversation; etc.

One premise of this approach is provided by Gestalt psychology. As Bateson explains, we do not perceive a sensorial continuum: on the contrary, our perception is broken up into what appear to us as series of events or objects. Both the sender and the receiver of the signals are so constituted that, in order to understand what is going on, they can and must rely on the fact that some of the possible signals are missing.<sup>12</sup> Communication is thus part of an ongoing process of learning to understand the elements that accompany the proper information content of a message. That is why this approach carries with it the idea that one cannot *not* communicate. There is always a "message about the message" that situates the meaning of the latter even if it purports to be empty. Even silence is enveloped in a message that carries meaning. Bateson tells how he came to understand how to think communication while filming otters. He noticed that the animals "classified" their behavior, for instance, by using specific attitudes to differentiate play from other kinds of behaviors. The implicit meaning of this message, which situates the framework of the communication, is in part normalized by culture.

Learning to communicate is essentially a subjective process insofar as it is not something that can be formally taught. This impossibility is of a logical nature. It is due to the existence of different levels of message that are superimposed in an infinite regression. Objectivization of one level through speech already supposes that this level of objectivization is included in a higher level. This idea is central to the approach to communication set out here: mental processes correspond to a hierarchical organization of processes which, at a certain level, are no longer conscious in the proper sense of the word. Thus, in order to think about

12 G. Bateson, "Communication", in N. MacQuown (gen. ed.), *The Natural History of an Interview*, Chicago, University Library, microfilm collection of cultural anthropology manuscripts, n° 95, series XV, 1971, pp. 1-40.

the meaning of a message taken at a certain degree of abstraction, one must place oneself at a higher level.

If man want's to change his third-order premises, which to us seems an essential function of psychotherapy, *he can do so only from a fourth level*. But we doubt that the human mind is equipped to deal with higher levels of abstraction without the aid of mathematical symbolism or computers. it seems significant that only glimpses of understanding are possible at the fourth level, and articulation becomes extremely difficult if not impossible. The reader may remember how difficult it was already to grasp the meaning of the "class of classes which are not members of themselves", which in terms of its complexity is the equivalent of a third-order premise. Or, likewise, while it is still possible to understand the meaning of "This is how I see you seeing me seeing you", the next higher (fourth) level ("This is how I see you seeing me seeing you seeing me") is virtually beyond understanding.<sup>13</sup>

In their founding article, "Towards a Theory of Schizophrenia", Bateson and his team formulated their first hypotheses, upsetting the traditional ideas about schizophrenia, which saw this mental illness as the result of an intrapsychic disorder. They advanced that the schizophrenic "must live in a universe where the sequences of events are such that his unconventional communicational habits will be in some sense appropriate":

In our approach we assume that schizophrenia involves general principles which are important in all communication and therefore many informative similarities can be found in "normal" communication situations.<sup>14</sup>

What interests Bateson and the other psychiatrists of the Palo Alto Group is not the analysis of unconscious processes but what happens at the conscious level. What is interesting and therefore requires an explanation, Bateson writes, is the fact of consciousness. The questions he asks himself are, for example, "What signals do we send, and how aware is the sender of sending other signals about these signals? Can he control them? Can he remember them?" Bateson is interested in the question of what signals actually reach the receiver and what signals he is aware of having received. He thus stresses, in his own words, perception and

13 P. Watzlawick, J. Beavin Bavelas and Don D. Jackson, *Pragmatics of Human Communication. A Study of Interactional Patterns, Pathologies, and Paradoxes*, New York, Norton & Company, 1967, p. 266.

14 G. Bateson, D. D. Jackson, J. Haley and J. Weakland, "Towards a Theory of Schizophrenia", *Behavioral Science*, vol. 1, 1956, pp. 251 and 264.

communication and not the hierarchies internal to the mental process. According to Bateson, the distinction between conscious and unconscious becomes significantly comparable to that between keen vision and blurred vision.<sup>15</sup>

Because it is the process through which the individual evolves continually and because it is not learned formally, learning to communicate is not only never finished, always ongoing, but it is also a process exposed to alterations, which are determined notably in early childhood. However we must consider that to some extent communication processes are always being altered.

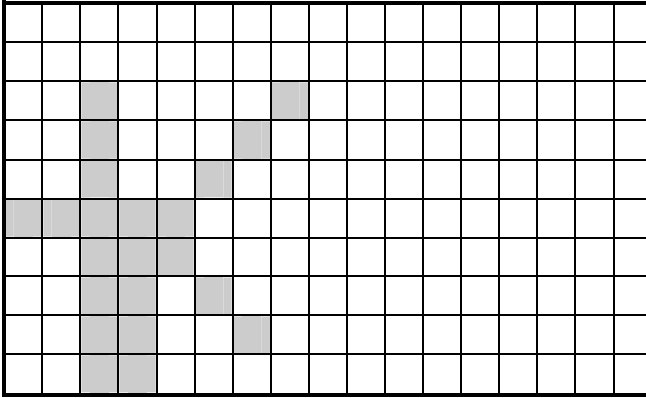
The individual develops his own codes by generalizing from past experience. This generalization constitutes the process of learning to communicate. Bateson uses the notion of generalized *transfer* to express this implicit premise of communication, which says that everyone who sends signals he has learned does so on the assumption (usually unconscious) that the receiver of these signals will understand them “correctly”. Alterations in communication are due to a divergence as to the premises that govern the production and comprehension of the messages. These rest on differences of interpretation linked to the interacting protagonists’ own experiences. They can be described, Bateson explains, by an analogy with a machine whose job would be to telegraph to another machine a black-and-white design made up, for example, of rows of dots. If we assume that the machines have to be geared so that they use an agreed number of dots per line, then divergence on the terms of this agreement will entail a distortion of the code. The design produced by the receiving machine will be functionally linked to the series of signals sent, but it will constitute a distortion of the original figure (see Figure 4).

A is a figure to be transmitted. B is the distorted version produced when the receiving machine operates on the premise that there are only 16 squares per line, instead of 17.<sup>16</sup>

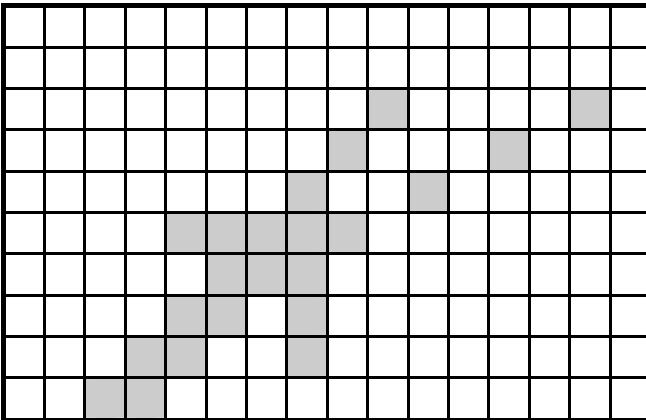
15 G. Bateson, “Communication”, in N. MacQuown (gen. ed.), *The Natural History of an Interview*.

16 G. Bateson, “Communication”, in N. MacQuown (gen. ed.), *The Natural History of an Interview*.

Figure 4.



A.17.



B.16.

A distortion of the learning processes results each time an individual punctuates the stream of communication differently from his interlocutor. Such painful experiences mislead him. From his point of view as speaker, he thinks he has been punished for what he thought he was communicating, whereas his punishment is based on the other person's perception of his message. This distortion between the reality of the interaction and the way it is perceived by the individual can originate in the individual having mislearned the relational and behavioral codes



within his home environment. Such alteration of the individual learning processes lends social interaction a pathogenic character. Alterations to the communication processes tend to be reinforced by repeated experience, in particular because the premises of communication are self-validating. For instance, someone who thinks everyone is his friend or his enemy will act in such a way that the way others behave towards him and his interpretation of these behaviors, in short, the signals he receives from the outside world, tend to confirm his belief. The actions and reactions of the individuals involved in an interaction entertain a circular relationship without the individuals being aware of it: each thinks he is reacting to his partner's behavior, whereas he is influencing this behavior by his own reactions. According to Bateson, the subject acquires false convictions under the cumulative effect of the learning contexts that formerly constituted his flow of communication with a person. Instead of enriching the individual then, the ongoing communication experience on the contrary impoverishes him, and can even cut him off from reality. Let us suppose that the individual's earlier experience is marked by punishments, that is by feelings of suffering, which lead him to subjectively adapt his behavior so as to avoid again being exposed to such sanctions. If this subjective adjustment actually represents an alteration with respect to learning to communicate normally, later the individual will tend to misinterpret the expectations of the outside world and to "send signals" that are themselves misinterpreted by the outside world, thus exposing himself to new punishments which are for him in contradiction with the earlier ones.

The concept of "double bind" refers to a type of pathogenic interaction in which the individual is psychologically trapped in an impasse because he is subjectively subjected to "paradoxical injunctions", a paradox being defined as a contradiction that arises as the outcome of a correct deduction from "consistent" premises. This contradiction is linked to the different message levels when a message is sent in the following structure: a. it affirms something; b. it affirms something about its own affirmation; c. the two affirmations are mutually exclusive. Thus if the message is a injunction, it must be disobeyed in order to be obeyed.<sup>17</sup>

17 P. Watzlawick, *Pragmatics of Human Communication*.

In the mother–child relationship, the child may be led to systematically distort his perception of her metacommunication signals in order to maintain the relation, and in so altering his ability to learn to communicate, may develop a pathology.

To illustrate this idea, let us go back to Bateson’s example:

For example, if mother begins to feel hostile (or affectionate) toward her child and also feels compelled to withdraw from him, she might say, “Go to bed, you’re very tired and I want you to get your sleep”. This overtly loving statement is intended to deny a feeling which could be verbalized as “Get out of my sight because I’m sick of you”. If the child correctly discriminates her metacommunicative signals, he would have to face the fact that she both doesn’t want him and is deceiving him by her loving behaviour. He would be “punished” for learning to discriminate orders of messages accurately.<sup>18</sup>

Defective learning of the relational and behavioral codes tends to maintain the individual’s feelings of anxiety by making him unable to understand what others really mean. Various solutions are open to him, Bateson explains: he can constantly search for the hidden meaning in other people’s behaviors and words or, on the contrary, he can take everything others say to him literally. But if the behavior of others tends to contradict his literal interpretation of their words, he can choose not to take these metacommunication signals seriously. He can also do his best to avoid provoking any reaction from those around him. At the pathological level, these different behaviors are all symptoms associated with specific types of schizophrenia.<sup>19</sup>

18 G. Bateson, D. D. Jackson, J. Haley and J. Weakland, “Towards a Theory of Schizophrenia”, p. 257.

19 G. Bateson, D. D. Jackson, J. Haley and J. Weakland, “Towards a Theory of Schizophrenia”, pp. 251–264.

*Part Four*  
*School and society*



## *Social philosophy, knowledge and education*

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### *School and democracy*

In order to clarify the significance of education for democratic societies, it is important to distinguish the general goals of education with respect to the foundations of democracy from the actualization of these ends in particular intellectual and social contexts.

The linkage between the school, democracy and society can be broken down simply as follows:

1. The equality of all individuals, in the ontological sense, is the basis of democratic values. It accounts for the fact that all power relations in democratic regimes are rooted in those towards whom power is exercised.<sup>1</sup>
2. The equality of all individuals, in the ontological sense, translates, in civil society, into equal rights for all persons.
3. With regard to democratic values, the school offers individuals, through formal education, the means to become free men and women capable of fulfilling themselves in society.

It is the third point that will be developed more particularly in the present section, through the presentation of different conceptions of the principles on which education in a democracy is or should be founded. In particular, the problem that theories of democracy wrestle with is how to conciliate the possibilities offered to individuals of becoming free and capable of fulfilling themselves in society with the cohesion of society itself. We will see how, through these conceptions, knowledge theory, psychology, sociology and social philosophy are organized into coherent systems of thought.

1 J. Baechler (1994), *Democracy: An Analytical Survey*, Paris, Unesco; Calmann-Lévy, 1995; translated from the French: *Précis de la démocratie*, Paris, Calmann-Lévy, 1994.



## I. Karl Marx and the school of labor

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We will attempt to explain the educational implications of Marx's doctrine by taking two fundamental points of Marx and Engels' theory of knowledge and social philosophy. The first is the proposition that, the "ideal is nothing other than the material world reflected by the human mind, and translated into forms of thought"<sup>1</sup>; this ideal underpins human knowledge in the form of categories of thought that impinge on reality. Marx's theory of knowledge, like Kant's, is in certain respects a theory of the conditions of all possible knowledge. Yet the conditions of possibility of knowledge do not reside in the most general categories of understanding that are those of Kant's transcendental subject but in the activity of individuals in determined circumstances. In addition, the truth of the world we live in is essentially relational. These conceptions are illustrated by the idea, expressed in *Capital*, that bourgeois economic categories are forms of thought that have an objective truth, but which belong only to this determined period. Because the conditions of the validity of thought (and therefore its limits) reside in practical activity, thought must not be separated from its "material causes"; theoretical activity must remain tied to *praxis*, so as not to engender misleading abstractions, and in particular lend substantial, ontological reality to that which rests on relations alone.

Secondly, the ideal of Marx and Engels is the fully developed man; as in Spencer, this ideal identifies freedom with "the complete life". Their conception of the complete life follows a similar logic of developing a better humanity to come. The complete life is that in which man achieves total fulfillment of his nature, develops all of his talents and abilities; it is the life in which man is free to actualize in himself every possible kind of productive and intellectual activity.

But as Marx's doctrine effects an inversion of the speculative relationship between the human essence and social relations, man's full

1 K. Marx (1867), *Capital*, vol. 1, Introduced by Ernest Mandel, transl. by Ben Fowkes, New York, Vintage Books, 1977, Postface to the Second German Edition.

development depends on the particular organization of social relations. The complete life requires that the (natural) division of labor be abolished, and in particular that material activity and spiritual activity, production and consumption not be meted out to different individuals. Productive tasks and intellectual tasks are as the two inseparable sides of the complete life and therefore of man's liberation. What Marx and Engels castigate is the subjection and narrow-mindedness that result from the division of labor. They speak of degradation of the personality: if circumstances allow the individual only the one-sided development of a single quality, then this individual "achieves only a one-sided, crippled development"; they speak of slavery of individuals under an exclusive activity forced upon them. In communist society, the complete life constitutes a victory over labor itself because it is chosen and not endured, and it is partially transformed into free time devoted to activities of pure development, which correspond, as he writes elsewhere, to artistic or scientific training, etc.:

Shortening the working day equals increasing free time, that is to say time for full individual development [...] Free time – which is leisure time as well as time devoted to a higher activity – has naturally transformed its possessor into a different subject, and it is as such that he enters into the process of immediate production.<sup>2</sup>

Marx criticizes the utopian socialists who believe in the action of outside factors on social change, notably education. For Marx, the materialist doctrine concerning change through circumstances as well as change through education comes into contradiction as soon as change in the

2 K. Marx, manuscript from 1857–58. Here Marx places pure development activities and labor on different planes. Is he being inconsistent, as Nogueira suggests? Cf. L. G. Nogueira, "Education, savoir, production chez Marx et Engels", Thesis in Education Sciences, Université de Paris V, 1986, p. 182. The ambiguity of the status of labor, usually so central in Marx, has often been pointed out. The ultimate goal of human life in communist society is in fact human development as an end in itself. Although this development is linked to productive labor, it must be freed from the immediate vital needs that must be satisfied by production: "In fact, the realm of freedom actually begins only where labour which is determined by necessity and mundane considerations ceases; thus in the very nature of things it lies beyond the sphere of actual material production. [...] Beyond it begins that development of human energy which is an end in itself, the true realm of freedom, which, however, can blossom forth only with this realm of necessity as its basis. The shortening of the working day is its basic prerequisite" (Marx, *Capital*, vol. III, chap. 48).



upbringing and education of the educator divides society into two parts of which one is superior to the other.<sup>3</sup> Only changed circumstances are likely to produce a pertinent education system; but since a pertinent education system is necessary for there to be a change in circumstances, one must start from the existing situation.<sup>4</sup> In different texts, Marx outlines the requirements for the school that would constitute a tool for man's liberation. The instruction offered by the school preparing for the future would be intellectual, physical and polytechnic.<sup>5</sup> As in Fourier, the fact of developing all of an individual's abilities and tastes, by enabling him to exercise a number of occupations, protects him from the harmful effects of the division of labor. The polytechnic school differs from the technical school in that it stresses the interpretation of labor processes, the connection between theory and practice, and understanding how the different sciences and techniques are interrelated, while the technical school simply transmits specific skills.<sup>6</sup> Marx also borrows inspiration

- 3 K. Marx's Third Thesis on Feuerbach (1845), in *Marx/Engels, Selected Works*, transl. by W. Lough, Moscow, Progress Publishers, 1969, vol. I, p. 13: "The materialist doctrine concerning the changing of circumstances and upbringing forgets that circumstances are changed by man and that it is essential to educate the educator himself. This doctrine must, therefore, divide society into two parts, one of which is superior to society. The coincidence of the changing of circumstances and of human activity or self-changing can be conceived and rationally understood only as *revolutionary practice*."
- 4 Cf. L. T. Khôï, *Marx, Engels et l'éducation*, Paris, Presses Universitaires de France, 1991, pp. 80–82. One needs to distinguish among Marx's educational principles certain strategic features – the need to train men of many talents capable of mastering the processes of production in particular – and features concerning a project in the distant future – the fully developed man of communist society (cf. T. Orel, "Analyse spectrale de la conception de l'éducation chez Marx", Thesis in Human Sciences, Université de Paris V, 1981).
- 5 When it comes to intellectual instruction, Marx, who is a product of the German *gymnasium*, remains personally attached to a classical education, nevertheless he is wary of the disciplines most susceptible to ideology. He spoke out in 1869 against teaching political economy and, as a general rule, those disciplines that lend themselves to a party or class interpretation in elementary schools and even more in higher schools. Marx believed that it was in the everyday struggle for life that young people should receive this education from adults. The only subjects that should be taught, he believed, were grammar, natural sciences and the like (Khôï, *Marx, Engels et l'éducation*, p. 99).
- 6 According to Marx, polytechnic training teaches the general principles of the production processes while initiating the child and the youth in the practical use and handling of the basic tools of all branches of work.

from Robert Owen's experimental school in New Lanark, where the children alternate between study and work:

Paltry as the education clauses of the Act appear on the whole, they do proclaim that elementary education is a compulsory condition for the employment of children. The success of those clauses proved for the first time the possibility of combining education and gymnastics [...] As Robert Owen has shown us in detail, the germ of the education of the future is present in the factory system; this education will, in the case of every child over a given age, combine productive labour with instruction and gymnastics, not only as one of the methods of adding to the efficiency of production, but as the only method of producing fully developed human beings.<sup>7</sup>

Combining instruction and productive labor is considered to be one of the most powerful means of changing present-day society, and the “only method of producing fully developed human beings”. This combination is given as both the tool for renovating society and the germ of the human consciousness of the future. In order to understand the role played by combining education and productive labor, it is necessary first to put these conceptions back into their historical context. The alternation between study and work was designed in part to combat the undereducation of children. It represented at first a means of ensuring the education of working-class children. It was also a means of preventing the dissociation of thought from labor, which had been separated in the process of capitalist development. Theory and praxis are inseparable: knowledge flows from social practice, and social practice determines the conditions of the validity of knowledge. But that is not the ultimate justification of the alliance between labor and study, which lies – but this is only a hypothesis – in shaping the human consciousness. It is not that education does not have “productive” powers that underpin the shaping of consciousness, but on its own it is incapable of enabling men to accede to a total consciousness of humanity. This alliance between education and productive labor is a tool for integrating human thought and productive work, in engendering what Marx calls complete man. The question of the relationship between thought and action nourished the thinking of school reformers throughout the twentieth century. For Marx, as we see, it took a particular direction that ultimately led to his conception of the social genesis of man.

7 K. Marx (1867), *Capital*, vol. 1, chap. 15, pp. 613–614.

The paradox of a school that is both a force for liberation and the potential tool of the ruling class, nevertheless paved the way for the theme of the “death of the school” in maximalist Marxist interpretations: “Where there is a State, there is no freedom; where there is freedom, there is no State”, as Lenin himself taught. With the fall of the State, law and religion will fall; ethics will replace politics; the formal culture transmitted by the school will give way to the direct liberating action of society and the factory.<sup>8</sup>

8 L. Volpicelli, *L'Évolution de la pédagogie soviétique*, Paris, Delachaux and Niestlé, 1966, pp. 14–17.



## II. Naturalism, social utopia and education in the work of Herbert Spencer

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By the start of the twentieth century, Spencer's system was no longer regarded as a scientific reference. Some of his important premises, taken in particular from association psychology and Lamarck's development hypotheses, were no longer tenable in light of new scientific discoveries. Still, offering broad theoretical syntheses of what concerned the spirit of the time, Spencer had provided, even tacitly, food for thought and criticism for generations of theorists and in so doing had made a considerable impact on modern thinking.

Spencer sees social development as the process of man's gradual adaptation to his environment, in particular his social environment, combined with the transformation of this environment. He imagines an ideal society in which individual freedoms and social dependence flow from each other. In this society there is no more government, the social classes have dissolved, and land is held in common.<sup>1</sup> The principal stages in his reasoning, from *Social Statics* to *Principles of Psychology*, then *First Principles*, *Principles of Biology*, and his many later developments, with his work on education, *Education: Intellectual, Moral and Physical*, show a strong coherence. Social theory, psychology, knowledge theory and educational thought are united by the laws of evolution that include these orders of life in a single ongoing process proceeding from the organic to the mental, from animal to man, and from man to society. This process, on which Spencer's general system is founded, rests essentially on the biological model of evolution,<sup>2</sup> which describes the form taken by social progress as well as that of human physical, moral

- 1 On Spencer's social utopia, see R. J. Richards, *Darwin and the Emergence of Evolutionary Theories of Mind and Behavior*, Chicago, The University of Chicago Press, 1987, chap. 6.
- 2 In very general terms, Spencer describes evolution as follows: "Evolution is definable as a change from an incoherent homogeneity to a coherent heterogeneity, accompanying the dissipation of motion and integration of matter" (H. Spencer (1862), *First Principles*, Westport, Greenwood Press, 1976, p. 325).

and intellectual development. The logical arrangement of his system can be roughly summed up in five main points.

*Point one.* Social progress comes with the functional differentiation of society in which individuals determine the social environment and vice versa.<sup>3</sup> This evolution stems from a law of organic life: a heterogeneous structure arises from a homogeneous one and constitutes an improvement on life. The progress of society obeys the same law, which translates into the progressive specialization of social functions. This process of social differentiation brings about changes in the environment, to which individuals always adapt. In turn, this adaptation constitutes an improvement in social relations and therefore circumstances, creating a new environment to which individuals again adapt. The process of social differentiation continually accentuates the interdependence of human activities, placing each sphere of activity within a complex network articulated with the whole.

*Point two.* The progress of man's freedom and morality derives from the adaptive evolution of the species. Individual happiness rests on the proportionate exercise of all abilities without one holding back the others. Likewise the happiness of a society depends on the harmonious functioning of all its different parts, without one part dominating any of the others. Thanks to the progressive symbiosis of the whole and its parts, individual desires for happiness, which are nothing other than desires for freedom, which in turn are nothing other than desires for the free and harmonious exercise of one's abilities, adjust themselves to each other in the course of individuals' interactions with their environment. It is in this way that the principle of the complete life is enacted. The adaptation of human nature to its conditions of existence tends towards a state of equilibrium in which individual freedoms do not infringe on each other, for such infringements give rise to frictions between the spheres of action, which disappears as a result of the laws of evolution. Harmful behavior towards others decreases, for instance,

3 "As soon as a combination of men acquires permanence there begin actions and reactions between the community and each member of it, such that either affects the other in nature. The control exercised by the aggregate over its units tends ever to mould their activities and sentiments and ideas into congruity with social requirements" (H. Spencer (1873), *The Principles of Sociology*, New York, D. Appleton and Company, 1897, pp. 11–12).

because the reactions engendered repress the desires at the origin of such behavior. According to these views, social and moral scourges are merely the “non-adaptation of constitution to conditions”:

the adaptation of man’s nature to the conditions of his existence, cannot cease until the internal forces which we know as feelings are in equilibrium with the external forces they encounter. And the establishment of this equilibrium, is the arrival at a state of human nature and social organisation, such that the individual has no desires but those which may be satisfied without exceeding his proper sphere of action, while society maintains no restraints but those which the individual voluntarily respects.<sup>4</sup>

The happiness of society is not the result of calculation. All interference with these natural adjustments, in this view, hampers man’s progress towards perfection.

*Point three.* All mental life follows the biological model of evolution. If the mind is not specially given by the Creator, according to Spencer, it is because it has a natural origin, in other words, an organic origin. Life and the mind arise from a single non-differentiated form. Both follow the principle of basic adaptation: the adjustment of internal organic relations to external relations in the environment. The adaptation of the nervous system to the progressive specialization of social functions stimulates the mind to evolve towards higher levels of complexity. Because of this, the various mental operations are, for Spencer, all of the same nature and differ only in their complexity.<sup>5</sup>

4 H. Spencer, *First Principles*, pp. 470–471. Spencer’s social utopia can be put no better. He expresses it in a similar manner in *Social Statics*, in a passage echoed fifty years later in *Principles of Psychology*, in which he says that the fully realized man is such that, when he spontaneously realizes his nature, he incidentally fulfils the functions of a social unit (H. Spencer, *Social Statics*, London, John Chapman, 1851, p. 77; and *Principles of Psychology* (1855), London, Williams and Norgate, 1876, vol. 3, p. 601).

5 For Spencer, evolution is a response to two adaptive forces. The first is based on learning by interaction with the environment (resulting in the activation or the disuse of the functions involved) and on Lamarck’s principle of the inheritance of acquired characters. The second, developed often taking into account the Darwinian intellectual climate, which rests on Darwin’s law of the survival of the fittest, is an indirect force. It is nevertheless regarded as being too crude to account for the historical development of man’s mental functions and his moral intuition. Finally, the principle of equilibrium governs the adaptation of organisms by reorganizing their system of internal adjustments.

*Point four.* Man's apprehension of the world rests essentially on the connections he establishes between his internal states and external circumstances. Referring to association psychology principles,<sup>6</sup> Spencer described the "law of intelligence", according to which the frequency of encountered external environmental relations produces a proportionate frequency of internal psychological relations. The law of intelligence underpins the idea of rationality as an adaptive response to situational circumstances; if such rational acts are constantly repeated, they become instinctive, and so on. A single line of evolution runs from instinct to rationality and connects them. At the higher developmental levels, recognition of relations between relations corresponds to conscious thought processes. From the principle of the evolution of intelligence resulting from the adjustment of internal relations to external conditions in the environment, Spencer derives the relational nature of all knowledge.<sup>7</sup> The mind is like the surface of an "intellectual cylinder" upon which reality imprints its relations of coexistence and sequence, but it does not reveal the rules of projection.<sup>8</sup> This realization coincides with the evolution of scientific thought, which substituted thinking in terms of relations for thinking in terms of substances.

*Point five.* Individual cognitive development is a response to two dynamic movements: the experience of the species and the experience of the individual. Given what precedes, the *a priori* character of the beliefs acting as a precondition of future knowledge rests on experience, and more specifically on repeated experience, which reinforces belief. Yet, according to Kant, universal validity is not induced from experience; it comes from the impossibility that things could be any other way, owing to the structural organization of the mind. Spencer resolves this dilemma by adopting a Kantian evolutionism based on

6 Associationist psychologists maintained that complex mental phenomena can be reduced to those sensations that, when repeated and combined, produce ideas.

7 Spencer's whole theory of knowledge is founded on this idea taken from his psychology: "In the progress of life at large, as in the progress of the individual, the adjustment of inner tendencies to outer persistences, must begin with the simple and advance to the complex; seeing that both within and without, complex relations, being made up of simple ones, cannot be established before simple ones have been established" (H. Spencer (1855), *Principles of Psychology*, Boston, Longwood Press, 1977, p. 426).

8 H. Spencer (1855), *Principles of Psychology*.



associationism and on Lamarck's theory of the inheritance of acquired characters: "Habitual psychological successions entail some hereditary tendency to such successions, which, under persistent conditions, will become cumulative in generation after generation."<sup>9</sup> In Spencer, laws of mind stem from the adaptive experience of the species. The structures of the mind and of perception are *a priori* and necessary, but they are an evolutionary consequence of the inheritance of mental habits. Thus the notions of space, time, movement and force derive from experience and are crystallized into categories of thought inherited by the species.

Spencer's ideas on education,<sup>10</sup> which he deduces from this system, reiterate the fundamental error it contains. Spencer failed to see that man's social nature constitutes a qualitative break in cognitive development, and not only a difference of degree with respect to other living species. That is why he was forced to minimize or even deprecate the role of the transmission of constituted intellectual tools. Not only is education not, nor can it be, for him an active agent of intellectual development, since general categories of thought (and action)<sup>11</sup> are supposed to develop on the scale of the history of the species and to reproduce themselves in miniature in the course of the intellectual development of the child and the adolescent. But the most specific tools of mind are

- 9 H. Spencer, *Principles of Psychology*. For Spencer's theory of knowledge and the controversy between followers of Kant and of Locke, see R. J. Richards, *Darwin and the Emergence of Evolutionary Theories of Mind and Behavior*, Chicago, University of Chicago Press, 1987, pp. 275–294.
- 10 H. Spencer, *Education: Intellectual, Moral and Physical*, New York, D. Appleton, 1860.
- 11 For Spencer, man's overall character, his nature, evolve gradually by adapting to changing circumstances, thereby giving rise to social progress: "Intellectual evolution, as it goes on in the human race along with social evolution, of which it is at once a cause and a consequence, is thus, under all its aspects, a progress in representativeness of thought. By consisting of representations that are more extended, more definite, more varied, more involved, the conceptions of developed intelligence are distinguished from those of undeveloped intelligence. And it is because they have this as their common character, that there exists among them throughout all their ascending stages, the *consensus* we have traced. Only as social progress brings more numerous and more heterogenous experiences can general ideas be evolved out [...]" (H. Spencer (1879), *Principles of Sociology*, Boston, Longwood Press, 1977, vol. II, p. 535; cf. J. D. Y. Peel, *Herbert Spencer. On Social Evolution*, Chicago, the University of Chicago Press, 1972, pp. 110–112).

supposed to be developed by each individual in the course of a process of interaction with his environment that coincides with the biological model of growth.<sup>12</sup>

Following these rules, Spencer's educational methods take into account both species development, on the one hand, and the laws of learning, on the other, which are linked with the former. As increasing complexity of the nervous system is a consequence of the diversity and increasing complexity of the forms of association and kinds of experience, complex relations rest on simple relations. Teaching should therefore proceed from the concrete to the abstract. Furthermore, it should respect the evolution of the civilization deciding what knowledge to transmit at each stage. Learning rests on observation, not on authority. It is first inductive and only afterwards deductive. Object lessons and experimental methods come before book learning. Learning to use language comes before learning grammar, etc. Since the intellectual faculties grow through experience and exercise, learning should be as autonomous a process as possible. The child should receive little instruction and should be left to discover a great deal on his own.<sup>13</sup> In this Spencer is close to Rousseau and Pestalozzi, both of whom recommend following the lessons of nature. Spencer's principles apply to all stages of education. Education should conform to the natural development of the mind. His whole criticism of the classical curriculum, which is one of the best-known features of his educational principles, is predicated on "the belief that the common scholastic routine, with its superstitious veneration of the past and entire devotion to merely bookish learning,

12 Spencer's basic learning model, in accordance with his principles of psychology, is revealed in the idea that education is extending and improving the correspondence of the inner relations with outside relations, in otherwise organizing the combinations of ideas such that they concord with the combinations of phenomena (H. Spencer, *The Principles of Psychology*).

13 One may wonder why, in light of his theory of development, Spencer does not recommend simply leaving children alone, but provides for the intervention of an educator. Spencer attempts to answer this question while retaining his theoretical framework. The opening he proposes nevertheless involves a departure from this frame. In effect, he argues that the more complex an organism is, the longer it is dependent on its parents. However the parents should merely provide the means of development (objects to discover, books to read, problems to solve), without interfering in the normal process of mental development.

inevitably leads to intellectual subjection”.<sup>14</sup> The choice of what to teach should be guided by the principle of the greatest happiness: the harmonious development of all of man’s faculties that underpins the individual’s liberty in society. For Spencer, the “utility” of an activity is measured by how much it contributes to the complete life: “To prepare for complete living is the function which education has to discharge.” Curriculum should be functionally related to the individual’s future activities as a worker, citizen and person of leisure. His needs are listed in terms of the ends of the activities he is destined to exercise:

1. those activities that directly minister to self-preservation;
2. those activities which, by securing the necessities of life, indirectly minister to self-preservation;
3. those activities that have for their end the rearing<sup>15</sup> and discipline of offspring;
4. those activities that are involved in the maintenance of proper social and political relations;
5. those miscellaneous activities that fill up the leisure part of life devoted to the tastes and feelings.<sup>16</sup>

In ministering to the necessities of life and especially survival, the most useful tool is scientific knowledge. Furthermore, since the primary end of education is to prepare for life, and in particular to produce citizens, it should be based on real life in the present-day world. Artificial circumstances, according to Spencer, force individuals to “readapt” to real circumstances. The effects of the social environment on individual development are thus altogether in continuity with the effects of the physical environment. Spencer’s whole theory of education, a theory suspicious of the didactic transmission of knowledge, is founded on this principle. This does not mean that there is nothing to transmit to the child. But Spencer places the child in a development process in which he must do his best to constitute his own tools of mind, when he does not inherit them directly.

14 W.H. Hudson, *An Introduction to the Philosophy of Herbert Spencer*, London, 1911, p. 14, cited in A.M. Kasamias, *Herbert Spencer on Education*, New York, Teachers’ College Press, 1966, p. 132.

15 The art of rearing children should be grounded, as Spencer states in a later passage, in knowledge of the laws of their physical and intellectual development.

16 H. Spencer, *Education: Intellectual, Moral and Physical*, New York, D. Appleton, 1860, pp. 13–14.



### III. Lester F. Ward and democracy through universalization of knowledge

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Lester Ward is the author of the first comprehensive treatise on sociology written in the United States. At the turn of the twentieth century, he was a principal figure of the emerging American sociology, but it was primarily through the work of his disciple, Albion Small, that he became known. Ward won the favor of progressive reformists in America. Nevertheless, when it came to the American education system, if “reformism” was fuelled by Ward’s social system spirit, educational “progressivism” was inherited from Spencer. Ward’s system took an entirely different view from that of Spencer, of whom he was a relentless critic.<sup>1</sup> Ward bases his criticism of Spencer, his system and his educational principles on what he terms the crucial importance of the distinction between non-purposeful physical or animal evolution and human evolution, which is radically transformed by purposeful telic action. In making this distinction, Ward excludes simplistic biological analogies from the list of explanatory principles in sociology. All of the benefits of science are the effects of man’s control of natural forces and phenomena that would otherwise have been wasted or have stood in the way of man’s progress. It is only by the artificial control of natural phenomena that science can be made to serve man’s needs. But social phenomena are essentially different from natural phenomena. Ward constantly opposes his dualism to the monist dogma of the continuum of natural and social processes, distinguishing “telic phenomena”, in other words those governed by man’s will, from “genetic phenomena”, which are the result of blind forces of nature. The genetic dynamics of nature are an effect of processes that are not erratic, but which are not economical either, in the sense that, left to themselves, they would result in immense wastage.

1 On Ward, see E.P. Kimball (1932), *Sociology and Education*, New York, AMS Press, 1968; R. Hofstadter, *Social Darwinism in American Thought*, New York, G. Braziller, 1959.

Although he bases his reasoning on the specificity of man's development with respect to the rest of nature, that is on the opposition between the method of the mind, *telesis*, and nature's method, *genesis*, Ward overrates man's potential ability to control society. He has thus not totally abandoned any reductionist frame of analysis defined by evolutionism when he substitutes the idea of a telic social dynamics for biological social dynamics. His *Dynamic Sociology*<sup>2</sup> is primarily a defense of the planned control advocated by social reformists. Nevertheless, as Douglas Hofstadter points out, Ward was defending a particular point of view which was not that of socialism:

He believed that he had a workable alternative to socialism and individualism which, borrowing from Comte, he called "sociocracy", or the planned control of society by society as a whole. Under sociocracy, purposeful social activity, or "collective telesis", could be harmonized with individual self-interest by means of 'attractive legislation' designed to release the springs of human action for socially beneficial deeds by positive rather than negative and compulsory devices. Where individualism has created artificial inequalities, sociocracy would abolish them; and while socialism seeks to create artificial equalities, sociocracy would recognize inequalities that are natural. A sociocratic world would distribute its favors according to merit, as individualists demand, but by equalizing opportunity for all it would eliminate advantages now possessed by those with undeserved power, accidental position or wealth, or antisocial cunning.<sup>3</sup>

*Dynamic Sociology* develops a series of hierarchical teleological relations linking the diffusion of learning to social happiness. Ward puts immoderate faith in the potential of education to reconstruct society. Coming from a modest background, he was directly confronted in his everyday life with the wastage of a huge latent intellectual potential through lack of instruction. His personal experience is often recalled in explanation of his educational principles and opposed to that of Spencer, who came from a highly educated family that provided him with, in addition to a formal education whose dogmatic aspects he objected to, abundant informal sources of knowledge.

Social dynamism is seen by Ward to be the result of the enlightened action of each member of society. Ward defines intelligence as "intellect *plus* knowledge":

2 L. Ward, *Dynamic Sociology*, New York, D. Appleton, 1883.

3 R. Hofstadter, *Social Darwinism in American Thought*, p. 83.

Intelligence, therefore, implies not only the degree of intellectual power employed, but the amount of labor actually performed by this power; it is intellect *plus* knowledge.<sup>4</sup>

According to Ward, the primary component of intelligence, intellect, far exceeds the second, learning. The best way to increase individuals' intellectual potential is to procure them the maximum amount of knowledge.

Intelligence, hitherto a growth, is destined to become a manufacture. The knowledge of experience is, so to speak, a genetic product; that of education is a teleological product. The origination and distribution of knowledge can no longer be left to chance and to nature. They are to be systematized and erected into true arts. Knowledge artificially acquired is still real knowledge, and the stock of all men must always consist chiefly of such knowledge. The artificial supply of knowledge is as much more copious than the natural as is the artificial supply of food more abundant than the natural supply.<sup>5</sup>

Man's intellectual power, in other words his power to understand and interpret his environment, has been increased by the use he has made of his knowledge and not by the growth of his brain. Ward furthermore rejects Spencer's doctrine of intuitive or innate knowledge. All of those principles that condition knowledge rely on human learning. Knowledge acquired through experience is a genetic product, but knowledge acquired through education is an artificial, teleological product. Education by experience, which is based on the genetic development model, is a waste of time and energy. He maintains that to represent education as a sort of social ontogenesis is erroneous in principle, and not supported by any proper interpretation of the teachings of science. Ward also rejects other educational aims not apt to be based on the transmission of systematic knowledge. Preparing individuals to appreciate culture is fine for the pleasure it procures, but it is not the primary goal of education. Nor does education aim at pure intellectual discipline. In particular, it is not an empty preparation for future acquisitions, for the mind must be nourished if it is to produce. Intellectual discipline is acquired, once again, through the transmission of systematic knowledge. Research as an educational aim is an illusion, for it can only maintain a

4 L. Ward, *Dynamic Sociology*, vol. II, p. 471.

5 L. Ward, *Dynamic Sociology*, vol. II, p. 539.

high level of ignorance and subjection within society. The primary goal of education is knowledge of what is already known. The most efficient kinds of knowledge should be judged firstly by their relative generality and secondly by their practical utility. The most useful kinds of knowledge are not based on isolated facts but on the relations between classes of facts, laws and general principles. What counts is not the amount of knowledge transmitted but its quality. Each individual's culture should make it possible to marry mind with technique, and thus to make all work attractive. The sciences should be taught in their order of filiation, which stands in a relation of diminishing generality with increasing complexity. To be sure, Ward is not talking about the order in which civilizations evolved, as Spencer does, but about a logical order that makes it possible to understand their articulation and their underlying principles.

What nevertheless was retained from Ward, and developed by a theoretician of social control like Edward Ross<sup>6</sup> or a proponent of social reformism like Dewey, are interventionist social principles and not the educational principles on which his system is based. It is Spencer's ideas on education that directly or indirectly won the interest of educational and pedagogical theorists.

6 See E. A. Ross, "Social Control", *The American Journal of Sociology*, January 1900, pp. 475–487.



## IV. John Dewey and education for democracy

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If there is a concept that is central to Dewey's approach to education, it is growth. From the standpoint of scientific psychology, growth through interaction with the environment is linked to the evolutionist model of biological development. From the standpoint of moral philosophy, the concept is linked to an ideal of perfection of the human personality through natural sources of motivation. From the standpoint of social philosophy, it is supposed to ensure the resorption of the dualism between thought and action into a democratic conception of human activity.

Dewey saw the old psychology as a psychology of knowledge, of intellect. The modern conception of mind is essentially one of a process or, to be more accurate, of a growth process. One of Dewey's projects for education was to make modern psychology the foundation of all pedagogical practice. He finds theoretical support for his views in James' *Principles of Psychology* (1890) and in the theses of Hall. The notion of growth thus comes from the biological development model, to which he adds the idea, taken from James' critique of Spencer, that the life of the mind is a dynamic reality. Education, Dewey repeats, has no goal other than growth, understood as the continual propensity of the individual to adapt his activities to new environmental conditions.

The notion of growth furthermore guides pedagogical action. The child's will, his interest and his development must constitute the center of gravity of the curriculum. This is the lesson of *The School and Society* (1900) and *The Child and the Curriculum* (1902). The child is said to be "passive" when in fact what is taught is not adapted to his needs and interests. The pedocentric reversal of the teaching process as advocated by Dewey is motivated by his sentiment of a revolution in the conceptions of human development. The child is not a small-sized man whose development requires nothing more than his progressive integration into adult society. He is a qualitatively different being, and is the source of his own development, which comes about in the process of interacting with his environment in the broad sense of the term. In

particular, his experiences do not depend on outside material but on a dynamic relationship between his individual dispositions and the environment. For Dewey, traditional teaching overrates the role of consciously formulated methods and underrates “vital unconscious attitudes”. But again, the environment is made up of dynamic relations, whereas the intellectual tools of the past deal with already obsolete conditions: “The study of past *products* will not help us understand the present, because the present is not due to the products, but to the life of which they were the products.”<sup>1</sup> The notions of growth, maturation, adaptation, by redefining the fundamental teaching project, should constitute the source of the renewal of social life.

Along with Rousseau, Dewey thinks that the child should be preserved from the perverse effects of society, but he objects to Rousseau that the child cannot be removed from society and handed over to nature. Indeed, nature offers no particular direction since it lacks the essential factor of development, which is society. In reality, for Dewey education should be a controlled form of socialization, dynamized by the intellectual vitality of the child placed at the center of the curriculum and channeled according to determined social ends. It is therefore within a school environment conceived as a “purified medium of action” that the child should be reared. Schooling should be organized in such a way as to satisfy the needs of the social life of modern democratic man.

Social life, Dewey writes, has undergone a radical change under the impact of industrialization: “If our education is to have any meaning for life, it must pass through an equally complete transformation.”<sup>2</sup> We must “make each one of our schools an embryonic community life”, formed around types of activity that reflect the life of society and penetrated with the spirit of art, history and science. The school should thus prepare the child for his future social life, “saturating him with the spirit of service, and providing him with the instruments of effective self-direction”, which, for Dewey, are the best guarantees of a “worthy, lovely and harmonious” society.<sup>3</sup> The progressive character of his conceptions rests

- 1 J. Dewey (1915), *Democracy and Education*, New York, The Free Press, 1966, p. 75.
- 2 J. Dewey (1899), *The School and Society*, Chicago, University of Chicago Press, 1990, p. 28.
- 3 J. Dewey, *The School and Society*, pp. 28–29.

on two essential ideas: rejection of the isolation of the traditional school from real life and social reform through a schooling designed to generate a better social life. The democratic ideal is thus supposed to prepare not a self-reproducing society but one that is perpetually changing.

*Democracy and Education*, Dewey's major work on the philosophy of education, is built around the question of what the democratization of society, the progress of science and industrialization, and the lessons of evolutionism mean for the renewal of education and culture. Democracy is more than a form of government, Dewey explains, it is a mode of associated living. This mode of living requires the resolution of the dualisms stemming from predemocratic forms of society and constituted around the fundamental opposition between thought and action. Because the capacity to reason has been seen as the distinctive trait of man, the human activity *par excellence* has been pure speculation, which has brought about the divorce between culture and utility, theory and practice, reason and experience, humanities and natural sciences, etc. Dewey is particularly sensitive to the historically rooted associations between culture and social class. These oppositions have led to the separation in society between those destined for a life of the mind lived for itself and those destined for a life of labor. In this respect, Dewey is close to Marx, even if his relations with Marxist doctrine were those of biting criticism.

Evolution theory teaches that the subject of knowledge is not a spectator but a part of the world. Knowledge is made up of connections between experiences: it is the entire set of dispositions that enables us to adapt our environment to our needs and to adapt our own goals and desires to our life-situation. The pragmatic conception of knowledge developed by Dewey is combined with the democratic ideal of knowledge conceived of as immersion in the world and not isolated from real life.<sup>4</sup>

4 Cf. W.L. McBride, "Psychology and Human Values in the Context of Dewey's Critique of Marx", in W. J. Gavin (ed.), *Context over Foundation, Dewey and Marx*, Dordrecht, D. Reidel Publishing Co., 1988, pp. 37–47. One of Dewey's criticisms is that Marx rejects the idea of a biological human nature independent, in his conception, from human behaviors determined by outside economic forces. According to Dewey, Marx was lacking in psychology. *Ibid.*, p. 44.



## V. The “problems of democratization of culture” according to Karl Mannheim

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Karl Mannheim’s works in sociology of knowledge, education and culture are part of a multifaceted intellectual heritage in which Marx and Max Weber play important roles. But Mannheim comes close on a number of key positions, as Louis Wirth points out, to American Pragmatism as put into theory by James and Dewey. The analysis with which we are concerned aims to characterize the fundamental features of democratization of culture in the Western world. Mannheim<sup>1</sup> starts with a comparative analysis of historical situations from Antiquity to modern times. He describes the phenomenon of democratization of culture primarily with respect to changes in the ways individuals relate to social reality. These changes take three major directions, characterized by the ideas of de-distantiation, relationism and process. The general trend towards “de-distantiation” is a primary consequence of the ontological equality of all individuals in a democracy. It is associated with denial of “qualitative” inequalities that might legitimize fundamentally asymmetric power relations. In most pre-democratic societies, such inequalities are grounded in the unequal ability of individuals to make themselves the representatives of principles laid down as being transcendent. One characteristic tendency of such societies is to recognize exceptional individuals only once they have attained their full potential and then to surround their personality with a sort of “magic charisma”. With such representations, which crystallize differences oblivious to the extrinsic causes that have brought them about, the democratic spirit contrasts the plasticity of man, the idea that everything could have been different, and that human greatness is “a manifestation of that human perfectibility which is the universal heritage of man”. Talent or genius are no longer held up as signs of insuperable differences between men. Musical gifts, for example, are interpreted as being due to early experiences with music. While this same

1 K. Mannheim (1933), *Essays on the Sociology of Culture*, London, Routledge & Kegan Paul, 1956.

trend provides the basis for the selection of élites on the principle of equality of opportunities, these élites are no longer cut off from the rest of social life. The intellectual henceforth treats “his specialty as being on a par with other skills”, perhaps superior to the others in terms of quantity because of the knowledge and training it supposes, but not superior in terms of essence and quality, as though it entailed the realization of a “higher human type”. According to the same processes of de-distinction, in democratic schools, a good teacher is supposed to bring himself down to the student’s level. This does not mean watering down the content of whatever the student is unable to understand – which would lead to popularization – but adapting the content so as to bring it within the grasp of what may be an average intellect. Furthermore, the knowledge taught is de-distanced from reality. With teaching that valorizes disinterested culture, Mannheim contrasts teaching that, on the contrary, aims to be in touch with the realities of life. Formerly culture was opposed to productive labor. Now the new ideal for training man is guided by the ideal of doing: “Man can become ‘cultivated’ only through and with a concretely goal-oriented practice.” The new idea of culture rests on everyday activities and remains organically bound up with them. These organic links between all activities in society are also the starting point for an enlightened understanding of the world. That means an understanding of the structures which underpin the reality of things on the basis of their relations with each other. The paradigm of society is thus that of an organism.

Mannheim argues that the process of de-distantiation marks a shift away from thinking in terms of substances to thinking in terms of relations, which rests on the essentially relational nature of the existence of things. De-distantiation of the sources of authority and relational foundations of existence thus go hand in hand. Formerly authority was founded on the otherness of truth. Individuals now have a new responsibility with regard to their destiny and to truth. They no longer mechanically apply the rules of Tradition to direct their lives. Rather they make deliberate choices and, in this sense, are the creators of their own lives, just as they are the creators of their own knowledge. The shift from a pre-democratic epistemology to a democratic epistemology occurs with Kant and the discovery of the primordial spontaneity and creativity of the subject of knowledge. This is, according to Mannheim, the philosophical formulation of the second basic principle of democracy. In earlier philosophies, whether they were idealistic or realistic,

the subject is in a dependent position with regard to the object of knowledge, he does not create the object. He is discouraged from acceding to knowledge on his own; whereas in democratic cultures, the individual is encouraged to interpret reality from his own viewpoint, which Mannheim associates with a call for independent thought and for an interpretation of human cognition in terms of creation rather than passive reception: "The democratic citizen encounters in society no laws except those which he himself has enacted as legislator." Nevertheless in Kant, Mannheim remarks, the consciousness that gives rise to law is not the concrete consciousness of every individual, but a universal abstract consciousness present in each individual as a creative faculty of knowing.

Relationist foundations of existence and valorization of the ideas of genesis and process also go hand in hand. Democratization of culture is reflected, according to Mannheim, by development of the use of certain concepts that are antithetical to the hierarchical, static mind of the aristocrat, such as organism, evolution, process. According to his theory, the modern mind favors genetic interpretations of phenomena over eternal truths. Everything that is real appears as part of a process of change. One of the characteristics of this new approach to reality is thus the substitution of the concepts of "function" and "process" for those of "Gestalt". The morphological perspectives projected onto reality are replaced by analytical approaches that reflect the observer's immersion in this reality. There is thus a shift, according to Mannheim, from a static ontology to a dynamic ontology that gives human experience new meaning.<sup>2</sup>

Yet one of the problems inherent in the nature of democracy is that the individual tends to abdicate his right to follow his conscience and is

2 One criticism of the interference of the notion of process in questions of ontology has been formulated in the field of political philosophy by Hannah Arendt, who remarks on its roots in the biological model: "The coincidence of Marx's labor philosophy with the evolution and development theories of the nineteenth century – the natural evolution of a single life process from the lowest forms of organic life to the emergence of the human animal and the historical development of a life process of mankind as a whole – is striking and was early observed by Engels, who called Marx 'the Darwin of history'. What all these theories in the various sciences – economics, history, biology, geology – have in common is the concept of process, which was virtually unknown prior to the modern age" (H. Arendt (1958), *The Human Condition*, New York, Anchor Books, 1959, p. 100).

tempted to take refuge in the anonymity of the masses. The phenomenon Mannheim describes is the following: Democracies cannot avoid developing the means to neutralize forces that threaten social cohesion, in other words implicit means of social control that alienate the individual they otherwise are meant to emancipate. That is why, according to Mannheim, they die out as a result of a set of self-neutralizing factors that grows up within them.



## VI. Pragmatism, sociology and knowledge: Durkheim's criticism

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Durkheim's<sup>1</sup> criticism of the doctrine of Pragmatism is a frontal attack on a series of purportedly new ideas, Armand Cuvillier points out, after having reconstructed Durkheim's course from notes taken by former students. The doctrine of Pragmatism was already held to be "quite out of date" in the mid twentieth century. But even today Durkheim's observations can help dissipate a good number of confused ideas in the area of psychology and knowledge theory.

It should be noted here that Pragmatism, a term that comes from Charles Peirce, was developed more specifically by James (who was its true "father") and Dewey, in the United States, and by Ferdinand Schiller, in England. The doctrine emerged at the turn of the nineteenth century and quickly became the predominant philosophical current in the United States. One could add to Durkheim's discussion that the principles of Pragmatism rest on a critical development, and not on the abandonment of Spencer, James having done no more than reject the more mechanistic features of Spencer's system.<sup>2</sup>

- 1 É. Durkheim (1913–1914), *Pragmatism and Sociology*, transl. J.C. Whitehouse, Cambridge, Cambridge University Press, 1983; translated from the French: *Pragmatisme et sociologie*, [unpublished course given at the Sorbonne in 1913–1914 and reconstructed by Armand Cuvillier from students' notes], Paris, Vrin, 1955.
- 2 James compares Dewey to Spencer in an enthusiastic article on Dewey's ideas: "Like Spencer's philosophy, Dewey's is an evolutionism; but unlike Spencer, Dewey and his disciples have so far (with the exception of Dewey's admirable writings on ethics) confined themselves to establishing certain general principles without applying them to details. Unlike Spencer, again, Dewey is a pure empiricist. There is nothing real, whether being or relation between things, which is not direct matter of experience. There is no Unknowable or Absolute behind or around the finite world. No Absolute, either, in the sense of anything eternally constant; no term is static, but everything is process and change" (W. James, "The Chicago School", *The Psychological Bulletin*, vol. 1, n° 1, 1904, p. 2). In thanking him, Dewey would repeat that he had only put into logical terms that which James himself had given to him with his psychology. Dewey always marks the distinction between his position and that

Pragmatism is more a current of thought than a doctrinal system. It constitutes at once a methodological orientation, a theory of truth and a theory of the universe. But it is first of all a theory of truth based on the following basic premises: 1/ truth is a human production; 2/ it is diverse and variable; 3/ it is in no way the copy of a given reality. The fundamental motive driving the pragmatist attitude thus turns out to be a softening of truth, a liberation from the discipline of logical thought. It shares with sociology its application of the historical point of view to the order of things human. Durkheim's presentation tends to show that Pragmatism draws erroneous conclusions from premises that are correct and capable of supporting a renewal of the classical rationalist conceptions. These erroneous conclusions are based on implicit hypotheses stemming from the doctrine's naturalist roots and are linked to the postulate of there being a continuity between biological and human development.

As a theory of truth, Pragmatism runs counter to the two major epistemological tendencies, Empiricism and Rationalism, which are, for Durkheim, no more than two ways of asserting the primacy of reason. Empiricism and (classical) Rationalism have in common the characteristic of enslaving thought to the discovery of necessary truths. The difference, he argues, is in the way this necessity is explained. Empiricism grounds it in the nature of things; Rationalism, in reason itself, in the nature of thought. In both perspectives, truth emanates from conformity of ideas with things, whether these things are located directly in the sensible world or in a higher world, such as Plato's world of intelligible ideas or that of Kant's *noumen*. They are established *a priori*. For this reason, the thought of the knowing subject, like the object from which it is separated, is cut off from life. Alternatively, Pragmatism consists entirely of connecting thought to life. By making the subject the creator of the object, the constructor of reality, it enrolls this enter-

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of Spencer, having developed an evolutionism that is *methodological*. In his own highly enthusiastic homage to Spencer, Dewey underscores Spencer's influence on the thinking of his time: but Dewey adds that Spencer dominated the intellectual life of his times without having initiated a new movement, properly speaking. According to Dewey, evolutionism as set out by Spencer represents a preliminary transition from a world made up of external facts and rigid values to a world in movement. Cf. J. Dewey, "The Philosophical Work of Herbert Spencer", *Philosophical Review*, I, 1904, pp. 159-175.

prise in a project to liberate thought. Nevertheless, Pragmatism commits some fundamental errors along the way. Durkheim's arguments against Pragmatism center primarily on the following points: 1. the differentiation of thought and action; 2. the intrinsic value of speculative thought; 3. the conciliation of pluralism with objectivity in the frame of a non-dogmatic rationalism.

### *The differentiation of thought and action*

In Pragmatism, reality and thought are part of a single process. There is no heterogeneity between a subject, on the one hand, and an object, on the other, but oneness of the plane of existence and that of knowledge: everything happens, Durkheim explains, on a phenomenal plane. Thought, too, occurs on a single plane. Pragmatism, as James presented it, is a radical form of Empiricism; it admits of nothing outside experience. This is why, according to James, it is pointless to look for the first principles of things, when knowledge can be of help only in determining their practical consequences. Failure is the sanction of error. Hence his logical utilitarianism:

The true and the good are simply two different aspects of the useful, the advantageous. [...] The useful and the good are values and, consequently, in that system of thought, all judgements, including judgements of truth as well as others, are value judgements. Logical value is not a separate value. There is only one value, *utility*, which merely assumes varying forms in particular cases.<sup>3</sup>

In identifying the plane of thought with that of action, Pragmatism has overlooked the specific role of consciousness. Pragmatism equates consciousness with the outside world, seeing it as no more than a moment in the series of movements that makes up this world and which loses itself in them. However, Durkheim explains, consciousness is the organism's knowing of itself, and only because the organism knows itself can we say that something new happens:

For consciousness to come into being, there must be gaps or spaces in action, and it is through these that the being becomes aware of himself. [...] What really shows us that consciousness is in some measure obliged to do violence to itself, when it attempts to direct attention, is the fact that once it is freed from this task or escapes

3 É. Durkheim (1913–14), *Pragmatism and Sociology*, p. 44.

from it, movements gradually become established in the organism and consciousness itself disappears. This is what occurs in the formation of habit. The initial error of pragmatism is thus to deny the proper nature of consciousness and subsequently of knowledge.<sup>4</sup>

Pragmatism fails to see in reflexive action an ascending movement, a detachment from the immediacy of existence. Such detachment in no way seeks to “stick” to an intelligible reality, but is basically a “creator of beings”; it seeks to liberate human potential, which is, Durkheim explains, already the function of mythological thought. Mythological thought enables a person to step back from the immediate reality that is the source of the consciousness society has of itself.

### *The intrinsic value of speculative thought*

The second fundamental error of Pragmatism is that it fails to grasp the nature of speculative thought. For Pragmatism, truth is merely at the service of action, it has no other function. The pragmatist theory of truth is, as we have seen, a utilitarian form of thought. Yet, according to Durkheim, preoccupation with action is not the predominant feature of Pragmatism. Man’s impatience to transform things is found in all idealists whose ambition it is to bend the world to their ideal. But since, for Pragmatism, there is only one plane of existence, there is no room for an ideal. Durkheim concludes that Pragmatism is much less of an undertaking to encourage action than an attack on pure speculation and theoretical thought. It is characterized, he says, by impatience with any rigorous intellectual discipline, aspiring far more to “liberate thought than action”<sup>5</sup>. That is why it stands in contrast to classical Rationalism, for which truth is a “thing quasi-divine” and is necessarily placed above human life. This contrast is reflected in the fact that, in Pragmatism, thought has as its aim, not the reproduction of a *datum*, but the construction of a future reality.

James opposed abstract thought by largely adopting Bergson’s criticism of intellectualism. The concept is, in effect, an isolated representation; it expresses only one thing, one aspect, one state, one element. With the result that the Principle of Identity or non-contradiction dominates

4 É. Durkheim (1913–14), *Pragmatism and Sociology*, p. 83.

5 É. Durkheim (1913–14), *Pragmatism and Sociology*.

the whole of intellectual life. That is not how reality works, however, and that is why abstract thought is unable to account for it. Intellectualism does not accept that finite things can act upon each other, for once they become translated into concepts, all things remain closed up within themselves. James contrasts the “saltatory” interpretation of conceptual thought, inherent in a discontinuist conception of the universe, with his own “ambulatory” interpretation that stems from a continuist conception of the universe. For Pragmatism, concepts are shortcuts: they provide inconceivably quick transitions. Conceptual thought thrives on distinctions, whereas the world is a unity. In particular, the Principle of Identity and the law of non-contradiction do not apply to reality. According to Durkheim, Pragmatism takes a serious shortcut. It is one thing to say that there is no contradiction in things, but only in the way of representing things; it is another to conclude from this that these relations do not apply to reality. They are obliged to entertain a functional relationship with reality, for how would conceptual thought have the practical interest Pragmatism recognizes it to have if it in no way related to reality?

Furthermore, the functional relationships established between the constructions of thought and reality can still be valid even though reality is constantly evolving. The thesis of the amorphous nature of truth proper to Pragmatism is inherent in its radical empiricism. While things may change, Durkheim writes, that does not mean that truth changes at the same time. Or again, new truths do not necessarily erase the old truths. A proposition concerning an (abstract) object can continue to be true even when the circumstances change. Reality can evolve without truth ceasing to be truth. The laws of the physical world, for instance, remained what they were when life first appeared and as the biological world came into being. Social milieus, too, are infinitely variable; but relationships can be established, on the basis of the individual’s relations with his milieu, which are relatively stable.

In reality, speculative thought has a dynamic thrust of its own independently of all practical ends. Knowledge has fundamentally different requirements from practice. Furthermore, it is driven by a need to understand that is universal and essentially human. Science in particular is not fundamentally motivated by practical preoccupations; the scientist looks reality in the face and cares little about the consequences of what he will discover. This point of view, Durkheim stresses, is diametrically opposed to that of Pragmatism.

*Conciliation of pluralism with objectivity in the frame  
of a non-dogmatic rationalism*

The third fundamental error of Pragmatism is its failure to recognize the socially constructed nature of human knowledge; it looks at things, at truth, solely from an individual viewpoint. To be sure, truth is the product of individual consciousnesses; but at the same time the tools of mind underpinning reason are the *sui generis* products of collective life, and cannot be reproduced from individual experiences alone. How could human reason, Durkheim asks, be constructed in the course of the life-experiences of a single individual? Sociology adopts the same historical viewpoint on knowledge as Pragmatism does when it considers truth to be a human production. Things have a circular character, Durkheim writes. But Rationalism as such is not refuted. It is not refuted because it does not require the idea to conform to reality: An idea is true not because it conforms to reality, but in virtue of its creative power. The diversity of individual minds does not in itself account for the diversity of norms of thought. It accounts for it even less because truth is in part a social production. Can we not ask, Durkheim adds, whether progress may not consist primarily in the erasure of individual differences? If dialectics is the first among scientific methods, and its aim is to eliminate contradictions, it is because the role of science is to turn minds towards impersonal truths and to eliminate contradictions and particularisms. But this idea is compatible with the diversity of needs and the wealth constituted by the multiplication of viewpoints and approaches used to understand a problem: a single system of categories, of intellectual frameworks is no longer acceptable. That is why Durkheim's exposé is animated by the idea that the need for universalism, for the elimination of particularisms, and the need for pluralism, for a differentiation of approaches and viewpoints, call for development of a renewed form of rationalism.

## *The dynamics of change in educational systems*

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### *Sociologies and social change*

Classically, sociology makes a distinction between the role played by formal education in preindustrial and in industrial societies. The major justification for this distinction lies in the fact that preindustrial societies did not have the problems of differentiation and selection that go with the idea of “organic solidarity”. Even in the advanced but still preindustrial stages of social development, the child is usually a productive part of the family, which, as a unit of economic production, is the primary agency of education and job training. Before the appearance of true industrial societies, formal education and social stratification are closely linked. Industrialization places new responsibilities on educational institutions, such as universal education, promotion of scientific and technological development, professional recruitment and social selection. Differentiation within the educational institution and its functions is bound up with issues that therefore take on new proportions. Educational systems thus come to occupy a strategic position as major determinants of the economic, political, social and cultural character of a society.

The direction in which the educational systems of advanced industrial societies have evolved has been linked to their specific role in allocating social status. The theory of modernization and the theory of reproduction hold opposing views on this subject. According to the modernization theory, developed by Peter Blau and Otis Duncan, developments in education are characterized by the fact that “achieved” criteria now outstrip “ascribed” criteria in the social stratification process. According to the theory of reproduction, education is becoming formally universalistic, whereas it is in essence particularistic: social inheritance now operates through cultural inheritance, through the agency of the school. From the standpoint of methodological individualism, one can observe the progress of universalism and the relative stability of social mobility. But education systems do not respond to a deter-

mined law of development. On the contrary, over the course of their long history, they have always remained relatively autonomous with respect to the other social subsystems. As Floud and Halsey point out, they can produce desired as well as undesired effects, functional as well as dysfunctional outcomes.<sup>1</sup>

1 J. Floud and A. H. Halsey, "The Sociology of Education. A Trend Report and Bibliography", *Current Sociology*, vol. VII, n° 3, 1958, pp. 165–233.



# I. Functional approaches

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## The sociological tradition

The functional paradigm proposed, with regard to the development of educational systems in free-market industrial societies, an interpretive framework that still prevails today. Its dominant position can be explained in part by the fact that the framework in no way shocks intuition. According to the interpretations connected with one form of functionalism or another, modern educational systems, like all other social institutions, perform essential functions in relation to the overall social system. In particular, they ensure transmission of culture (knowledge, beliefs, values, etc.), transmission of new knowledge, research, and selection of individuals to occupy socio-professional positions.<sup>1</sup> By its extended function of integration and socialization, the school increases equality of social opportunities and facilitates the distribution of a vast number of abilities and talents throughout the economic system. Economic systems in turn now call for a more specialized labor force. Thus the school is supposed to adapt the training it provides to the knowledge required to perform the professional tasks in modern societies. The need to satisfy these functions explains the following basic developments:

1. lengthening of the time spent in formal education for all individuals
2. development of the school's task of integration and socialization
3. emphasis on transmission of basic skills upstream of the curricula and development of specialized training downstream.

For Burton Clark,<sup>2</sup> who proposes, in *Educating the Expert Society*, a technocratic version of the functional interpretation of changes in school-

1 Cf. D.A. Goslin, *The School in Contemporary Society*, Boston, Scott, Foresman, 1965.

2 B. Clark, *Educating the Expert Society*, San Francisco, Chandler, 1961.

ing, technological progress transforms nearly all social institutions. The impact on education, however, is particularly heavy. Bureaucratic organizations are developing and becoming more complex, imposing specialized qualifications on those they recruit. That is why, he explains, the opposition between the expert and the cultivated person, between the specialist and the generalist, between the scientist and the humanist, fuels modern debates about education. Owing to the magnitude of its cognitive and cultural impact, the school, once an agency for maintenance and reproduction of the social order, has become an engine of social change. In this regard, the different analyses tend to focus on the changing role played by higher education.<sup>3</sup> Universities and other establishments of higher learning adapt to the new needs of the production system. Special training in the growing economic domains is needed, and they constitute the active agencies of knowledge-creation in all domains, from the human sciences to science and technology. However the problems hanging over the modern academic institution stem from partly conflicting ambitions. Independently of any cognitive justification, mass secondary and higher education entails a relative drop in standards. Moreover, the selection processes are less visible, and instead more gradual and hidden. The attainment levels that formerly constituted an external sorting problem at the door to a given path have become a problem internal to the institution. According to Clark, this process of confronting continual encouragement to succeed with the realities of progressive selection in school and in the workplace is a dilemma inherent in democratic institutions.

- 3 M. Trow, "The Second Transformation of American Secondary Education", *International Journal of Comparative Sociology*, vol. 2, 1961, pp. 144–166; D. Bell (1973), *The Coming of Postindustrial Society*, Boulder CO, The Perseus Books Group, 1976; T. Parsons, *The System of Modern Societies*, Upper Saddle River, Prentice-Hall, 1971; T. Parsons and G.M. Platt, *The American University*, Cambridge MA, Harvard University Press, 1973; C. Kerr, *The Uses of the University*, Cambridge MA, Harvard University Press, 1964; A.H. Halsey, "The Changing Function of Universities in Advanced Industrialized Societies", *Harvard Educational Review*, XXX, Spring 1960, pp. 19–127.

## Economic tradition and the “human capital” theory

In economic theory there grew up within the functional paradigm what is known as the theory of “human capital”, according to which individuals invest in themselves in the expectation of future financial or other rewards. In the domain of education, human capital approaches are founded on the idea that individuals and societies derive economic advantages from investing in education as a commodity. The “actionist” component of the analyses, which sees social phenomena as being rooted in individual behaviors, is therefore strong. In this framework, education is supposed to increase the quality of individual labor connected with the “human capital” acquired by individuals, in other words connected with economically useful cognitive skills. Although recognition of the economic advantages that can be expected from increasing the useful knowledge and overall capacities of individuals goes back at least to Adam Smith, the research area was not officially created until the early 1960s, around the work of Jacob Mincer, Theodore Schultz and Gary Becker.<sup>4</sup> Schultz in particular expanded the field of factors contributing to increase human capital by considering the variety of factors capable of augmenting individual productive potential. Among these, he includes health services and personal migrations, for instance. Classically, studies analyze the effects of different kinds of formal education, notably from the end of secondary education to higher education, as well as continuing education, and informal training such as on-the-job experience, etc. The first generations of studies attempted to assess the rate of return on educational investment. Mincer uses an explanatory model identifying the systematic connections between educational attainment, represented principally by time invested in training, and income. Some of Becker’s studies published in *Human Capital* deal with evaluation of the return on investment in American higher education.

4 See in particular J. Mincer, “Investment in Human Capital and Personal Income Distribution”, *The Journal of Political Economy*, n° 66, 1958, pp. 281–302; T. W. Schultz, *The Economic Value of Education*, New York, Columbia University Press, 1963; G. Becker, *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, New York, National Bureau of Economic Research, 1964.

The human capital theory runs into some important empirical problems, however. One of the major problems analysts face, Becker writes, has to do with the existence of factors that have a positive effect on both educational investment and personal income. Real returns on education are thus potentially overestimated because persons with different educational levels also differ in a number of characteristics that can also explain the systematic difference in their incomes. The most serious difficulty stems from the positive correlation between educational level and abilities not produced by education. According to Becker, the connections between educational attainment and abilities explains only a small part of the rate of return on educational investment: the most capable persons invest in education because they derive an economic benefit plus a cognitive benefit. The “screening” theory takes the opposite view. According to this theory, it is as though the academic system acted as a screening device for the job market, independently of any cognitive role it might play. For Spence,<sup>5</sup> the motivation behind educational demand is not the investment in augmenting cognitive skills but the advantages derived from the process of academic screening. Differences in educational investment correlate positively with differences in personal “productivity” because the personal “costs” of educational investment correlate negatively with productivity. For these reasons, arbitrary social constraints grow out of the objective personal characteristics reflected in the productivity differential. These constraints depend primarily on the structure of the educational system, on the differences in the cost of an educational investment according to the different personal productivities, and on employers’ beliefs concerning the link between educational attainment and productivity.

Although analyses of the human-capital and screening theories diverge on the importance to be given to the selective and to the productive effects of different kinds of education, the existence of the two kinds of effects is generally recognized and is questioned by only the most radical critics.<sup>6</sup> Furthermore, the human-capital and the screening theories agree on one basic postulate:

5 Cf. M. A. Spence, “Job Market Signalling”, *Quarterly Journal of Economics*, August 1973, vol. LXXXVII, n° 3, pp. 355–374.

6 I. Berg, *Education and Jobs: The Great Training Robbery*, New York, Praeger, 1970; C. Jencks et al., *Inequality, A Reassessment of the Effect of Family and School-*

Screening by employers in terms of educational credentials creates an incentive on the part of employees to produce the ‘signal’ that maximizes the probability of being selected, namely the possession of an educational qualification, and this signaling incentive is in fact conveyed by the private rate of return to educational investment.<sup>7</sup>

From there, while screening approaches valorize dysfunctional processes, the human-capital approach valorizes functional processes. Nevertheless, such questions as the incidence of educational and professional structures on individual academic careers, the qualitative variety of the commodity “education” and its evolution,<sup>8</sup> individual differences in benefits derived from the different kinds of education,<sup>9</sup> the influence of latent personal variables affecting, for example, both educational and income levels, all point to the interest of combining the two approaches.<sup>10</sup> Otherwise analyses in terms of human capital do not permit an evaluation of the rate of return on educational investment that is free of cumbersome assumptions.

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*ing in America*, New York, Basic Books, 1972; S. Bowles and H. Gintis, *Schooling in Capitalist America, Educational Reform and the Contradictions of Economic Life*, New York, Basic Books, 1976; R. Collins, *The Credential Society*, New York, Academic Press, 1979.

- 7 M. Blaug, “The Empirical Status of Human Capital Theory: A Slightly Jaundiced Survey”, *Journal of Economic Literature*, vol. 14, Sept.–Dec. 1976, p. 847.
- 8 For example, Blaug sees real merit in a general academic education as opposed to the rapid technological changes that are continually altering the modes of recruitment; cf. M. Blaug, “Where Are We Now in the Economics of Education?”, *Economics of Education Review*, vol. 4, n° 1, 1985, p. 27.
- 9 Cf. D. A. Wise, “Academic Achievement and Job Performance”, *The American Economic Review*, vol. 65, n° 3, June 1965, pp. 350–356; and E. Lazear, “Academic Achievement and Job Performance: Note”, *The American Economic Review*, vol. 67, n° 2, March 1977, pp. 251–254.
- 10 Cf. for instance, L. Lévy-Garboua, “Les Demandes de l’étudiant ou les contradictions de l’université de masse”, *Revue française de sociologie*, XVII, 1976, pp. 53–80.



## II. Conflict theories

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### Neo-Marxist perspectives

The neo-Marxist interpretation of developments in educational systems proposed by Bowles and Gintis fundamentally rejects belief in a match between school attainment and individual productive potential. The authors start from the premise that the acquired human capital is restricted to specific professional competences. Furthermore they adopt the hypothesis that academic screening does not signal individuals' productive potential but the kind of socialization they received in the educational institution. For Bowles and Gintis, changes in schooling depend primarily on the needs, in terms of socialization, of the capitalist system of production. This hypothesis explains the failures of the two educative trends these economists single out for their overall coherence. These are, on the one hand, functional sociology and neo-classic economics, conferring a meritocratic and technocratic justification on the evolution of the educational system, and, on the other, the trend that emerged from Dewey's theory of education for democracy. The first trend, which seeks to adjust the child's cognitive skills to society, errs principally in believing that job recruitment depends primarily on individuals' intellectual and cognitive competences. The second, which seeks to adapt the school to the child, places unrealistic faith in the democratization of a society in which economic life is governed by corporate capitalism. Given such a context, of the three major tasks assigned to the school: social efficiency, equalization of opportunities and individual development, the first prevails, due to the integrating function of the school, over the other two so as to satisfy the interests of the economic élites. The history of American education in the twentieth century, according to this perspective, is not that of socialism, but that of the legitimization of social relations reflecting the hierarchical division of labor in a capitalist system. The premise of a relative independence between academic selection and productive potential prompts the following question: "Is the higher average cogni-

tive attainment of the more highly educated the *cause* of their greater likelihood of achieving economic success?"<sup>1</sup> Observation of at least partial independence of intellectual potential, valorized by the school, from economic "productivity" would also tend to substantiate the thesis of the relative autonomy of the educational institution. But if this independence is considerable, as Bowles and Gintis claim, it should result in academic screening playing a lesser role in the job market. Academic screening is thus supposed to play the role described above: the connection between intellectual level and educational attainment and then occupational success is simply a by-product of a selection based on other traits, which combines socialization by the family, socialization by the school and socialization by the occupation.

## Neo-Weberian perspectives

Like Bowles and Gintis, Randall Collins challenges the technocratic myth that school curricula evolve in response to needs for professional competences. But, according to Collins, considering schooling to be a mere instrument of social control, as Bowles and Gintis do, does not in itself explain either the indefinite expansion of the educational system or the differences in educational capital among the social categories. The French model presented in *La Reproduction*, on the other hand, merely substitutes condemnation of a system for its adulation by the functional model, but it uses the same kinds of data and offers the same overview of a system in equilibrium based on a "cultural capitalism". The expansion of a "cultural economy", as Collins conceives it, thus stands in opposition to neo-Marxist interpretations that show social classes as being homogeneous and entertaining a quasi-existential relationship with their culture. Social-status competition is in fact general; it affects all individuals and groups who seek to make the most of their status on the cultural-values market thus constituted. This competition plays off edu-

1 S. Bowles and H. Gintis, *Schooling in Capitalist America, Educational Reform and the Contradictions of Economic Life*, New York, Basic Books, 1976, p. 112.



cational institutions, occupational groups, ethnic groups and all those in search of a social status against each other:

The difference is that a cultural currency makes the conflict irreparably multisided, each occupational group against the other, and tends toward increasing fragmentation rather than toward consolidation into two opposing blocks.<sup>2</sup>

In playing educational institutions off against each other, Collins argues, these struggles are the source of the educational sequence that leads from elementary school to junior high school, to senior high school, college, university and post-graduate studies. It is the multiethnic conflicts, from the Anglo-Protestant battle for control of cultural standards to the different ethnic-group struggles for professional status, he maintains, that also instigated the major changes in the system. The effect of this competition is to have made the cultural currency that is the instrument of this competition more abstract by detaching its value from specific educational content. A common measure has emerged from this: the length of time spent in school. The academic attainment of the pupils at the lower levels of education has become less and less important, and the credential function of the academic discipline has been displaced to the higher degrees. For Collins, the stakes involved in academic curricula are essentially symbolic. They rest on the respective cultures of the status groups or on the conditions these groups have managed to force onto formal education so as to maintain or raise their status. They instill specific rules of sociability and worldviews. Vocational curricula themselves have never had much success because of the possibility of acquiring the same skills on the job.

The analyses of Collins, like those of Bowles and Gintis, have an important actionist component. The changes in American education that they explain are supposed to stem from the combination of individual actions. Among these, we can distinguish globally those of the system-users, who are in competition with each other, and those of the social, economic and institutional actors, who are attempting to control the evolution of the system in order to serve their own respective interests.

2 R. Collins, *The Credential Society. An Historical Sociology of Education and Stratification*, New York, Academic Press, 1979, p. 72. See also R. Collins, "Functional and Conflict Theories of Educational Stratification", *American Sociological Review*, vol. 36, 1971, pp. 1002–1019.

While in Bowles and Gintis scholastic competition drives individuals to a utilitarianism that favors vocationally oriented curricula, in Collins, it drives individuals to opt for the academic disciplines whose essential function is traditionally symbolic credentialization. These different individual logics are complementary and are connected in part with different assessments of the costs, risks and advantages of the pathways as they relate to the individuals' social backgrounds. However the combination of the actions of the actors involved underwrites a dynamic tending towards economic power relations in Bowles and Gintis, while in Collins they underwrite an indefinite endogenous development of educational systems. Neither of these two approaches really comes to grips with interactions between individual actions and social and institutional structures. Collins gives little weight, in his interpretive schema, to institutional structures and, more specifically, to the situations with respect to which the actors determine their actions; while Bowles and Gintis give preponderant weight to the economic power relations that, for them, ultimately dictate the changes in the educational systems.

### III. Interactionist approaches

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#### Educational change from the early Christian era to the twentieth century

*The Evolution of Educational Thought* formed the basis of a course given by Durkheim<sup>1</sup> at the time of the 1902 reform. Its aim was to afford an understanding of the French educational system and the crisis it was undergoing through a sociological approach to its history.<sup>2</sup> More generally at issue was the role and nature of formal secondary education. In response to these preoccupations, Durkheim developed an approach based in part on sociology of knowledge that concentrates on the formation and transmission by the school of tools of mind. *Evolution of Educational Thought* is one of Durkheim's least doctrinal works. Because of the different intertwining themes treated side by side, the text admits of a number of readings. Yet the analytical grid Durkheim applies to the history of education in France is relatively clear and systematic. His model for explaining social change rests on principles that today would be associated with methodological individualism. Certain elements inspired by evolutionism still appear between the lines. Nevertheless, if these influence identification of the major variables marking the differentiation of social function dynamics, they do not really play an explanatory role as such. For the rest, every phenomenon analyzed is explained by the rational solutions the social actors, individuals and groups, have

- 1 É. Durkheim (1938), *The Evolution of Educational Thought: Lectures on the Formation and Development of Secondary Education in France*, transl. by Peter Collins, London/Boston, Routledge and Kegan Paul, 1977; translated from the French: *L'Évolution pédagogique en France*, Paris, Presses Universitaires de France, 1990.
- 2 Faced with socio-economic changes and the evolution of educational demands, the French educational system at the turn of the 20th century was torn between dominant sectors and divided into opposing pairs: letters and sciences, classics and moderns. The 1902 reform sanctioned in particular the introduction of the modern track (D: sciences and languages) into the academic track, whereas it was previously a vocational one.

come up with in response to problems arising from changes in their situations. These solutions are the products of limited rationalities, divergent interests and in part fortuitous circumstances. Perverse effects dominate the evolution of educational thought; these are the unintentional effects that arise in a largely blind fashion, whose impact can be beneficial or detrimental. Durkheim's interpretation thus reveals the relative autonomy of the educational system with respect to the rest of society, together with a relative autonomy of the different dimensions of the institution. These dimensions are interdependent, but each follows its own evolution, marked by the emergence of institutional forms corresponding to specific logics. Reading through the book, the evolution of educational thought appears to be largely erratic and not fully adapted to the social needs of education:

The development of educational theory, like all human development, has been far from following a steady, regular course. In the course of the struggles and conflicts which have arisen between opposing sets of ideas, it has often happened that basically sound ideas have floundered, whereas, judged from the point of view of their intrinsic worth, they ought to have survived.<sup>3</sup>

Durkheim's analytical model can be outlined as follows:

1. Changes in macrosocial conditions exert an influence on the educational aspirations and needs of the social actors.
2. The processes driving social change are not exogenous to the educational institution. In particular the educational principles in one period have a hand in constituting the tools of mind individuals will use to apprehend the problems they encounter in the following period.
3. Changes in educational thought depend on processes involving latent social needs and ideological and political struggles for control of schooling.

In explanation of social change, Durkheim's analysis rests on the social actors' reasons for acting. These are connected with the changes that affect the actors' social situations. They are mainly axiological and cognitive.

The primary intervening factor is of an existential nature and is bound up with the stage of evolution, the structure and the living standard of societies. If, for example, in the high Middle Ages, the education provided by the Church could act as a mediator between the barbarian popu-

3 É. Durkheim, *The Evolution of Educational Thought*, p. 13.

lations and the Romans, it was because the asceticism and the humility taught by Christian morality corresponded to the needs both of a people comprised of the humble and the poor, and of a civilization saturated with abundance and easy living. Self-awareness on the part of the actors, groups and individuals also plays an important part. Because of the changes in the respective situations of social actors, this factor actually reflects new action rationales. These can be explained by the transformation of latent groups into organized groups<sup>4</sup> (for example, the foundation of the Christian State by Charlemagne is a factor that explains the emergence of a common identity for the peoples of Europe) or by the strengthening of the cohesiveness of the organized groups in their struggle against a common enemy.

These evolutions fuel the latent social needs that constitute a set of important factors for educational change. Social demand intervenes by tipping the scales towards one alternative or another. But it does not define the new forms of education that correspond to its aspirations. This is the work of the social actors, individuals or groups that, through their intellectual role, or their political and institutional power, influence the evolution of the dominant forms of educational thought. Social change and the emergence of the new problems this triggers, given the cognitive dispositions of the social actors, thus underlie the slow evolution of needs and ideas in matters of education.

The primary stages in the emergence and evolution of the French secondary educational system are shown in Table 2. The major types of intellectual training depend both on the moral ideals of the society and on the dominant epistemology. These ideals, as well as the epistemology, depend in turn, at least up to the preindustrial era, on the relationship between the sacred and the secular in the society in question. That is why the evolution of educational thought is especially linked with the secularization of speculative thought in the Western world.

From the outset, Durkheim underscores the duality between the moral mission of Church education and the cultural heritage of the pagan civilizations. The raw material of our intellectual civilization, he writes, comes from Rome. But Christian morality concentrated on the ideal of shaping the mind. From the embryonic forms of the educational institu-

4 On this subject, see M. Olson (1966), *Logic of Collective Action: Public Goods and the Theory of Groups*, Boston, Harvard University Press, 1966.

Table 2. Synoptic table of the major phases in the evolution of educational thought in France according to Durkheim

<i>Historical period at the beginning of the educational change</i>	<i>Overall situation</i>	<i>Important educational actor(s)</i>	<i>Dominant type of education</i>	<i>Main educational institutions</i>	<i>Asiologial orientation of the education</i>	<i>Cognitive orientation of the education</i>	<i>Cultural bases of the education</i>
High Middle-Ages	Church as mediator between Romans and barbarian populations	St. Augustin, St. Benedict: instruction for understanding of dogma		Cathedral and convent schools	Asetic morality, general disposition of the mind; conversion	Knowledge giving access to Holy Scripture	Christian and pagan culture (ancient literature)
Carolingian Renaissance	Restoration of the Empire in the West Beginnings of organized society	Charlemagne: stimulation and diffusion of education of dogma	Liberal arts 9th–11th c.	Palace School, cathedral, convent and parish schools	Total training of the mind	Grammar: understanding of the texts, linguistic formalism	Book culture
Middle Ages	Organized feudal system, crusades, urban centers	Abelard: famous teacher	Scholastics 12th–15th c.	Notre-Dame School, then University of Paris, ( <i>hospitia</i> ) colleges	Rationalization of the dogma; unification of logic and moral	Logic: Aristotelian dialectics or the art of arguing on grounds of likelihood	Book culture (Aristotle)
Renaissance	National and spiritual differentiation, increased public well-being	Rabelais: erudition Erasmus: art of language Montaigne: educational skepticism Comenius: educational realism	Humanism 16th–18th c.	Jesuit university and colleges	Intellectual estheticism, Jesuite moral/guidance and emulation	Rhetoric: literary formalism	Greek and Latin literary culture
French Revolution	Emergence of civil society	Condorcet: enlightened citizenship	Scientific rationalism, years IV–X of the Revolution	Central schools (écoles centrales)	Humanistic progressism, intellectual autonomy	Formation of the scientific mind	Scientific, humanist and social culture
Contemporary period	Industrialization, democratization, economic growth		Duality between literary/scientific humanism 19th–20th c.	Lycées, colleges, University of France (1808)	Preparation for temporal	Training in speculative functions	Literary and scientific thinking culture

tion during the Carolingian renaissance to the eve of the French Revolution, educational thought was driven by this ideal. Grammar during the Carolingian renaissance, the dialectics of the Scholastic movement and the literary rhetoric of classical humanism all aimed at a common goal: man, the shaping of his thinking and expression, the development of his general faculties. Nature is studied solely through texts, that is to say through the way in which it is apprehended by thought. The knowledge taught long rested on what authorized writers had said on the subjects. However Durkheim notes that the thinkers of Antiquity, until Socrates, had on the contrary begun taking an interest in the natural world. If Greek thought looked primarily to the outside world, it is because it was the dwelling place of the gods, whereas humans represented profane values of no importance in themselves. Christianity reversed this relationship:

The Christian religion had its seats in man itself, in his very soul. It is essentially an Idealist religion: it is over the world of the mind and the spirit that its God seeks to acquire dominion, not over that of the body. To worship the gods of antiquity was to sustain their material life by means of offerings and sacrifices because on their life depends that of the world. As for the god of the Christians, he wants to be worshipped, as the formula has it, in spirit and in truth. For Him, to be is to be believed in, to be thought about and to be loved. Thus every thing inclines the Christian to turn his thoughts inwards, since it is within himself that the source of life is to be found, that is, the source of true life, of the life which he regards as of supreme importance, spiritual life.<sup>5</sup>

The major speculative orientations thus correspond to the meanings the relationship between the sacred and the profane confer on the components of reality. It is nevertheless in Plato and Aristotle that the Western model of education is rooted, with as its starting point the famous Allegory of the Cave in Plato's *Republic*, which sets out the spiritual benefits of educating the mind. It is this ideal of intellectual training that has dominated the history of educational thought in the West. It has to do with cultivating intellectual powers through the learning of rational disciplines. As in Plato's work, it appeals to a "conversion of the soul". This conversion, which for the philosopher constitutes the very object of education, is associated with a moral ideal of a quest for truth for its own sake. Plato's and Aristotle's educational models thus rest on the teaching of disciplines that shape the mind, such as those that make up what is

5 É. Durkheim, *The Evolution of Educational Thought*, p. 282.

known as the “liberal” arts because they serve the purpose of training the free man. These subjects constitute the *trivium* (grammar, rhetoric and dialectics, which were the equivalent in the Middle Ages of a secondary education) and the *quadrivium* (geometry, arithmetic, astronomy and music, which were the equivalent of a higher education).

Christianity promoted these educational principles connected with the central role ascribed to man and to the human faculties of conversion. In order for its doctrine to be taught, Christianity had need of foundations on which to base its instruction. For its approach to the Holy Scriptures and the writings and controversies of the Church Fathers, Church schools borrowed the substance of their teaching from the Ancients, from pagan civilization, especially as Latin was the language of the Church. But the education provided by the Church was conceived differently from that of Antiquity. Its primary mission was not to instruct students in different disciplines, but to imbue the mind with moral direction. In this sense, its undertaking was unitarian and totalizing. Of the three disciplines that made up the general curriculum and comprised the *trivium*, grammar headed the list, in front of rhetoric and dialectics, until the Carolingian era. If rhetoric could be a weapon for combating error, it was presented first of all as a political instrument of persuasion. Dialectics, while an instrument of rational access to truth, was not deemed essential to faith. Grammar, however, was deemed to be the science *par excellence*, which rested on an understanding of the texts, and the best intellectual training. Grammatical formalism was the royal road to understanding the thought expressed by the texts, a way based on the formal manipulation of language. Durkheim makes it clear that there is no such thing as intellectual learning without content: reflection always takes an object. Nevertheless the forms of thought depend on the level of abstraction of the objects thought about. Previously the content of teaching was more tenuous. It was more exclusively concerned with abstract objects. It is in this sense that the Church dispensed a more formal type of education.

The establishment of the University of Paris was a crucial phase in the evolution of educational thought in France, for it was the source of what came to represent the “matrix” of the educational system. Durkheim describes this development as the emergent effect of a set of independent actions none of which individually can be regarded as teleologically guided by the project of a new kind of educational institution. The end of the barbarian invasions and the definitive implementation of the



feudal system had unleashed new availabilities for action. The effervescence of the eleventh century and the stimulation of intellectual activity explain that students flocked to what were still Church or monastery schools. The geographic mobility of the men of the time resulted in their concentration in the major academic clusterings. In addition, the establishment of the Capetian monarchy in Paris in the early twelfth century had made Paris the cultural center of the kingdom, and the *École de Paris*, under the auspices of Notre Dame, the principal educational institution. Durkheim stresses the importance, for the history of the educational system, of the presence in Paris of an immensely respected teacher renowned throughout Europe: Abelard. The prestige of Paris in the eyes of all Europe and the influx of students was responsible for the creation, in the late twelfth century, of schools housed in private homes. This creation resulted in the emancipation of both students and masters from ecclesiastical control. The masters formed a guild, as it was the practice of the time to unite in this form individuals sharing a same profession and a same collective life. It was through the continual struggle against the Church, which was seeking to preserve its hold on education, and owing to support from the pope, that the masters' guild gained strength and grew into an entity capable of engendering a new way of organizing education. Thus it was that the University of Paris was established with a semi-ecclesiastical, semi-lay status.

In the area of Scholasticism, study of the texts no longer came down to grammatical mastery of the language alone; it now consisted in a more thorough analysis of the logical articulations of the propositions set out by the authors under study. The practice of *expositio* thus consisted in a commentary based on restitution of the logical articulation of the texts. With respect to the teaching of grammar, this marked a shift of the dominant forms of access to the truth in favor of logical analysis. The evolution was motivated in particular by the need to understand and to justify Church dogma. But it had an epistemological justification as well. Dialectics, in education, represented the art of proving plausible propositions. Mathematical reasoning, the highest form of demonstrative reasoning, was not considered applicable to empirical reality. In the absence of experimental reasoning, discussion offered the only way of subjecting the ideas on a majority of subjects to intellectual scrutiny. Scholasticism thus substituted dialectical formalism for grammatical formalism as the ideal method of education. The Scholastic

exercise *par excellence* (besides reading or the weekly review of lessons) was the *disputatio*. Conducted between masters, bachelors or pupils, the *disputatio* obliged them to confront conflicting opinions in verbal jousting matches based on logical argumentation.

The structuring of the educational institution appears as the effect of ad hoc solutions found to particular problems. Such solutions gave rise to the educational sequence consisting of primary education, secondary education and higher education. The university had supplanted the old school system based on Cathedral, abbatial and collegial schools. The latter subsequently served, in the form of “grammar” schools, to prepare students for higher education. In the university, students and masters were divided into four faculties according to the nature of their studies: theology, law, medicine and liberal arts. The first three faculties prepared for a professional career, while the fourth offered a general curriculum. Students had to take courses in the liberal arts before specializing in one of the three branches constituted by the faculties of medicine, law and theology. Higher education was thus organized according to an internal sequence of which the first part, general culture, is comparable to the upper classes of present-day secondary education. The usual age of the pupils in the arts faculty, moreover, was only thirteen, and they were eligible to sit the *baccalauréat* at fourteen.

The origin of the examination system dates from the masters’ association into a guild. The different grades or degrees constituted the successive steps in the controlled admission of students to the different phases of their cursus. They were inspired by the customary induction rites practiced by the guilds (for instance, the practice of producing a “master-piece” to mark the end of apprenticeship and access to the rank of master). The university career was broken down into three major stages: the *baccalauréat*, the *licence* and the doctorate, the relative values of which are not far from their equivalents at the end of the twentieth century. In order to study, children were obliged to leave their family so as to be near one of the centers of education. In the thirteenth century, colleges were set up, in the beginning for impoverished students. In these early colleges, or *hospitia*, which provided room and board, the students developed an extra-curricular life.<sup>6</sup> Group exercises

6 The Sorbonne college, for example, was established around 1257 for 16 students in theology.

and tutoring were also organized. As these colleges were of interest to everyone, their number grew with the demand emanating not only from the scholarship students, but increasingly from paying students as well. The colleges offered more than an educational interest and a solution to the lodging problem, though; they also provided moral and disciplinary security. Ultimately the masters came to the lodgings to give their courses. In the fifteenth century, colleges constituted the only university framework, which therefore came to be founded on the principle of the boarding school. At this point in the formation of a strongly centralized power, the boarding-school principle acted as a vector for the uniformization and social control of student life.

The schema explaining the change in educational thought ushered in by the Renaissance follows Durkheim's general model. The principles of Scholastic educational practice help us understand certain mental dispositions of the actors' of the change. Scholasticism, Durkheim explains, tended to arm reason to serve faith. In so doing, it stimulated intellectual autonomy. But change, Durkheim writes, is the sign that new causes had come into action. In the event, these were at once political, economic and religious. The trend towards the differentiation of the States within Europe led to the Reformation that gave rise to the Protestant Churches. Changes affecting spiritual life were bound to have an impact on education as well, so tightly were the two interwoven. Furthermore, the ascetic ideal of the Middle Ages no longer corresponded to the aspirations of an increasingly civilized society in the process of opening up to the world, to luxuries and to easy living. Before this time, changes had come about in education on their own, without being systematized. However now that a system was in place, new ideas had to be justified. That is why, according to Durkheim, in the sixteenth century, for the first time in the history of education in France, there was an outpouring of literature on education that would be equaled only in the eighteenth century with the advent of a second great revolution in educational thought.

The Renaissance rejected Scholasticism *en bloc*. The educational theories of François Rabelais and Desiderius Erasmus each defined a new model favored by society. Durkheim underscores the features that oppose the two, as well as those that are similar, thereby showing that the two represented only potential alternative approaches to education, both of which were in conformity with the spirit of the time. Rabelais disapproved of restrictions being imposed on human nature. He recommended

that, in matters of education, all bodily and mental dispositions be exercised. Gargantua and then Pantagruel were to become fully developed men, superior in all areas. But Rabelais' ideal education, which reserved the largest place for science, aimed at quasi-encyclopedic knowledge and therefore had a superficial character. Erasmus was the spokesman for another aspiration of the times: words, style, literary faculties of expression. His educational model called for the study of the great literary works of Greek and Latin Antiquity, and the practice of a new exercise: written composition. The Renaissance rejected what it deemed "barbarian and crude" in Scholasticism. While it discovered a taste for the *belles-lettres*, it is not for having exhumed the great works of Antiquity. On the contrary, Durkheim explains, the Renaissance was exhuming these works because they spoke to the taste of a new civilization. Nevertheless, humanist education satisfied only some of the educational needs. It valued the rhetorical aspect of argumentation, seduction of the mind, over the quest for truth. In certain respects, it constituted a regression with regard to Scholasticism. Durkheim accounts for Montaigne's skepticism in education by saying that he was inspired by the fundamental vices of the educational principles of the time as they were exposed by Erasmus and Rabelais, which aimed too exclusively at a sterile intellectual estheticism. Language, according to Montaigne, should serve to express ideas clearly and not to ornament them. As opposed to Rabelais, he also preferred a "well-rounded mind to a well-filled mind". This skepticism, according to Durkheim, rested on the ignorance that instruction well employed can be one of the best ways of cultivating judgement.

In the early decades of the sixteenth century, colleges and universities began to change under the impact of new ideas and aspirations. Nevertheless they did not succeed in dominating education. The turning point in the evolution of educational thought in France is linked to the creation of a new body of teachers in the mid-sixteenth century: the Jesuit order. This creation was part of the Catholic Church's strategy to counter the spread of Protestantism in Europe. The aim was to gain power over the education of the new generations. Yet the Jesuits, who were directly answerable to the pope, ran into strong resistance from the laity, on the one hand, anxious to protect the university, and from the clergy, on the other hand, anxious to protect the Gallican Church. The opening of the Collège de Clermont in Paris (now *lycée* Louis-Le-Grand) was the outcome of a long struggle whose outcome was almost unexpected. Never-

theless this battle decided the educational solution that would be adopted and which would fuel the thinking behind secondary education in France, at least until the end of the nineteenth century.

The logic of Scholasticism gave way to a literary formalism whose aim was no longer truth but beauty; however it still sought to inculcate an intellectual discipline. Jesuit education was based on classical literature and was therefore organized around the pagan writings. The Jesuit fathers attempted to conciliate their teaching with Catholic doctrine, though. And to this end, the texts submitted to the students were carefully selected and entirely expurgated of any temporal and properly pagan content, so that all particularisms of the figures and civilizations were effaced: all the remainder was of a purely general character. The Jesuits' manipulation of the texts, according to Durkheim, engendered a way of apprehending human reality through general categories that was not without an effect on subsequent historical development. Some of the distinctive features of the French mentality stem from there. This revised humanism gave rise to the general, impersonal figures of seventeenth-century French literature: Corneille's Andromaque, is no more a pagan, Durkheim writes, than a lady at the court of Louis XIV, she is Motherhood itself, Mother Love in person, just as Molière's Célimène is Flirtatiousness, Harpagon Miserliness, etc. Anything that might distinguish these characters, anything that might make them concrete individuals living in a determined place and time has been systematically omitted.<sup>7</sup> In Durkheim's view, the natural man behind the cultural man also inspired the figure of the general man of the framers of the French Constitution. While the dominant cognitive dispositions of the classical era bear the stamp of the representation of reality as manipulated by Jesuit teaching, they are also shaped by the intellectual discipline dispensed at the same time. Durkheim notes that the French language was perfected and structured during the period of classicism. This evolution is the work of a humanistic education based on an essentially Greek and Latin culture. According to Durkheim, this fact should favor a rationalistic method of education. Ideas, he writes, present themselves to us in a global, synthetic and vague form; to separate out the component ele-

7 Note that Corneille and Molière received their education in Jesuit schools; Racine was educated by the Jansenists, at Port Royal, before going on to the Jesuit *collège* of Harcourt, which was to become the *lycée* Saint-Louis.

ments and the relations that connect them is the whole secret of style, that is what one needs to know.

For the majority of students (those not destined for theological studies), the curriculum of the Jesuit colleges was almost exclusively literary. The grammar classes prepared students for a cycle of studies (sixth grade to rhetoric included, corresponding to today's *classes de première* in the French system or 11th grade in the American system), in which the dialectics and philosophy of the medieval arts faculty had yielded to ancient languages and literatures. Jesuit teaching methods soon met with success, as illustrated by the number of colleges opened in numerous places outside Paris (there were 92 by the time the Jesuits were expelled in 1762). To understand the predominance of Jesuit schools over the University, which was not fundamentally different, an important piece of Durkheim's explanatory model must be borne in mind. The Jesuit colleges are supposed to have provided a better response to certain social aspirations or needs than the University. In the first place, Jesuit colleges imposed a more rigorous intellectual discipline on their students, and therefore their results were reputed to be clearly better. Written work, which was absent from Scholastic teaching, typically constituted the most important exercise and thus was more developed than in the University. Furthermore, students were subjected to an unremitting discipline of activities: translations, compositions, various kinds of work in prose and in verse. These exercises had only one purpose: the mastery of Greek and Latin, which were in fashion at the time. The students were spurred on by constant competition and emulation. This individualistic orientation was an innovation in education. But Jesuit teaching methods differed from the University in yet another way: the Jesuits watched over the students with an attentive and benevolent eye, and offered individualized moral guidance. In sum, the relative superiority of their methods rested on the features of the axiological orientation of their education, which corresponded to latent social aspirations. Competition, differentiation of levels, personalized moral guidance, according to Durkheim, all met the aspirations of a society in which the individual was coming to occupy a growing place. Certain devices to inspire emulation (compositions, distribution of prizes, etc.), later adopted by the University, are a legacy of these methods. The educational system thus set in place remained particularly stable until the French Revolution. The sciences, in spite of their development, and French, made their way

only slowly and painfully into the curriculum (French gained entry under the influence of the Port Royal preparatory schools, which did not survive the Jesuit intrigues against the Jansenists).

Durkheim's analyses of the last period he studied (from the end of the eighteenth to the end of the nineteenth century) are particularly brief. They ascribe the major "cause" of social change to evolving economic needs that lifted the temporal functions out of their low estate and assigned new basic orientations to education. Educational thought became "realistic", in the sense that, instead of the idealism that had until then prevailed, it made, as in the work of Jan Amos Comenius, intelligence of the real world the mainspring of intellectual culture. But Durkheim analyses practically none of the educational literature of the eighteenth century in these courses. His only concern is to contrast idealism with realism in order to characterize the progressive secularization of speculative thought.<sup>8</sup> This trend towards secularization, one might add, constituted at the same time a proclamation of the value of human reason as opposed to all revealed, preestablished truths. Man became the subject of history. By the same token, the ideal formation for man henceforth aimed at knowledge of the natural world.

With the French Revolution came an opportunity to overhaul the educational system and to raise it on new foundations. Plans to reorganize the school system were concretized in year IV of the French Revolution by the creation of the *Écoles centrales*; however these lasted a mere six years. Nevertheless, their organization and curricula were truly revolutionary. The curricula were defined with respect to disciplines, as has increasingly been the case in the U.S. since the beginning of the twentieth century, and not to pupils group into classes. Thus students could in part define their own program of studies. However, since the programs were subjected to the logic of the order in which the disciplines were taught, these were broken down into the three sections that covered

8 Durkheim gave a series of courses in Bordeaux on the history of education and educational theories. He also devotes substantial passages to Rousseau's political and educational theories; cf. É. Durkheim, "Le 'contrat social' de Rousseau", *Revue de métaphysique et de morale*, 1918, t. XXVI, n° 1, pp. 1–23 and n° 2, pp. 130–161; "La 'pédagogie' de Rousseau", *Revue de métaphysique et de morale*, 1919, t. XXVI, n° 2, pp. 1–23 and n° 2, pp. 154–179, see É. Durkheim (1918), *Montesquieu and Rousseau forerunners of sociology*, transl. by R. Mannheim, Ann Arbor, The University of Michigan Press, 1960.

the whole of secondary education. Many new disciplines had been introduced. The whole curriculum (drawing, natural history, physics, chemistry, moral and social sciences, history, legislation, general grammar, Latin, literature), took on a primarily scientific orientation. Under the Consulate (1799–1804), these schools were abolished and replaced by *lycées* and lower-level secondary schools (*collèges*) which prepared students for the *lycée*. In 1808, the Université de France was created, which united all the local university guilds in a single body. The general structure of the French educational system was now in place. And yet literature, once again central to education, was soon to experience a long period of critical examination, reflected in the nineteenth century by a series of curriculum reforms. Literary humanism, devoted to shaping such intellect and moral values as integrity and rectitude, was opposed to education in the sciences, often perceived as utilitarian. Depending on whether the government in place had reactionary or progressive leanings, Durkheim writes, the defense would change sides. When he writes that teaching the sciences is also an inestimable instrument for instilling logic, Durkheim is expressing in part the ideological character of these oppositions (in part only, since the science and mathematics curricula had not reached the same degree of maturity as the liberal arts curriculum). Furthermore, in defining the fundamental mission of secondary education as training the mind for speculative thought, Durkheim dissociates the ideal of shaping the mind from the moral and religious ends to which it had been attached in the past. But such an ideal still aims to liberate man, in the secular world, by enhancing his rational abilities.

## Educational change in the twentieth century

### *Expansion of educational systems*

Exogenous factors, such as the impact of economic and technological change, intervene in the explanation of the changes in educational demand. But increased demand for education in free-market industrial societies is the result of mainly endogenous factors, in particular because the meritocratic structures of these societies encourage everyone to at-



tain the highest level of education possible. When demand from one group of individuals increases, the others must up their own or suffer a reduction in their social expectations. The action of endogenous factors explains in particular the fact that there is no reason why changes in the educational structure should be congruent with changes in the occupational structure.

Formalization of the evolution of educational demand gives us a clearer picture of the interplay of endogenous factors. Mohamed Cherkaoui<sup>9</sup> shows that education received can be identified with a cultural commodity, as the evolution of the number of *baccalauréat* candidates conforms to that of many diffusion phenomena over time. Cherkaoui translates the propositions governing the construction of the mathematical function and which correspond to a logistics model as follows:

Let  $a$  be the saturation level. This level represents the maximum size of the population of *baccalauréat* candidates, lower than that of the age-group of young people between the ages of 17 years 6 months and 18 years.

Let  $x$  be the number of candidates at time  $t$ ;  $(a-x)$  is equal to the distance separating  $x$ , the increase level attained, from  $a$ , the saturation level. The rate of increase of  $x$  per time unit is proportional to  $x$  and to  $(a-x)$ . This relation can be represented formally by the following equation:

$$dx/dt = k \times x \times (a-x)$$

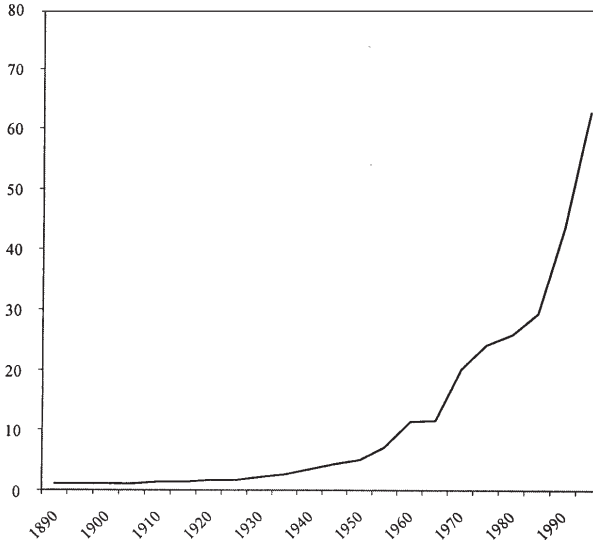
where  $k > 0$  designates a coefficient of proportionality.

$x$ , which increases with time, is a factor of acceleration.  $(a-x)$  is a restraining factor. When saturation level  $a$  is approached,  $(a-x)$  tends towards zero, and the rate of increase,  $\frac{dx}{dt}$  also tends towards zero.

The speed at which the phenomenon evolves ( $dx/dt$ ) is proportional to the number  $x$  of individuals who are factors of propagation of change and to the number  $(a-x)$  of individuals who constitute the number of individuals still likely to follow the changing trend in scholastic behaviors.

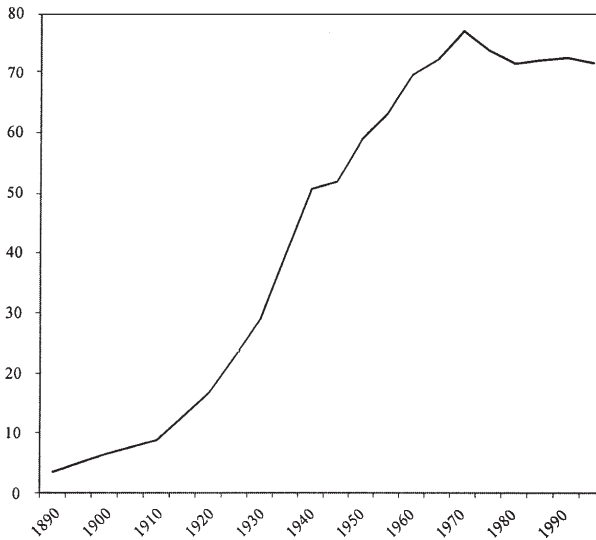
9 Cf. M. Cherkaoui, *Les Changements du système éducatif en France 1950–1980*, Paris, Presses Universitaires de France, 1982, pp. 39–41. Opposing exogenous and endogenous theories of social change is ideal-typical, no theory is ever totally exogenous or totally endogenous. Nevertheless this division indicates which class of independent variables is given priority, since, in the event, endogenous theories give precedence to the internal determinants of the observed changes.

Graph 1. Evolution of the proportion of *baccalauréat* holders in a generation



Source: French Ministry of Education

Graph 2. Evolution of the proportion of high-school graduates in a generation



Source: US Department of Education and US Department of Commerce

Graph 2 shows that the evolution of the percentage of an age-group of high-school graduates, between the end of the nineteenth century and the end of the twentieth century, takes the overall shape of a sigmoid (S-shaped) curve, which can reflect a diffusion phenomenon such as that formalized above. In Graph 1, the evolution of the proportion of French students in a generation having obtained the *baccalauréat* degree reflects the intertwining of several sigmoid curves connected with specific political reforms, in particular the conversion of *brevets* into technical *baccalauréats* at the end of the 1960s and the creation of professional *baccalauréats* at the end of the 1980s.<sup>10</sup>

### *Evolution of educational thought*

The fundamental changes in schooling that occurred in the twentieth century marked the end, in advanced industrial societies, of the primary influence of family situations and individual economic conditions in the allocation of social status. It is henceforth largely through the educational institution that professional qualifications are acquired. That is what is meant by the idea that social status is acquired rather than ascribed. Individuals are judged by what they do and not by what they are. In other words, the distribution of occupations is supposed to rest on performance and not on family ties. The importance given to performance explains the greater weight of schooling in this respect. Nevertheless analysis of the changes in the systems, as illuminated by the interactionist approaches, confirms Durkheim's hypothesis about the relative autonomy of educational systems. Changes in educational thought occur in response to latent social needs. These needs express the effect of social change, but the educational responses do not necessarily constitute social solutions totally adequate to the evolving educational needs. Interactionist approaches thus lead one to rethink the propositions set out in

10 A *brevet* is a certificate of education delivered upon completion of a course of studies shorter than that for the *baccalauréat*, usually in technical, agricultural or other specialized domains. The *baccalauréat* is the certificate awarded at the end of seven years of secondary education if the student passes the final examinations. The "bac" as it is known, is organized into broad series: currently L (literary), ES (economics and social sciences), S (scientific); a second group covering a technological series and a third covering vocational courses.

modernization theories according to which, given the importance acquired by performance criteria in the ascription of social status, educational values should develop according to universalistic criteria. They also invalidate the conflict-theory proposition that the ideology of the development of universalistic values masks in fact the influence exerted on educational systems by particularist values through which the dominant social groups are socialized. Changes in teaching methods and curricula were primarily driven by changes in scholastic population.

Not only has economic development given rise to new needs for basic training at all levels of the production system, it has also engendered a rise in family living standards and growing urbanization, which have stimulated educational aspirations. These new educational needs, and the policies defined to answer them, resulted in a rise in educational demand revealing an endogenous dynamics. The evolution of this demand thus followed its own logic, which did not coincide with the macrosocial transformations that triggered it. Yet it appears to be the major cause of the change in the educational aims and practices of the scholastic institution. Indeed, the fundamental changes in the approach to teaching coincide with the principal phases of the expansion of the educational systems. In the United States, this expansion took place during the first half of the twentieth century, while in France it happened in the second half. As Graphs 1 and 2 show, high-school graduates for all fields represented 6% of the 17-year-old population in 1900, 60% in 1950 and 92% in 1995. In France, those having obtained the *baccalauréat* represented 5% of a generation in 1950 and 63% in 1995.<sup>11</sup>

From their creation in the nineteenth century, American high schools offered a strongly decentralized public education that brought together vocational and academic studies within the same institutional structure. Originally the curriculum was based on the dominant Western educational model. It cherished the ideal of shaping the mind, associated at the time with the idea of mental discipline. Compulsory schooling, which was introduced gradually in the different states and reached an average age of slightly over 16 in 1920, acted as a catalyst for the demand for education. Owing to the development of this demand, schooling policies were confronted first of all with a social issue. On one side, there were the requirements of a structured, cumulative transmission of knowledge,

11 12% in 1965, 24% in 1975, 29% in 1985.

while, on the opposite side, was the growing heterogeneity of the different students' academic attainments and motivations for learning. As a consequence, the value of the more cumulative and more inherently selective curricula, which constituted the greatest obstacles to mass education, was called into question. From that point on, fundamental changes in educational objectives and curricula were the outcome of more or less ideological power struggles and not a true rationalization of the school system.

Faced with the rapid expansion of secondary schooling and spurred by progressive administrators, the American school system began changing in the early decades of the twentieth century. Progressive ideology was driven by the will to reform the school system with a view to freeing it from the principles upon which it rested, which were held to be outdated, rigid and coercive. One response to the growing demand for education was a search, developed by progressive educators, for what science, industrialization and the democratization of social life could mean for formal education. In particular, they thought that socialization was an educational goal that should take precedence over intellectual training. The initial development of a so-called scientific psychology provided the justification for thorough re-assessment of the values on which educational norms had previously been founded. While genetic psychology urged reconstituting the curricula around the intellectual and affective particularities of the child, functional psychology, which espoused the doctrine of Pragmatism, argued for teaching practical and applied tasks. The latter developed the premise inspired by evolutionist models that conscious thought is the response to a problem encountered by an organism in its attempt to adjust itself to its environment. The break with earlier educational thinking was consummated by the Commission on the Reorganization of Secondary Education report entitled *Cardinal Principles*, published in 1918.

In the first half of the twentieth century, the nature of the educational offer changed: it expanded without any real limits owing to the specificity of each matter and to the philosophy that schools should adapt to the needs and interests of the new populations attending them. This exacerbated pluralism was one consequence of the lack of intrinsic value attributed to the knowledge taught. In particular, general courses of study had been developed for those not judged fit to go on to college or vocational school. Academic courses were themselves sometimes academic in name only. To the curricula of many junior and senior high schools had been

added new courses such as “driver training”, “home economics”, “typing”, “human relations”, “problems of democracy” or “consumer education”, far divorced from what could still be regarded as a general secondary education. The patently feeble results of American secondary schools has, since the early 1980s, justified the development of educational policies built around principles of excellence.

In France, the changes in the dominant educational model were based on very different scholastic structures, founded on a highly centralized education system. But certain fundamental reforms of the educational objectives and curricula are comparable to the evolution of educational thought in America, owing precisely to the kinship between the issues and the ideological power struggles involved in the choice of solutions. Until the mid twentieth century, quality of formal education was the primary concern of French educational reformers. This concern corresponded to the ideals of the Third Republic, which associated the formation of enlightened citizens and social advancement with quality of schooling, which was in turn associated with the possibility formally extended to each person to attain his or her own level of excellence. In the period following the Second World War, the rapid expansion of schooling justified plans to adapt the education system, giving pride of place to diversification of the curricula and student-orientation problems. Educational aims were progressively oriented towards socialization in one respect and specialisation in another. The major structural reforms were brought in under the Fifth Republic, starting with the extension of compulsory schooling to the age of sixteen (1959) and the creation of the “collège d’enseignement secondaire” (CES), unifying the different institutions in which pupils followed the junior high school courses.

The most fundamental shift of educational objectives towards the application of modern child-centered principles, a progressive lowering of academic standards and an accentuation of the specialization of academic sections, took place at the end of 1980s, following previous transformations of teaching programs and conceptions in the 1970s. These changes were influenced by genetic psychology and cultural (specifically neo-marxist) sociology.

The cultural changes in the educational systems over the twentieth century were a response to the needs of the economic system and life in democratic societies. Nevertheless, the transformations in educational aims and practices reveal the development of another logic. During the

major phases in the expansion of the educational systems, issues of access and equality took priority over the educational principles that had prevailed throughout the history of Western civilization, in other words over the intellectual objectives connected classically with the idea of a liberal education. The changes in the cognitive orientation of education were supposed to adapt to the new school populations. But they were primarily those that facilitated the implementation of mass secondary education, giving priority to democratic socialization ideals like those promoted by progressive ideology. Because of their culture in the human sciences, most of those who pointed schooling in this direction entertained representations of humans and their development that were fundamentally modeled on biological evolution. Thus they minimize the intellectual role of knowledge transmission. The new directions on the whole served a philosophical view of humanity and society that transcended political divisions and went back to the early developments in the human sciences.

Modern education theory is rooted in the nineteenth century, a time in Western intellectual history when the question of democratization of society and the developments of the naturalist doctrines encouraged finding replacements for religion to seal the social bond. At this time, the doctrines of evolutionism seemed to reveal the malleability of human nature in terms of inherited features and adaptation to the environment. They thus saw humans as essentially molded by social relations. For these doctrines, reason is not the force that drives the human organism. This derives from action. Action is the motor of adaptation. The result is a fundamental reversal of social and human ontology. The subject of education is no longer the human being as an individual, but the human being as a member of the group. Within this interpretive framework, modern educational theory associates individuals' emancipation with their socialization as democratic citizens.

The democratization of educational systems involved then different kinds of pressure exerted on the evolution of teaching to oppose, paradoxically, the intellectual values of formal education. This opposition was deeply motivated by the participation of these values in individuals' own culture and in the processes of selection developed throughout their schooling. It is explained by the divorce between intellectual values, supposed to serve individual interests, and the moral and social values the school takes it upon itself to instill in the new generations.

From the pedagogical viewpoint, progressive educators in a very general manner defend placing less emphasis on structuring teaching by disciplines and explicit learning and more on practical realizations, themed projects, learning based on group activities and paired interaction. When they maintain that the pupil should be at the center, they are talking about the pupil as a member of the community, and when they claim that this is based on the principle of preparing for life, they are interested more specifically in social life.<sup>12</sup>

It appears that the so-called modern educational and pedagogical principles justified a softening of the cumulative, structured nature of the academic knowledge. These transformations did have the effect of curbing the schools' transmission of knowledge as well as a number of other perverse effects. The advantage of longer schooling was in certain respects minimized or even hobbled. Furthermore, the development of educational thought was reflected in vaguer, less explicit educational norms. By engendering a greater gap between the qualities of education provided by the various establishments, this evolution accentuated the impact, on the educational value of the curricula chosen and the teaching received, of the differential educational strategies of families.<sup>13</sup>

12 Cf. N. Bulle, *L'école et son double. Essai sur l'évolution pédagogique en France*, Paris, Hermann, 2008.

13 Cf. N. Bulle, *La Rationalité des décisions scolaires. Analyse comparée de l'évolution de l'enseignement secondaire français et américain au cours du XX<sup>e</sup> siècle*, Paris, Presses Universitaires de France, 1999; For more on the evolution of the American educational system in the 20th century, see L. A. Cremin, *The Transformation of the School, Progressivism in American Education 1876–1957*, New York, Vintage Books, 1962; K. Egan *Getting it Wrong from the Beginning: Our Progressivist Inheritance From Herbert Spencer, John Dewey and Jean Piaget*, Yale University Press, 2004. R. Hofstadter, *Anti-intellectualism in American Life*, New York, Vintage Books, 1962; E. A. Krug, *The Shaping of the American High School*, New York, Harper and Row, 1964, 2 vols; D. Ravitch, *Left Back. A Century of Battles Over School Reform*, New York.

In the perspective of methodological individualism, Margaret Archer develops a neo-Weberian analysis of the relationship between political structures and the development of the educational structures in Great Britain, France, Russia and Denmark: M. Archer, *Social Origins of Educational Systems*, London, Sage Publications, 1979.



*Part five*  
*Schools and inequalities*



## *Inequality of opportunity*

An individual's educational or social opportunities in terms of his social background usually refer to the average performances of individuals from the same social group, for example, the proportion of members of this social group who attain the different levels of education or training. This general concept reflects the effects of the combination of all social processes apt to generate observable inequalities. One can also speak of inequality of opportunities in the case of each of the processes in question. Identification of the relevant variables involved in these processes depends on the feelings of fairness or unfairness they arouse. The initial opportunities of attaining a given social status can be broken down into a series of successive opportunities combining the opportunities of belonging to certain groups (section, establishment, achievements, etc.) and the opportunities of members of these groups for attaining the positions under consideration. Depending on the processes identified and the responsibilities attributed to the community, different concepts of equal opportunities emerge. Let us take the example of America.<sup>1</sup> Equality of opportunity was originally seen, at the turn of the twentieth century, as the possibility for all children to receive an intellectually formative schooling. The secondary school curriculum was divided into different levels of difficulty, but they were all of a comparable nature. Equality of opportunity referred to the provision of the best possible intellectual training in view both of entering higher education and living one's life. The standard curriculum followed a classical pattern, with Ancient literature and mathematics as the main subjects. It was the community's responsibility to allow the child to be exposed to this type of education, and the child's responsibility to profit from it. The expansion of secondary education at the start of the twentieth century brought about a new conception of equal opportunities. The arrival of large numbers of non-college-bound adolescents prompted a change in the norms suited to this new majority. It seemed unfair to treat the whole student population as though it were pursuing the same social goal. Equality of opportunity thus came to mean the possibility

1 See J. S. Coleman, *Equality and Achievement in Education*, San Francisco, Westview Press, 1990, Chap. 2: "The Concept of Equality of Educational Opportunity".

for each child to follow a curriculum that made sense for him or her. The curricula were diversified, and a shift to lower academic norms began, notably under the influence of the National Education Association's, *Cardinal Principles*, published in 1918. Equality of opportunity thus came to mean the adaptation of curricula to students' characteristics. High-school curricula became increasingly differentiated according to the subjects chosen by students in terms of their interests and needs. The proportion of practical subjects and physical education continued to grow until the middle of the twentieth century. To force all children into a curriculum made for thirty percent of them seemed to create an inequality for the seventy percent who would not go on to college after finishing high school. But this concept, focused on the immediate needs and interests of pupils, led to taking for granted the social destinies that were actually a problem. According to James Coleman, the high degree of professional mobility from one generation to the next revealed the dilemma. The question of difference in student results as a function of the racial, ethnic or social group shifted the focus to the effects of schooling. The new concept was based primarily on the problem of integration. A corner was turned with the 1954 Supreme Court *Brown vs. Board of Education* decision, which declared racial segregation in the schools to be unconstitutional. The next step in this evolution was the Office of Education Survey of Equality of Educational Opportunity, which had the task of evaluating the "lack of equality of educational opportunity" among racial and other ethnic and social groups in the United States. The survey results were published in 1966 in the famous Coleman Report. The report is based implicitly on a notion of equal opportunity combined with that of equal educational achievement for similar individuals (family background, abilities...). But another kind of equality can be defined in terms of effects of schooling on different individuals. At the extreme limit, Coleman writes, equality of opportunity is attained when the results of schooling are the same for everyone. Nevertheless, he goes on to say, the notion of equal educational opportunity loses its meaning and becomes misleading when it restricts the problem of inequality to the institution alone, whereas "equality of opportunity refers to later life rather than the education process itself".

Given two groups of students, the role of the school in reducing the inequality of opportunities between the two groups can be assessed on

the basis of the relative effects of two sets of factors: those factors to which both groups are equally exposed, primarily in school, and those factors that affect the two groups differently, primarily at home or in the neighborhood:

If the school's influences are not only alike for the two groups, but very strong relative to the divergent influences, then the two groups will move together. If school influences are very weak, then the two groups will move apart. Or more generally, the relative intensity of the convergent school influences and the divergent out-of-school influences determines the effectiveness of the educational system in providing equality of educational opportunity.<sup>2</sup>

2 J.S. Coleman, *Equality and Achievement in Education*, p. 29.



# I. Educational systems and occupational systems

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## Types of political domination and types of education in Max Weber

It is in connection with the types of political domination he defines that Max Weber specifically addresses education.<sup>1</sup> He attempts to correlate different types of institution as well as differences between cultures. In this view, he seeks to identify, in terms of types of political domination, what education transmits, or determines, that legitimizes the position of the educated person within society. Many analyses in sociology of education inspired in part by Weber, whether they follow functional, conflict or neo-Marxist theory, have lost sight of the analytical reduction produced by the specificity of his problematic. Weber explains that he is not proposing a sociological typology of educational means and ends, but instead a few broad ideal-typical trends.<sup>2</sup> For that, he defines ideal-

- 1 According to Weber, there are three pure types of legitimate domination. The validity of the claims to legitimacy may be based on:
  1. *Rational* grounds – resting on a belief in the legality of enacted rules [...] (legal authority)
  2. *Traditional* grounds – resting on an established belief in the sanctity of immemorial traditions [...] (traditional authority), or finally
  3. *Charismatic* grounds – resting on devotion to the exceptional sanctity, heroism or exemplary character of an individual person [...] (charismatic authority) (the charismatic leader is seen to have greater worth because of his heroism, his qualities, or his closeness to a transcendent principle). See M. Weber (1922), *Economy and Society. An Outline of Interpretive Sociology*, transl. by Talcott Parsons et al., Berkeley, University of California Press, 1979, p. 215.
- 2 The notion of ideal-type is defined by Weber: “One obtains an ideal-type by unilaterally *accentuating one or more* points of view and by stringing together a great number of vague or discrete phenomena given in isolation, which one finds sometimes in great numbers, sometimes in small numbers and in some places, not at all, which one then organizes according to earlier unilaterally chosen points of view so as to form a homogeneous thought picture” (M. Weber (1919), “Science As a Vocation” in H. H. Gerth and C. W. Mills, *From Max Weber: Essays in Sociology*, New York, Oxford University Press, 1958).

types embodied in two opposite figures of the role played by education in the transmission of social status: the formation of the charismatic leader and that of the expert:

Historically, the two polar opposites in the field of educational ends are: to awaken charisma, that is, heroic qualities or magical gifts; and to impart specialized expert training. The first type corresponds to the charismatic structure of domination<sup>3</sup>; the latter type corresponds to the *rational* and bureaucratic (modern)<sup>4</sup> structure of domination. The two types do not stand opposed, without connections or transitions between them. The warrior hero or the magician also needs special training, and the expert official is generally not trained exclusively for knowledge. However, they are polar opposites of types of education, and they form the most radical contrasts. Between them are found all those types which aim at cultivating the pupil for a *conduct of life*, whether it is of a mundane or of a religious character. In either case, the life conduct is the conduct of a status group.<sup>5</sup>

The three major orientations of education associated very roughly with the notion of charisma, status socialization and expertise are: 1/ testing and development of general capacities; 2/ transmission of a culture; 3/ transmission of economically and socially useful knowledge. The first educational orientation fulfills a mainly axiological function, the second fulfills a function of symbolic socialization, the third fulfills a cognitive function. The charismatic leader represents a social ideal; the cultivated élite is trained in view of a specific status group, while the expert is prepared to perform specific economically useful tasks. Types of legitimate domination, like types of education, do not exist in a pure state.

3 “The term ‘charisma’ will be applied to a certain quality of an individual personality by virtue of which he is considered extraordinary and treated as endowed with supernatural, superhuman, or at least specifically exceptional powers or qualities. These are such as are not accessible to the ordinary person, but are regarded as of divine origin or as exemplary, and on the basis of them the individual concerned is treated as a ‘leader’” (M. Weber, *Economy and Society*, p. 241).

4 *Individual civil servants* are characterized by the formalism used to define their activity, their relation to the organization and their mode of recruitment (they are subject only to the objective duties of their job; their job hierarchy is firmly established, the skills of their function are firmly established; they are generally recruited by open selection on the basis of professional qualifications revealed through examination and certified by a diploma; they see opening before them a career, “promotion” by seniority or service, etc.

5 H.H. Gerth and C.W. Mills, *From Max Weber: Essays in sociology*, New York, Oxford University Press, 1958, “The Chinese Literati”, p. 426.



They simply make it possible to lay out the features of formal education on the proposed analytical grid. Weber applied his typology to the training of the administrative literati in classical China<sup>6</sup> and to the bureaucratic rationalization of professional tasks in modern society.<sup>7</sup>

Charismatic education tends to awaken and test a capacity regarded as a personal gift. But charisma is not taught or trained for. The “routinization” of “revolutionary charisma” usually transforms a charismatic system into a traditional or bureaucratic type of society. Hereditary charismatic rights substitute “qualification in virtue of one’s origins” for “qualification in virtue of one’s personal acts of valor” and underlies development of birth condition.

The ideal of the “cultivated man”<sup>8</sup> as opposed to the expert, according to Weber, is the basis of social esteem in social systems as varied as the feudal system, the theocratic system and patrimonial structures of domination. The status socialization function of education, like charisma, can be opposed to expert training, albeit on another level. Contrary to the charismatic leader, but like the expert, the social status of the cultivated man is legitimized by his training. Yet, contrary to that of the expert, this training has no economic usefulness. Its role is primarily symbolic: it confers a distinctive right of membership in a status group. It guarantees the quality of a man’s life conduct with respect to what is regarded as culture. Such an education was meant to produce a gallant or ascetic type, or a literary type, as in China, or a conventional type, in the image of the English gentleman. The qualification of the ruling class as such therefore rests on the possession of “more” cultural quality.

The educational type diametrically opposed to the valuation of charismatic qualities is the transmission of useful expert knowledge. Expert education aims to train the student to perform administrative, commercial, scientific, industrial and other roles. In principle, Weber explains, this can be done with any individual, albeit to a varying extent. The bureaucratization of any kind of domination furthers the development of a “rational matter-of-factness” and of the personality type represented

6 H.H. Gerth and C.W. Mills, *From Max Weber*, pp. 416–444.

7 H.H. Gerth and C.W. Mills, *From Max Weber*, “Bureaucracy”, pp. 196–244 (excerpted from Weber, *Economy and Society*).

8 H.H. Gerth and C.W. Mills, “Bureaucracy”.

by the professional expert. In effect, bureaucracy encourages formal regulatory procedures. It substitutes “formal arbitrariness for human arbitrariness”. Such development is supported by the governed, who see it as diminishing the forms of arbitrary domination. The bureaucratization of capitalism, with its demand for technical experts and clerks, spawned in particular the worldwide development of examination systems, even though examinations, based on the testing of competences, were neither indispensable nor concomitant with the phenomenon of bureaucratization. This development is strongly stimulated by the social prestige of the educational qualifications certified by the examinations. Weber notes that, in this regard, democracy occupies an ambivalent position. On the one hand, examinations allow a democratic selection on the basis of candidates from all social strata. But, on the other hand, democracy tends to combat this kind of meritocratic system for fear that educational certification may favor and engender a privileged “caste”.

It is with the formation of such academically certified “castes” that France associates the notion of “mandarin” power, in the figurative sense, which originally referred to the abuse of authority by the heads of hospital and medical school departments, but was extended, after the student uprising of May 1968, to professors and persons whose authority accruing from their knowledge is regarded with suspicion. But the educated Chinese civil servants known as “mandarins”, who administered the productive labor in what was an essentially agrarian society, derived their authority primarily from a highly centralized bureaucratic system. This system, which lasted for some 2000 years, was relatively stable, according to Weber, in part due to the mode of civil-servant recruitment based on the selection of candidates by examination. Not only did this system satisfy the population, recruitment being open to any candidate having the requisite educational level, but the emperor, too, found it in his interests: competition between the candidates prevented the formation of coalitions and power bases among the nobles that might be a threat to him. Administrators were selected on the basis of essentially literary tests. Professional rank depended on the number of examinations successfully passed. Thus social rank was directly subordinated to the examination system and was not hereditary. On the contrary, it was one’s official status that authorized the possession of a “heredity”, for example a temple in which to worship one’s ancestors.

Weber attempts to characterize Chinese education using the educational types he has defined. Education of the Chinese literati was not placed under a religious authority; it was an education of a secular type. The examinations were political affairs. Nevertheless, successful candidates remained subordinated to the school's discipline, its director and its examiners throughout their life. Their education reflected an ideal of social and ethical excellence: "benevolence tempered by classical (canonical) beauty". This was the very ideal that was expressed through the purely literary intellectual content of the curriculum, which consecrated the examinations. Canonical perfection and beautiful achievements were the supreme values of the Chinese culture. That is why Chinese literati, Weber explains, proved the quality of their status, their charisma, through the canonical correctness of their literary forms. Considerable weight was given to these forms in official communications. Charisma emanated from the harmony of the administration, which was the sign that no nature spirit or human spirit perturbed the official order. The high mandarins were "considered magically qualified". This official status rested on the conviction that the well-being of the subjects depended on the charisma of those who governed them.

The education itself was much like Western humanist education, but more specific and exclusively bookish and literary. Writing was pushed to extremes. The Chinese examinations did not test special skills, as is the case with modern bureaucratic examinations: the administrative "work" could be left to subordinates. Yet neither did these examinations test the possession of any power that might resemble the charismatic selection procedure. In reality, they tested "whether or not the candidate's mind was thoroughly steeped in literature and whether or not he possessed the *ways of thought* suitable to a cultured man and resulting from cultivation in literature".<sup>9</sup>

The classical Chinese literati's education was an education in culture, according to Weber, but it tested a certain mental outlook, dispositions linked with a secular morality that is not fully conveyed by the ideal of the "cultivated man". Dividing the axiological, cognitive and cultural tendencies of education according to the modes of legitimizing social status, as Weber does, does not make it easy to seize the features of formal

9 H. H. Gerth and C. W. Mills, *From Max Weber*, "The Chinese Literati", p. 428.

education in particular contexts. Durkheim's approach, which proposes a general analysis of the way the axiological, cognitive and cultural dimensions of education together define specific types of schooling, is more fruitful in this regard. In particular, the types of education designed to prepare for status groups in Weber have, for Durkheim, essential axiological and cognitive roles historically associated with religious ideals.

### Action-orientation in Talcott Parsons: Particularism vs universalism, ascription vs achievement

Analysis of the occupational system in industrial societies led Parsons to generalize Weber's analysis of bureaucracy to all occupations. He develops this generalization starting with *pattern variables*, which he defines and which serve as conceptual tools for analyzing modalities of social relations, in particular in American society.<sup>10</sup> In this respect, Parson's variables are primarily descriptive tools of classification. We will retain only two for their conceptual importance in analyzing stratification systems. These are the variables characterized by the poles "particularism vs universalism" and "ascription vs achievement"; the second variable is also translated by the opposition "qualities vs performances". Since the history of these variables, as well as their place in Parson's theoretical system, are quite complex, we will not dwell on them, for the conceptual clarification that concerns us here aims at no more than a general understanding of their meaning in the sociological tradition. The creation of pattern variables was suggested to Parsons by Ferdinand Tönnies' reflection on the notion of community and society. However, in Parsons, community and society designate types of social relations within a historically determined society. While actions in "society" have an essentially instrumental goal, those in the "community" have a symbolic significance based on community ties. Aside from instrumental

10 On Parsons' theoretical system as a whole, see F. Chazel, *La Théorie analytique de la société dans l'œuvre de T. Parsons*, Paris, Mouton, 1974.

considerations, conformity within the community to norms of conduct is a way of expressing membership in the group.

The particularism *vs* universalism variable refers to role obligations. The actor's particularistic orientation with respect to a social situation reflects certain obligations defined in virtue of relational particularities such as membership in a given group. It rests on group solidarity, on the obligations of a head of house, a neighbor or a member of some community. The particularistic orientation is recognized by the fact that the group bond discriminates actions independently of the actor's qualities. Alternatively, the universalistic action-orientation relates to criteria in virtue of which individuals are qualified to perform given actions. It rests on contractual agreements and on particular technical skills. This orientation is illustrated for instance by the attitude of the doctor, for whom the patient is "a case", etc.<sup>11</sup> Substitution of a universalistic orientation for a particularistic orientation of role obligations can be prompted by the need to increase the degree of formalism of the social activity once it reaches a certain level of complexity. Small simple organizations can be managed with a high degree of particularism in the relationship between leaders and subordinates. But when the "distance" between the points of decision and execution increases, uniformity and coordination demand formalization of the processes that affect the overall structure of the organization and the roles.<sup>12</sup>

To characterize the evaluation of actors in social situations, Parsons uses Ralph Linton's terms "ascribed status" and "achieved status". Ascribed status depends on qualities or attributes independently of specific performances, while achieved status depends on the person's performances. The second is opposed to the first in that individuals are evaluated in virtue of what they *do* rather than in virtue of what they *are*. According to Parsons, the "ascription *vs* achievement" variable defines "the major axis of differentiation of actors in a social system" (in their capacity as *objects* of orientation, as distinguished from their capacity as actors whose own orientations are to be analyzed).<sup>13</sup> It underlies the definition of the criteria of actors' eligibility and the differential treatment of roles. The first effective criteria of selection in all

11 T. Parsons (1951), *The Social System*, New York, The Free Press, 1964, p. 62.

12 T. Parsons, *The Social System*, p. 508.

13 T. Parsons, *The Social System*, p. 98.

known societies is kinship. In addition to ascription of social status by birth, there are two other types of selection, the first based on third-party decision, in other words appointment, and the second on the outcome of free competition.<sup>14</sup> These three types of selection are present and variably combined in the different social systems.

Social evolution has strongly accentuated the tendency to isolate the conjugal family, above all because both specialization and bureaucratization have contributed to the predominance of the values of universalism and achievement. The linking of achievement with universalism, as opposed to that of ascription with particularism, marks, in Parsons, an opposition between the professional sphere and the family sphere in modern societies and more specifically in American society. In particular, jobs are now usually allocated in the labor market independently of family solidarities.<sup>15</sup>

Nor is there any obligatory connection between criteria of achievement, which define expectations towards social actions, and a universalistic value-orientation. Achievement rests on performance. Performance with respect to a goal is sanctioned by instrumental criteria that always refer to a universalistic evaluation-orientation (cognitive criteria rank highest). But goals are not necessarily universalistic, they can rest on particularistic values (based on appreciation criteria). The particularistic components of a value system thus limit the choice of the goals to which achievement values apply.<sup>16</sup>

The “universalism–achievement” combination, in other words the valuation of goals of success according to universalistic criteria is supposed to be represented more particularly by the prevailing American ethos (but one wonders if this in itself does not include some particularistic values). According to this combination, no ultimate goal is continually maintained. The combination of universalism with achievement values puts the primary universalistic accent, Parson explains, on processes, that is, on instrumentally oriented actions “leaving the goal-system fluid”. In some sense, he goes on, “the philosophy of Pragmatism epitomizes this orientation”.<sup>17</sup>

14 T. Parsons, *The Social System*, p. 118.

15 T. Parsons, *The Social System*, p. 510.

16 T. Parsons, *The Social System*, p. 95.

17 T. Parsons, *The Social System*, pp. 107–108.

## Mobility through sponsorship and mobility through competition<sup>18</sup>

Ralph Turner constructs an ideal-type for the purpose of accounting for the functional relations between various sectors of society.<sup>19</sup> He proposes to look at “the manner in which the *accepted mode of upward mobility* shapes the school system”, adding that this influence accounts for only certain aspects.

Turner defines two main types of social mobility through schooling: sponsored mobility and contest mobility. These two ideal-types apply to the organizing norms that in principle oppose the respective ways in which the American and English school systems were characterized as functioning in the late 1950s.

Contest mobility is a system in which élite status is the prize in an open contest and is taken by the aspirants' own efforts. While the “contest” is governed by some rules of fair play, the contestants have wide latitude in the strategy they may employ. Since the “prize” of successful upward mobility is not in the hands of the established élite to give out, the latter are not in a position to determine who shall attain it and who shall not. On the contrary, under sponsored mobility, élite recruits are chosen by the established élite or their agents, and élite status is given out on the basis of some criterion of supposed merit, and cannot be taken by any amount of effort or strategy.<sup>20</sup>

The principles of sponsorship and contest have to do with more than the selection of candidates for élite positions, however. They concern all levels at which selection may occur and every criteria of access to the different social status.

18 R. H. Turner, “Sponsored and Contest Mobility and the School System”, *American Sociological Review*, 1960, vol. XXV, n° 5, pp. 855–867.

19 Turner suggests that the extent of consistency between various social situations might be due to the effect of an implicit norm internalized by the social actors. Nevertheless this hypothesis is not necessary to the analysis, which, as he explains, may identify not so much the effects of collective norms as the by-products of specific structural factors.

20 R. H. Turner, “Sponsored and Contest Mobility and the School System”, *American Sociological Review*, Vol. XXV, n° 5, 1960, pp. 855–867.

*Sponsored* mobility through schooling presents the following main characteristics:

1. Allocation of social status is based on an *a priori* selection of those having the desired qualities in view of making the best possible use of the talents in society.<sup>21</sup>
2. Recruits are selected at the earliest possible point so as to prepare them and to counteract outside influences on individual achievements.
3. Discrimination of the chosen ones requires the trained skills of their peers (intellectual, literary, scientific, etc).
4. Social control, i. e. acceptance of the norm, is based on the intrinsic value accorded by society to the skills of the *élite*. One sign of this collective orientation is that the school debate in Great Britain centers on the manner of detecting individual aptitudes.
5. Preservation of the *élite* is part of maintaining a demarcation from the rest of the population. This entails developing ties of solidarity with agents able to protect them from weaknesses with regard to the rest of society.
6. The types of education and the selection of students in terms of their social destinations are relatively differentiated and final. Students' social aspirations tend to correspond to their real social opportunities.
7. The society tends to value esthetic, literary or intellectual capacities.
8. Education is seen as having an intrinsic value.<sup>22</sup>

*Contest* mobility through education presents the following main characteristics:

1. Allocation of social status can be compared to a competitive sporting event. The qualities most appreciated are those that serve competition. They are not defined *a priori*:

The most satisfactory outcome is not necessarily a victory of the most able, but of the most deserving [...] victory by a person of moderate intelligence accomplished through the use of common sense, craft, enterprise, daring and successful risk-taking is more appreciated than victory of the most intelligent or the best educated.

- 21 Turner notes that social mobility is certainly greater in this system, but that it has the disadvantage, with respect to the contest system, of reducing the opportunities of upward mobility for those not selected *a priori*.
- 22 In this system, part-time work for students is regarded as a waste of time and scholarships tend to cover their financial needs.



2. Selection is delayed as long as possible so as to give individuals the best opportunity of showing they can win the competition.
3. Chosen ones' credentials are awarded by society and can in principle be identified without any special training (material possessions, popularity, know-how, etc.).
4. Social control, i.e. acceptance of the norm is guaranteed by formal and permanent open access to elite status.<sup>23</sup> One sign of this collective orientation is the fact that the school debate centers on the best way to motivate individuals.
5. The position occupied by the elite is insecure. The power of discrimination of the chosen ones is rooted in society.
6. In principle students are not strictly separated according to their scholastic level, and channels are kept open between courses of study. Integration and shared school experience are stressed. Students' aspirations tend to be at odds with their real opportunities.
7. The level of material consumption, the most visible attribute of the elite, tends to be valued in the society.
8. Education is not seen as having an intrinsic value. The primary objective is to keep all individuals in the running as long as possible.<sup>24</sup> The practical interest of an education is valued. Beyond basic education, the curricula tend to be essentially vocational. Scholastic skills need to be completed by proof of skills in practical living.<sup>25</sup>

Turner's ideal-types characterize two poles located at opposite ends of a continuum of possible models. The ways in which the American and British school systems actually function, however, reveal an interplay of the two models. The growing importance of higher education as a prerequisite for employment has introduced a form of sponsorship into the American contest system, Turner writes. Thus sponsorship is institutionalized even more clearly, but locally, by the selection process for entry to the major private colleges and universities. The tracking system, used or not depending on the school district, is another form of sponsorship in American education. Most districts practice tracking

- 23 The idea that greater chances of ascending mobility are a major factor in the stability of democracy in America comes from Alexis de Tocqueville.
- 24 In reality, Turner notes, the drop-out rate in the advanced stages of schooling is higher in the contest system.
- 25 This system tends to look favorably on students working part time.

according to academic ability, sometimes starting in the first grade, more often in junior high school. In the 1960s, special sections for the academic élite were created within the academic tracks. Students in these sections take courses satisfying the admissions criteria, generally unfamiliar to the students and their families, of the most selective colleges.<sup>26</sup> Furthermore, today the sponsorship model no longer describes the operation of the British school system before the end of secondary school and entry into higher education because of the expansion of schooling and the development of comprehensive schools.<sup>27</sup>

The interplay of the features of Turner's ideal-types is explained by the very nature of ideal-types, which are no more than a projection of reality onto a specific conceptual plane. In the case in point, they express an inherent limitation of Turner's typology. The modes of social selection associated with sponsorship and contest are comparable to Parson's variable that opposes qualities to performances as criteria of eligibility in the social system. Contest is connected with achievement, i.e. with conquest of social status. Likewise, sponsorship is connected with ascription of status in virtue of criteria of quality having nothing to do here with family ties. However with these opposites, Turner's typology associates the presence or absence of an intrinsic value seen in education. Yet Parson's second variable, "particularism vs universalism", is of no help in understanding this role. The absence of any inherent role characteristic of education in the contest model can be associated with universalistically oriented educational values only by adopting a particular doctrinal bias, such as that of Pragmatism.

Contest and sponsorship principles tend to refer each to one of the two following problematics: the criteria for allocating social status, on the one hand, and the role assigned to formal education, on the other. Generally speaking, contest is associated with open access to the different social statuses. It reflects an action dynamic that springs from the individual. Sponsorship, on the other hand, is more specifically associated

26 Cf. A. G. Powell, E. Farrar and D. K. Cohen, *The Shopping Mall High School, Winners and Losers in the Educational Marketplace*, Boston, Houghton Mifflin Company, 1985, p. 119.

27 Cf. H. P. Morgan, "Sponsored and Contest Mobility Revisited: An Examination of Britain and the USA today", *Oxford Review of Education*, vol. 16, n° 1, 1990, pp. 39-54.

with the intrinsic importance given to the types of teaching ensured by formal education, or by certain kinds of education in particular. It reflects an action dynamic that springs in large part from outside the individual. The requirements imposed by the structured and cumulative transmission of knowledge justify, from the standpoint of sponsorship, the importance given to educational achievement or potential achievement in getting into prestigious establishments, tracks, sections or simply courses. For these reasons, the contest and the sponsorship models are not really opposed, rather they interact in all educational systems in the advanced industrial societies in accordance with:

1. the individual's share of responsibility in constructing his destiny and, in this respect, his right to self-fulfillment at any time and
2. the role played by education in the individual's opportunities for self-fulfillment.

## Modernization theory and allocation of social status<sup>28</sup>

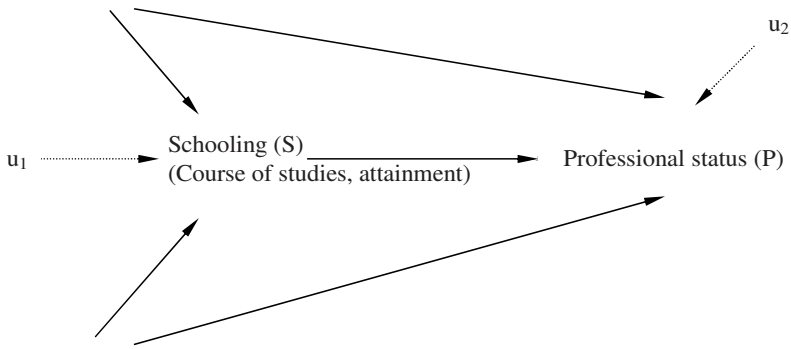
### *Methodological preamble*

Countless studies have been devoted to analysis of the factors explaining achieved social status. Among the various methods used, "causal analysis" aims to test the adequacy of the theoretical models specifying "causal" links between variables. The models in question are based on systems of equations that express the supposed links between the variables retained. In particular, the influence of the different factors affecting individuals' social status can be either direct (family social status can, all other things being equal, influence individual professional careers) or indirect (family social status can influence the social status attained in particular by investing in education). Figure 5 roughly depicts the representation of the action of the factors involved.

28 P.M. Blau and O.D. Duncan, *The American Occupational Structure*, New York, Wiley, 1967.

Figure 5. General diagram of the causal relations involved in processes of social mobility

Individual characteristics (I)  
(aptitudes, personality, etc.)



Family characteristics (F)  
(economic, cultural and other parameters)

The action of the factors involved can be translated into measurable statistics using a system of equations in which, for example and in virtue of some simplifying hypotheses, the effects of the variables in the model are held to be linear and additive.<sup>29</sup> In a system of this kind, certain variables are thus linear functions of others. The remaining variables are exogenous to the system. They can be correlated with each other but the explanation of these correlations is not regarded as problematic.<sup>30</sup>

Let us take the system of equations corresponding to Figure 5.

$$1) S = x_1I + y_1F + u_1$$

$$2) O = x_2I + y_2F + z_2S + u_2$$

where I, which represents a set of individual traits, and F, which represents a set of family background traits, are exogenous variables. School-

29 On these questions, see O. D. Duncan, "Path Analysis: Sociological examples", *The American Journal of Sociology*, vol. 72, n° 1, 1966, pp. 1-16; L. R. James, S. A. Mulaik and J.-M. Brett, *Causal Analysis, Assumptions, Models and Data*, Beverly Hills, Sage Publications, 1982.

30 The non-analyzed correlations between variables that do not depend on the others in the system are shown by double arrows in the diagrams, with a curved line.

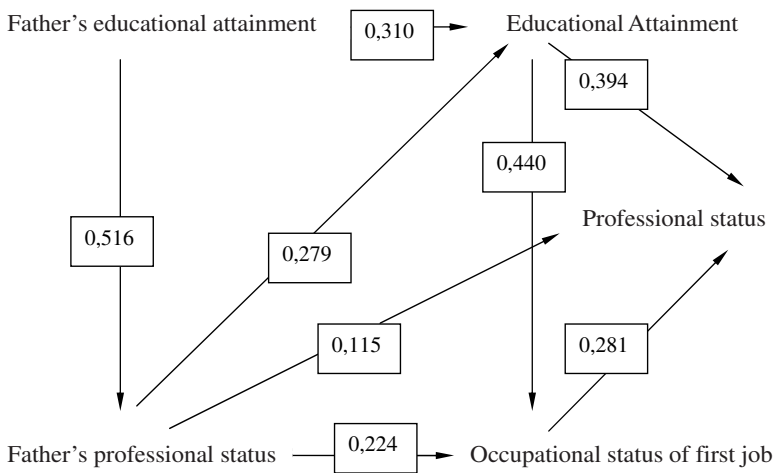
ing (S) is determined by factors depending on family background (F) and individual characteristics (I). Occupational status (O) is a function of schooling (S), family background (F) and individual characteristics (I). The terms  $u_1$  and  $u_2$  represent the actions of multiple implicit (not explicitly introduced) factors, whose effects are assumed to be random.

An important remark needs to be made here, which applies in general to the delicate problem of getting from the observation of correlations to the attribution of causations. The possible causes not included in the analysis are assumed not to be correlated with those explicitly included. For instance, whenever a non-measured factor “A” might have a positive causal effect on both explanatory variables and explained variables, characterizing for example the person’s schooling (S) and occupational status (O), any evaluation of the strength of the links between the variables involved would be biased. In effect, the strength of these links is evaluated on the basis of the co-variations of the variables. In the present case, part of the causal influence of (A) on (O) would be attributed to (S).

The notion of “cause” and “influence” in this type of explanatory framework are specifically linked to the causal model proposed. Causal effects as such are not measured; all that is measured is the extent of covariation between variables. One of the first examples of this type of model in the area of social mobility was presented by Peter Blau and Otis Duncan.

Blau’s and Duncan’s analyses are based on data gathered from a Bureau of Census (1962) national panel of 20,000 individuals. In the framework of the analytical method used, hypotheses were constructed about the causal relations between the variables retained. The empirical data made it possible to evaluate the influence of the causal variables on the other variables in the model. This influence can be broken down into direct and indirect effects, as shown in Figure 6.

Figure 6. Model for evaluating the influence of different variables in social mobility in the United States in 1962



Source: Blau and Duncan, *The American Occupational Structure*, p. 170.

Blau's and Duncan's principal findings concerning the relationship between social origin, educational attainment and occupational status are as follows:

1. Educational attainment has the strongest direct effect on occupational status (influences measured by the path coefficient = 0.394). Taking into account the effect of educational attainment on social status at the beginning of one's career, this effect is:  $0.394 + 0.440 * 0.281 = 0.518$ .
2. Social origins have a strong influence on occupational status, but principally through educational attainment.
  - Father's influence (educational attainment + social status) on son's educational attainment is:  $0.310 + 0.279 = 0.589$ .
  - Father's influence on occupational status through educational attainment is:  $0.589 * (0.394 + 0.440 * 0.281) = 0.304$ .
  - Father's influence on occupational status independently of educational attainment is  $0.115 + 0.281 = 0.18$ .
3. Social origins and educational attainment account for only half of the variance in occupational status ( $0.394 + 0.115 = 0.509$ ). Therefore the influence on the occupational status of factors independent

of social origins and educational attainment is important and increases over the career. This is summed up principally by the influence of the past career on the subsequent career.

4. Social mobility is relatively stable.

The authors interpret these findings on the role of educational attainment in occupational status using the idea of the increasing universalism characteristic of industrial societies. Social differentiation weakens the particularistic values of social groups. Increasingly objective criteria of evaluation are used; they explain, in all spheres of life, and replace the particularistic criteria of the different social groups. Efficiency standards are applied to performance of professional tasks and selection in the job market. For these reasons, the growing importance of universalism has serious repercussions on the stratification system. A person's achieved status, what he has achieved according to certain objective criteria, becomes more important than his ascribed status, "what he is" in the sense of the family he comes from. That does not mean that family background no longer influences careers. It implies that a higher social status cannot be inherited directly; it must be legitimized by socially recognized present success. Henceforth social status is transmitted through socially controlled educational attainment.

Furthermore, according to Blau and Duncan, industrial society governed by universalistic principles produces the structural principles that both generate a high degree of social mobility and ensure that this mobility is relatively stable. The relative stability of this mobility can be attributed in particular to increased satisfaction on the part of the social actors due to open competition for status attainment. Emphasis on equal opportunities makes status distinctions less important in themselves because they are accessible to everyone. At the same time there is a change in deeply held personal aspirations, as described by Parsons in the case of American society. While America has no hereditary aristocracy, social distinctions are no less present. These are mediated by differences in resources, which are openly displayed. They are expressed through lifestyles. Consumer goods are status symbols. The universalistic tendency of the criteria for allocating social status, the authors go on to say, reflects concern with social effectiveness, not social justice.

The importance given by Blau and Duncan to the rise of universalistic values in explaining the role played by educational attainment in

occupational status is nevertheless at odds with observations in comparable conditions of mobility in many countries where universalistic values are assumed to be less important.



## II. Impact of social variables on academic achievement

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### Social- vs school-factor effects on individual achievement: *The Coleman Report*<sup>1</sup>

The *Coleman Report*, drawn up in response to a mandate of the 1964 Civil Rights Act to the Commissioner of Education, was meant to answer two main questions:

1. What is the extent of inequality of opportunity among racial, ethnic and social groups?
2. To what main aspects of the educational system is this inequality due?

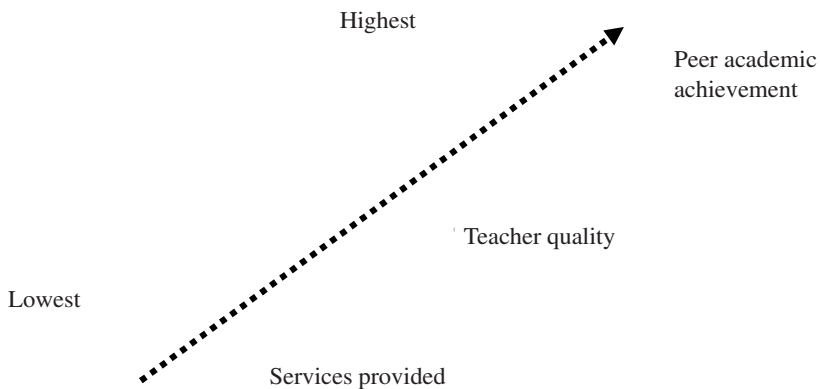
Three types of inequality were identified as affecting the impact of differences in schools on academic achievement:

- community inputs into the school (per-pupil expenditure, number of pupils per class, presence of a library, teacher quality);
- student-body characteristics;
- intangible school characteristics (climate, teachers' aspirations for the students, students' interest in learning, etc.).

The relative importance of the main factors identified is shown in Figure 7.

1 J.S. Coleman et al., *Equality of Educational Opportunity*, Washington DC, U. S. Government, 1966; J.S. Coleman, *Equality and Achievement in Education*, San Francisco, Westview Press, 1990.

Figure 7. Relative importance of certain differences between schools in student achievement according to the *Coleman Report*



The main conclusion of the report is that inequality of educational opportunity depends not so much on the disparity of school resources and services as on the little impact of schooling experience on student performance in American schools.

### *The Report*

The *Coleman Report* is based on the findings of the *Office of Education Survey of Equality of Educational Opportunity*, a national survey carried out on a sample of 645,000 students representative of the general American student population. The subjects of the survey came from over 4,000 schools and five different grade levels, ranging from elementary through secondary school (grades 1, 3, 6, 9, 12). The questionnaires, administered in September and October 1965, provide data on the schools, the teachers and the students (including in particular tests of verbal and mathematical ability, and general culture elements).

The report's main conclusions are based on analysis of the variance in individual achievement between and within schools according to students' racial and ethnic backgrounds.

School-to-school variance in achievement constitutes upper limits of the differential effect of school variables on student achievement.

The factors identified as influencing school-to-school variations in achievement are:

- differences in school factors affecting achievement
- differences in student populations (family background, students' educational level and aptitudes)
- differences in the influence of students' socioeconomic environment, with the exception of home environment.

The factors identified as influencing within-school variations in achievement are:

- differences in individual student's aptitudes and capacities
- differences in home backgrounds within the same school
- differences in schooling experience within the same school (teachers, curriculum, etc.)
- differences in influence of socioeconomic environment according to the types of students.

The effect of school factors on within-school variations cannot be analyzed from the survey because there is little data on individual schooling experience.

For each group of students studied (race, ethnic group, etc.), the total variations in test scores (the analyses are based on verbal-test scores) can be broken down into two parts:

- one related to the variations in individual student scores compared with the average scores of the group to which the student belongs (within-school variance);
- the other related to the variations in the average scores of the groups considered in a school compared with the average score of these groups across the state or the nation (school-to-school variations).

Table 3 shows the percentage of the total variance, by group, in individual verbal-test scores due to school-to-school variance in these scores. This percentage ranges from 5 to 35%, depending on the racial and ethnic group, and on the grade level.

Table 3. Percentage of total variance in individual verbal scores based on differences between schools

	<i>Grade</i>				
	12	9	6	3	1
Mexican-Americans	20.20	15.87	28.18	24.35	23.22
Puerto Ricans	22.35	21.00	31.30	26.65	16.74
American Indians	30.97	24.44	30.29	37.92	19.29
Asian-Americans	5.07	5.64	22.47	16.25	9.54
Blacks (South)	22.54	20.17	22.64	34.68	23.21
Blacks (North)	10.92	12.67	13.89	19.47	10.63
Whites (South)	10.11	9.13	11.05	17.73	18.64
Whites (North)	7.84	8.69	10.32	11.42	11.07

Source: J. S. Coleman et al., *Equality of Educational Opportunity*, p. 296.

School-to-school variations in achievement turn out to be much lower than individual variations within the schools in all grades and for all groups studied.

Another look at the findings reveals that, whereas the tests were given shortly after the start of the school year, there were already large discrepancies in student achievement as early as the first grade. A major portion of these differences is therefore not the effect of school-to-school variations themselves, but of the differences between the student bodies of these schools. Moreover, differences between schools seem to have a slightly greater effect on the results of minority students.

These analyses lead the report's authors to claim that the primary finding of the study is that schools are remarkably similar in the impact they have on student achievement. Two other important ideas that emerge are: the high degree of school segregation and the greater sensitivity of minority children to school quality.

The report reaches the following conclusions

– *School-to-school variations*

1. For each group in the survey, by far the greatest portion of the variations in individual achievement stems from differences in achievement within the school and not between schools.

2. Differences in achievement from school to school show up from grade one. They are due in large part to factors not controlled by the schools.
3. School-to-school differences tend to have the strongest impact on lower-achieving groups.

– *Influence of home-background factors*

4. Between 10 and 25% of the variance in differences in individual achievement can be attributed to the home-background factors that are analyzed.
5. Objective home conditions (neighborhood, parents' educational attainment, presence of elements of comfort and culture) explain the greatest share of the variance in achievement that can be attributed to home background, especially in the lower grades.
6. Subjective home conditions (parents' interest in and aspirations for their children's success) do not have the same relation with individual achievement in all groups surveyed. Moreover the proportion of the variance in achievement they account for increases with the grade in school. It is relatively higher for white and Asian-American children than for children from the other groups. Nevertheless, for any given socioeconomic level, black parents take more interest in their children's studies than white parents. One explanation is that minority group parents are less apt to translate their interest in their children's studies into concrete support for academic achievement.

– *Student-body characteristics*

7. The characteristics of the other students in the school, mainly their academic achievement and their aspirations, account for a much greater amount of the variance in individual achievement than any attribute of the school and somewhat more than teacher's characteristics.
8. The results of the highest-achieving groups – whites and Asian-Americans – are the least sensitive to student-body characteristics.
9. The portion of variance in individual achievement accounted for by student-body characteristics tends to be greater in the higher grades than in the lower ones.

The authors of the report further note that it seems that schools have an effect depending on average student home background, which operates

mainly through average student academic achievement. In other words, the effect of schools seems to operate mainly through variables that the schools do not control.

– *Curricula and services*

10. School-to-school differences in services provided (libraries, laboratories, extra-curricular activities, school size, vocational counselors) and in curricula (presence of an accelerated program, tracking, polyvalence, etc.) do not in themselves have a significant effect on individual achievement.

– *Teaching staff*

11. Variations in the average characteristics of the teaching staff account for most of the variance in individual achievement connected with school factors, with the exception of student-body characteristics.
12. The effect of variations in the average characteristics of the teaching staff is slight in the lower grades and significant in the highest grades.
13. The students whose achievement is most sensitive to the average characteristics of the teaching staff are those who display an overall sensitivity to school characteristics.
14. The teacher characteristics that have the greatest impact on student achievement are teacher's academic level (teacher's own educational level and that of the teacher's family, using that of the mother as the reference), and teacher's score on a vocabulary test.

– *Student attitudes*

15. Variables in student attitudes (towards their studies, self-concept with respect to their studies and academic success, sense of control of the environment)<sup>2</sup> most account for academic achievement (compared with family background and school variables).

2 This variable is based on the answers to three questions: "Good luck is more important than hard work for success"; "Every time I try to get ahead, something or someone stops me"; "People like me don't have much of a chance to be successful in life".

16. For all groups, sense of control of the environment shows the strongest correlation with achievement in the early years of schooling. At the end of secondary school (12th grade), for white and Asian-American students, self-concept is the variable that correlates most strongly with high scores on verbal tests; for all other minority students, sense of control of the environment correlates the most strongly with achievement.
17. Student's self-concept and their sense of control of the environment are the variables showing the most significant correlation with parents' aspirations for their children.

The main conclusion of the report is:

Taking all these results together, one implication stands out: schools bring little to bear on a child's achievement that is independent of his background and general social context; and this very lack of an independent effect means that the inequalities imposed on children by their home, neighborhood, and peer environment are carried along to become the inequalities with which they confront life at the end of school. For equality of educational opportunity through the schools must imply a strong effect of schools that is independent of the child's immediate social environment, and that strong independent effect is not present in American schools.<sup>3</sup>

### *Criticisms*

The *Coleman Report* had a resounding impact on educational research.<sup>4</sup> The findings were abundantly analyzed and criticized from both a methodological and a theoretical standpoint. We will retain only the main criticisms and comments concerning the analysis and interpretation of the effects of school-related factors on student achievement.

#### *a) Concerning the correlation of school factors with home-background variables*

- Verbal ability acts as the principle reference measure for student achievement. Yet, in light of development-psychology findings,

3 J.S. Coleman et al., *Equality of Educational Opportunity*, p. 325; J.S. Coleman, *Equality and Achievement*, p. 119.

4 Concerning the controversy aroused by the report, the reader can consult, e.g. M. Cherkaoui, *Les Paradoxes de la réussite scolaire. Sociologie comparée des systèmes d'enseignement*, Paris, Presses Universitaires de France, 1979, pp. 45–78. See also *Harvard Educational Review*, vol. 38, n° 1, 1968; and J.S. Coleman, *Equality and Achievement in Education*.

this variable is more dependent on family background than the other cognitive-development variables.

- In many analyses of the report, controlling family-background variables provides an estimation of the effects of school factors independent of the variables controlled for. This control eliminates the effects of those school factors that show a flexible correlation with sociocultural background, and which are potentially vehicles of equalization of opportunity. These are, for example, the effects of school factors having to do with family choices that influence the quality of the schooling (choice of establishment linked with neighborhood choice), choice of curricula and subject matters, etc.

*b) Concerning estimation of the effects of school factors within the school*

- The effects of school programs on student achievement are not measured. These should in particular be defined in reference to the subjects taught and not in reference to variables of lesser importance included in the survey (variables having to do with the kinds of curricula available and aggregated with school quality).
- Indirectly, the survey findings show the importance of teaching quality on student achievement. The school factors having the most significant effects, in particular on the success of minority children, are first of all peer-group educational level, or student-body educational proficiency in Coleman's terms, and secondly, teachers' level.

*c) Concerning the overall extent of the effects of school factors on student achievement*

- The fact that differences in student achievement within the same school are in general greater than differences in achievement from one school to another shows simply that the impact of differences between schools is in general less than the impact of differences in individual students' ability to profit from the instruction. In other words, acting on the quality of instruction does not necessarily make all students the same, but it can have a decisive impact on the levels attained by the students.<sup>5</sup>

5 Cf. M. Rutter, *Fifteen Thousand Hours, Secondary Schools and their Effects on Children*, Cambridge MA, Harvard University Press, 1979, p. 7.



- The potential effect of schools on student success is minimized. The analyses in the *Coleman Report* make very little distinction between types of schools (based on such variables as services, extra-curricular activities, tracking or the presence of an accelerated curriculum, etc.). In view of later analyses, different variables would reveal more important school characteristics with regard to the impact of school factors on student performance (some of these analyses are presented below).

The survey was also confined to a national area and a given time period, it used a sample of schools that were very likely to be relatively homogeneous, therefore the more general potential impact of institutional characteristics was not measured.

The primary effect of the *Coleman Report* on public opinion was to fuel a wave of pessimism about the potential effect of schools on equalizing educational opportunity. In the early 1980s, a series of important studies,<sup>6</sup> some of which, carried out by Coleman himself, opposed this interpretation of the *Coleman Report* findings as an abusive generalization. The new studies compared different types of schools, nationally and internationally, in an attempt to determine to what extent and in what conditions schools can become effective tools for equalizing educational opportunity.

## Determinism vs indeterminism of individual social achievement

The articles in *Inequality. A Reassessment of the Effect of Family and Schooling in America*, edited by Christopher Jencks,<sup>7</sup> were produced using data from a number of sources, but in particular the findings of the survey on which the *Coleman Report* was based. Counter to socio-

6 M. Rutter, *Fifteen Thousand Hours*; M. Cherkaoui, *Les Paradoxes de la réussite scolaire*; A. H. Halsey, A. F. Heath, and J. M. Ridge, *Origins and Destinations. Family, Class, and Education in Modern Britain*, Oxford, Clarendon Press, 1980; J. S. Coleman, T. Hoffer and S. Kilgore, *High School Achievement*, New York, Basic Books, 1982.

7 C. Jencks, *Inequality. A Reassessment of the Effect of Family and Schooling in America*, New York, Basic Books, 1972.

logical interpretations in terms of social determinisms, these analyses show the differences in individual social achievement within each social group studied. As the authors state in Chapter One:

The reader should be warned that we are primarily concerned with inequality between individuals, not inequality between groups. This accounts for much of the discrepancy between our conclusions and those of others who have examined the same data. There is always far more inequality between individuals than between groups. It follows that when we compare the degree of inequality between groups to the degree of inequality between individuals, inequality between groups often seems relatively unimportant. It seems quite shocking, for example, that white workers earn 50 percent more than black workers. But we are even more disturbed by the fact that the best-paid fifth of all white workers earn 600 percent more than the worst-paid fifth. From this standpoint, racial inequality looks almost insignificant. Our decision to emphasize individual rather than groups differences was made on political grounds. We would, of course, like to see a society in which everyone's opportunities for advancement were equal. But we are far more interested in a society where the extremes of wealth and poverty are entirely eliminated than in a society where they are merely uncorrelated with skin color, economic origins, sex and other such traits.<sup>8</sup>

According to this viewpoint, the analyses show that correlation between one kind of inequality (aptitude, educational attainment, occupational status, income, job satisfaction) and another is on the whole fairly weak. Thus the authors advance the following conclusions:

- Occupational status is strongly correlated with educational attainment. But there is a great deal of variation between the status of individuals with exactly the same level of academic attainment, and these differences are hard to explain in terms of identifiable features.
- The role of family background in socioeconomic status is largely mediated by educational attainment. But family background influences only in part educational attainment, which in turn influences only in part occupational status. As a consequence, family background has only a modest influence on achieved socioeconomic status.
- Differences in individual incomes are even harder to explain than differences in occupational status. The overall effect of educational attainment on income is scant. Family background and skills have

8 C. Jencks, *Inequality*, p. 14.

some direct effects on income over the individual's career, but their global impact remains moderate. General aptitude levels as measured by IQ tests also have relatively little influence on income.

In sum, economic success would seem to depend on different kinds of opportunities and acquired professional skills that have little to do with family background, schooling and IQ scores. Jencks claims that "there is nearly as much income variation among men who come from similar families, have similar credentials, and have similar test scores, as among men in general."<sup>9</sup> He concludes that equalization of educational opportunities has only a slight effect on the equality of individuals, and especially on the reduction of economic disparities. Inequality of educational opportunity is not the only determinant of social inequality. The growing equality of educational attainment, for example, has not reduced economic inequality in the United States since the Second World War. Equalization of schools' effectiveness has only a small impact on reducing cognitive inequalities. A compensatory educational policy would probably not have a major effect on inequalities between individuals arising later in life. In fact, school reformers actually have very little influence over the factors affecting students. According to Jencks, the products of education cannot be viewed in the same way as business products because the effects of educational systems depend mainly on student characteristics. It would be pointless to assess schools from the standpoint of their long-term effects on students and preferable to evaluate them with regard to their direct effects on teachers and students, which are all highly variable:

Some schools are dull, depressing, even terrifying places, while others are lively, comfortable, and reassuring. If we think of school life as an end in itself rather than a means to some other end, such differences are enormously important. Eliminating these differences would not do much to make adults more equal, but it would do a great deal to make the quality of children's (and teachers') lives more equal.<sup>10</sup>

As Boudon<sup>11</sup> explains, because of the statistical tools they use (especially causal analysis or path analysis), Jencks, Blau and Duncan, and many

9 C. Jencks, *Inequality*, p. 254.

10 C. Jencks, *Inequality*, p. 256.

11 R. Boudon, "La Sociologie des inégalités dans l'impasse? En marge du livre de Christopher Jencks: *Inequality*", *Analyse & prévision*, t. XVII, 1974, pp. 83–95.

others, are led to include in their causality patterns variables defined exclusively at the individual level (social background, educational attainment, conformity to norms, socioeconomic status, etc.). In other words, as they are conducted, these analyses do not take into account variables defined at the level of institutional structures and society as a whole. Yet the connections studied are affected by these variables, which characterize job-market structure, educational structure, the expansion of schooling, etc. at a given point in time. When these variables are neglected, the investigations discover a large degree of indetermination, which is actually an artifact generated by the analytical methods used. The example of a society characterized by two social categories, “manual occupations” and “non-manual occupations” illustrates this idea.

Table 4. Table of social mobility in an imaginary society

		<i>Respondent's occupation</i>		
		Non-manual	Manual	Total
<i>Father's occupation</i>	Non-manual	300	0	300
	Manual	300	400	700
	Total	600	400	1000

Source: Boudon, “La Sociologie des inégalités dans l’impasse”, p. 91.

In the example illustrated by Table 4, the variable “father’s occupation” explains around thirty percent of the variance in son’s status. However, this high degree of independence measured between father’s status and that of the son is due to the change over time in the distribution of occupations, that is to the decrease in the proportion of manual jobs.

It is as though, within the limits imposed by changes in the occupational structure between the two generations, the social inheritance was as great as it could be: all respondents from higher social backgrounds, according to our table, achieved a higher social status. In other words, the influence of the father’s social status on that of the son is *not slight* but on the contrary *maximum*, given the constraints imposed by the changes in the socioprofessional structure.<sup>12</sup>

One of the reasons for the crisis of the social-mobility theory, according to Boudon, is that researchers tried to make it “factorial”, that is they tried

12 R. Boudon, “La Sociologie des inégalités dans l’impasse”, p. 91.

to identify mobility factors whose actions were seen as additive. Formally put: factors  $x, y, z, \dots$  have a positive or negative influence on social mobility. But the “factors” of mobility cannot be conceived as independent from each other. An interesting remedy for these methodological problems is to use the methods of systems analysis, which makes it possible to include the effects of structural constraints on individual actions.

## Impact of family decisions on scholastic attainment

The national survey conducted in France by the Institut National d'Études Démographiques looked at the academic attainment of children after leaving CM2 (10–11-year olds; it is followed by the *sixième*, or 11–12-year olds).<sup>13</sup> The survey made it possible in particular to analyze the influence of the socioeconomic status of the head of house on children's orientation.<sup>14</sup> It shows that the inequality of access to the *sixième* (and particularly in the *lycée*) in terms of social status results both from inequality of educational achievement and inequality of behavior: for the same educational achievement, the proportion of children of senior management executives is higher than that of children from working-class families.<sup>15</sup>

13 The sample was comprised of 17,461 pupils at the national level. The Paris sample (3,221 students) chosen at random (a sample stratified by grade, orientation and social origins) provided a representative sub-sample of 1,229 pupils.

14 As Paul Clerc explains in “La Famille et l'orientation scolaire au niveau de la sixième, Enquête de juin 1963 dans l'agglomération parisienne”, in A. Girard (ed.), “*Population*” et enseignement, Paris, Presses Universitaires de France, 1970, pp. 143–188, on leaving CM2, there are three options:

- a. a final class for pupils leaving school after their primary education
- b. the French 6th level (known as “*le sixième*” or “the sixth”) in a CEG (the first level of the Collège d'enseignement général, which is a secondary school for pupils aged 11–15 who have not been admitted or have not chosen to go to the *lycée*) and assimilated private establishments
- c. the French *sixième* in a *lycée* (a secondary school providing preparation for the *baccalauréat* examination, for students 11–18 yrs, also open to students after completing a collège at age 15) and assimilated private establishments.

15 P. Clerc, “La Famille et l'orientation scolaire...”, p. 143.

As Table 5 shows, inequalities of orientation for the same level of educational achievement are greater for average students. Among the working-class children identified as average, 64% enter the *sixième*, as compared with 90% of children of senior managers. Furthermore, of the 64% of working-class children, only 6% enter a *sixième* in a *lycée* (which usually led to academic studies) and 58% in a CEG (“Collège d’Enseignement Général”, which usually led to technical or vocational studies); whereas, of the 90% of children of senior managers, 74% enter a *lycée* as compared with 26% who go into a CEG.

Table 5. Distribution of pupil orientation as a function of educational level and socioeconomic background (INED survey 1963)

	Common	Blue-collar workers	White-collar workers	Shop-keepers	Middle management	Senior management*
School assessment in CM2**						
Good	48	34	43	52	60	67
Average	29	34	31	29	21	23
Poor	23	32	26	19	19	10
Total	100	100	100	100	100	100
% entering <i>sixième</i> in October 1962						
in a <i>lycée</i>	29	12	22	36	36	65
In a CEG	43	46	46	41	44	28
Total	72	58	68	77	80	93
% entering <i>sixième</i>						
Good	96	93	94	98	96	100
Average	72	64	71	74	81	90
Poor	21	17	18	23	26	53
% entering a <i>lycée</i>						
Good	47	28	37	51	51	74
Average	19	6	13	31	22	52
Poor	5	1	4	5	3	35
% entering a CEG						
Good	49	65	57	47	45	26
Average	53	58	56	43	59	38
Poor	16	16	14	18	23	18

\* Including large-scale retailers, industrialists and the professions

\*\* In the national survey, each pupil was classified by the fifth-grade teacher in one of the 5 groups: excellent, good, average, mediocre, poor. When the two highest and the two lowest groups are merged, the findings group the pupils into three categories

\*\*\* Number of pupils entering the *sixième* for every 100 pupils coming out of 5th grade.

Source: P. Clerc, “La Famille et l’orientation scolaire...”, p. 144.

The analyses are guided by two specific considerations:

1. family factors involved in inequality of educational achievement
2. family factors involved in inequality of entrance into the *sixième* of children with same educational achievement.

The main findings of surveys taken at the parents' home, in a sub-sample of the survey in the Paris region, are as follows:

1. There is no direct link between parental supervision of children's homework and children's school achievement. Potential differences in the influence of parental supervision of homework are accounted for by the quality of parental involvement (depending on the family's material circumstances or cultural level).
  - 1a. Differences in parental income have no direct influence on children's academic achievement.
  - 1b. Parents' educational attainment, whether sanctioned by a diploma or not, correlates with children's educational success.
2. Social inequalities of achievement have less impact on academic attainment than social inequalities of behavior (the calculations were done using Table 1).

We observe that 59% of working-class children enter the *sixième* (12% in a *lycée* and 46% in a CEG). It is possible to calculate what the change in these children's educational attainment would be if they had the same academic success as children of senior managers or if the families had the same behaviors with regard to educational orientation according to their children's success:

- 2a. If working-class children had the same level of achievement as the children of senior managers, 79% of them would enter the *sixième* (20% in a *lycée* and 59% in a CEG).
- 2b. If, with the same rate of achievement, working-class families adopted the behavior of senior managers, 82% of working-class children would enter the *sixième* (54% in a *lycée* and 28% in a CEG).

At the time of entering the *sixième*, the greatest impact of differences in family behavior, compared with differences in children's academic achievement, comes from choice of the type of school. In particular, families are largely unaware of the differences between the kinds of

school (under half the families of *lycée* or CEG students express a difference). The different types of *collège* (11–15 years old) were fused by the creation in 1963 of Collèges d'Enseignement Secondaire (CES), which were at this time divided into tracks according to academic levels.

In addition, differences in students' educational attainment increase with the grade in school. With levels of achievement comparable to those of children of senior managers, 24% of working-class children would enter a *lycée*, compared with 18% in reality (whereas 64% of the children of senior managers enter a *lycée*). If, keeping their actual levels of achievement, these working-class families adopted the behavior of senior management families with regard to schooling, 58% of their children would enter a *lycée*.

## Modeling inequality of opportunity processes

The model developed by Raymond Boudon in *Education, Opportunity and Social Inequality*,<sup>16</sup> uses methods borrowed from systems analysis. This model makes it possible to account for the apparent effects of the “reproduction” of social status without calling into question social determinism. The model lets Boudon simulate, first, the distribution of educational attainment as a function of social background and educational achievement, and, second, social destinations on the basis of educational attainment.

He shows that:

- social inequalities in the transmission of culture are not the main causes of inequality of opportunity;
- lessening schooling inequalities does not necessarily lead to weakening the link between social origin and social destination.

First of all, the model makes it possible to analyze the respective effects of decisions (which bring into play the actors' situations and therefore positions and dispositions: economic, education, cultural levels) and

16 R. Boudon, (1973), *Education, Opportunity, and Social Inequality: Changing Prospects in Western Society*, New York, John Wiley & Sons, 1974, translated from the French *L'Inégalité des chances*, Paris, A. Colin, 1973.



relative achievements (defined intrinsically, i.e. with respect to a stable reference and assumed to show up in primary school) on access to the highest levels of the educational ladder. The allocation of educational status at each stage in the school career depends on educational achievement as a function of social background, on the one hand, and on scholastic orientation as a function of educational achievement and social background, on the other. The structure of interaction between these three variables,<sup>17</sup> which stems from the difference in decisional situations as a function of social background and educational achievement, accounts for the effect of social origins on inequality of individual academic attainment. The model thus enables us to take the full measure of Pitirim Sorokin's statement that the family, as an agency of orientation, contributes to the sorting of individuals. Indeed the differences in the decision-making situations act repeatedly and multiply their effects on the inequality of school careers. Whereas differences in academic success as a function of social background are no longer significant in the highest grades, owing in particular to the effects of these decision-making processes on the overselection of children from the most disadvantaged categories, the differences in decision-making situations as a function of social status continue to differentiate individuals' paths. One of the major results of the modeling of school careers is that educational achievement is not the principal cause of inequality of educational opportunity.

Secondly, allocation of social status is supposed to depend mainly on academic attainment. The results of this second part of the model are the effect of the discrepancy in the educational system and the occupational system evolution dynamics. All other things being equal, while the social structure (distribution of social status) changes less rapidly than the educational structure (distribution of schooling), the structure of opportunity attached to each academic level changes over time. And when the educational demand is driven principally by factors within the educational system, one should expect a more rapid change in the structure of the schooling system. One of the major outcomes of modeling social-status allocation is that augmentation of rates of schooling and the corresponding reduction of inequality of educational opportunity do not necessarily lead to a perceptible reduction in inequality of social opportunity.

17 Scholastic orientation as a function of aptitude varies with social background, as the analyses of Clerc have already shown.

The model goes as follows. Differences in relative student performance show up at an early age and are assumed to continue on from one grade to the next. The school system is assimilated to a series of forks in the school path at each of which students orient themselves towards higher education or not. For the purposes of the model, individuals are characterized by their educational achievement level (A1, A2 or A3) and by their socioeconomic status of origin (S1, S2 or S3). For those in S1, 60% have an achievement level of A1, 30% of A2 and 10% A3. For those in S2, 50% have an achievement level of A1, 30% A2 and 20% A3. For those in S3, 30% have an achievement level of A1, 40% A2 and 30% A3.<sup>18</sup> At each fork in the school system, there are two possible paths that correspond to unequally desirable expectations in terms of socioeconomic status. Rates of access to the higher path at each fork increase with social status and are less sensitive to educational achievement the higher the social status. The rates used are respectively 0.86, 0.75 and 0.65 for class S1 according to levels of achievement A1, A2 and A3; they are 0.70, 0.60 and 0.40 for S2; and 0.60, 0.40 and 0.20 for S3.

For each social category, according to academic success, there is a corresponding probability of leaving school at a fork ( $n + 1$ ) in the school system (which hypothetically contains 8 forks in all). This probability is equal to the probability of continuing at each of the first  $n$  stages and stopping at  $n + 1$ :

$$p^n \times (1-p) \text{ with } 0 < n < 7$$

The probability  $p_{n+1}$  of any given child in socioeconomic category 1 (distributed into the 3 academic levels) stopping at level  $n + 1$  is therefore:

$$p_{n+1} = 0,60 \times 0,85^n \times (1-0,85) + 0,30 \times 0,75^n \times (1-0,75) + 0,10 \times 0,65^n \times (1-0,65)$$

The inequality affecting educational decisions (effect of the interaction between origin, achievement and decisions) has a greater impact on

18 Boudon notes the restriction implied by this axiom. The stability of the distribution of the students within the decision-making space supposes that schools cannot change a student's relative level of achievement. This hypothesis nevertheless fits the findings of the empirical analyses that were carried out.

educational inequality than the inequality of achievement as a function of social origin. The first has multiplicative effects on inequality of opportunity measured as the rate of access to a specific level of education, whereas the second has simple effects. This finding appears in the calculation of the rate of access of individuals in S1 to the educational level (n+1) shown in detail above (in calculation of  $p_{n+1}$ ). While the rates corresponding to the distribution of individuals from this social background on the three levels of achievement are raised to the power of one in  $p_{n+1}$ , the rates corresponding to the results of the interaction between origin, achievement and educational decision are raised to the power of “n” in  $p_{n+1}$ . Thus, Boudon comments, the probability of finishing higher education for a student in S1 is equal to 0.1967, for a student in S2, 0.0340 and for a student in S3, 0.0053: students in the highest class are thirty-seven times more likely to obtain a graduate degree than those in the lowest class. For a given achievement level (e.g. A1, the highest), the probabilities are respectively 0.2725, 0.0576 and 0.0168, etc.

The model thus enables us to simulate the generation of unequal opportunities in schooling as it unfolds at each successive fork in the educational system.

From one period of time to the next, the increase in the opportunities for the survival of all of the children enrolled in school as a function of academic evaluation and socioeconomic status (probability of P at time  $t$ ) is expressed by the following function:

$$P_{t+1} = P_t + (1-P_t) \times a$$

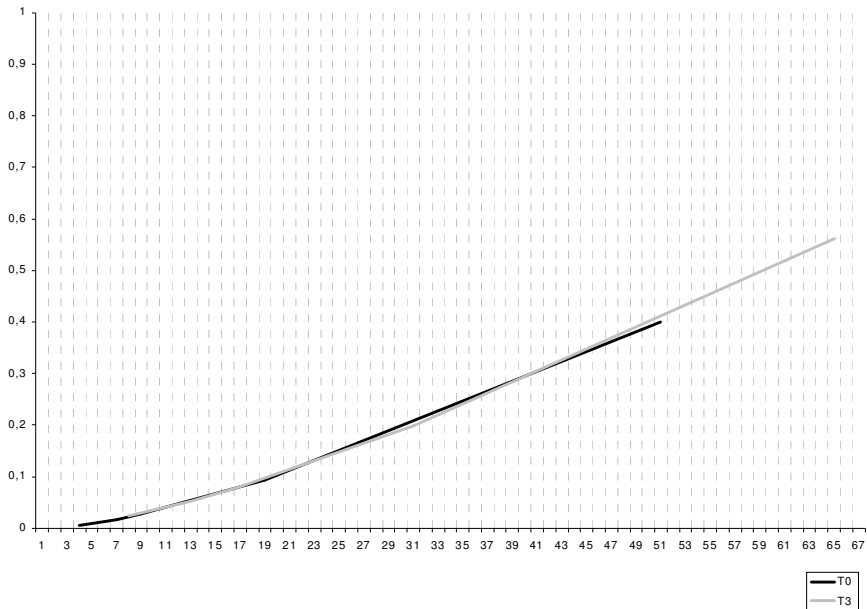
with  $0 < a < 1$ :  $a = 0.1$  in the model

Dynamic analysis of the model makes it possible to obtain the same results as the empirical observations.

For a clearer understanding of what happens, it is interesting to study the evolution of schooling opportunity in a fixed reference mark of relative educational opportunity (like the successive centiles of the school population). In such a framework we note that the various rates of access to the same levels of the distribution of educational opportunity do not vary perceptibly from one period to another, and this provides the key to the evolutions illustrated by the model. Diagrams based on known values and simply extrapolating the unknown values of these rates illustrate this

in class C3 with the periods t0 and t3 distinguished in the model). While the distribution of the school population in the different formal levels of the educative system evolves strongly, expressing a perceptible fall in the inequality of opportunity, alternatively the distributions of individuals from the different categories in a fixed reference mark of relative opportunities (like centiles) shows only very slight variation.

Graph 3. Access rates to the top centiles of the school population in periods t0 and t3, extrapolated values – Cat. C3



Source: *Education, Opportunity, and Social Inequality*, Table 6.2

In the second stage of the simulation of the processes of accessing a socioeconomic status, individuals are characterized by their social status of origin and their educational attainment. In this phase, they follow an almost meritocratic process of status allocation<sup>19</sup> within the stratification system. But this process depends on parameters inherent in the social and educational structures.

19 Results are sensibly the same with a *dominance system* favoring, within each group with a given academic level, those with the highest social origin.

In virtue of the advance educational expansion gains on changes in the occupational system, one effect of this expansion is to reduce the social returns of the academic levels in which disadvantaged children are most heavily represented. Educational expansion does not diminish inequality of social opportunity overall and in some respects even increases it.

The relative stability of the distribution of intrinsic educational opportunities (distributions of educational opportunities in a fixed reference mark of relative opportunities such as centiles) has a fundamental explanatory role. Note that it is not explicitly stated in Boudon's presentation of the model. In a near-meritocratic system, this quasi-stability of intrinsic educational opportunities results in a quasi-stability of intrinsic social opportunities (distributions of social opportunities in a fixed reference mark of relative opportunities). From there, the shift in educational distribution (rate of access to the different levels of the system) leads to a lowering of inequality of educational opportunity that is not linked to a lowering of the inequality of social opportunity if the social structure remains unchanged. Alternatively, even if intrinsic educational opportunities remain stable, a shift in the social structure may lead to a lowering of the inequality of social opportunities. Boudon shows the independence of the two phenomena (insofar as the shift in the educational structure has an endogenous dynamic and is not associated with a shift in the social structure). And that is what the available international data show: the considerable rise in rates of school enrolment and the democratization of educational opportunities characteristic of liberal industrial societies appear incapable of modifying the social-mobility structure. Insofar as differences can be observed between countries in terms of mobility, they result from differences in the changes characterizing the social structure rather than from the development or degree of democratization of the school system.

Boudon's model accounts for the effect of basic processes underlying the impact of factors outside schools on inequality of opportunity. It explains why:

- democratization of schooling through a lowering of academic standards does not perceptibly reduce educational inequality;
- reduction of educational inequality through expansion of schooling does not necessarily lead to a weaker link between social background and social destinations.

Educational systems are easier to change than systems of stratification. But, according to Boudon, it is society rather than the schools that is to blame for unequal educational opportunities. A policy of reducing socioeconomic inequality would therefore probably be the most effective way to reduce inequality of educational opportunity, since the latter appears to be due principally to the effects of social stratification, which accounts for a great part of the differences in the decisional situations.

A model takes from reality only those elements that are likely to affect the dynamics of the phenomenon under study. However the parameters involved can change with the institutional variables. With regard to the foregoing findings, research should therefore look into, first, the variations in social inequality of decisions about schooling according to school context and, second, the variations in social inequality of scholastic achievements according to school context. These problems were more particularly the object of major analyses conducted at the start of the 1980s.

### III. Impact of institutional variables on academic achievement

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#### Impact of institutional practices of orientation on educational attainment

Philippe Perrenoud<sup>1</sup> studies the problem of institutional factors of social inequality in orientation. He shows in particular that the match between students' orientation and previous success varies from one educational system to the next. His analysis is based on comparison of two types of school organization, the French system and the system used in Geneva. The data on the Geneva system stem from a sample of 2,078 students surveyed in 1967. The data on the French system come from the Paris sub-sample of the survey conducted by the Institut National d'Études Démographiques on pupils' educational orientation at the end of the fifth grade (10–11 year olds; the French cours moyen deux, or CM2) in 1961–62, some of the results of which, as analyzed by Clerc, were discussed in the preceding chapter.

The main difference between the two educational systems in regard to orientation rested on the agency making the choice of orientation.<sup>2</sup> In the French system, the parents submitted their child's application to a *lycée* or a Collège d'Enseignement Général (CEG), and the institution

1 P. Perrenoud, *Stratification socioculturelle et réussite scolaire, les défaillances de l'explication causale*, Geneva, Droz, 1970.

2 Other important differences noted by Perrenoud are:

- the normal age of orientation was 11–12 yrs in France and 12–13 yrs in Geneva;
- the French orientation was much more selective: 29% of pupils entered the *lycée* as opposed to 43% that went into the equivalent sections (Latin and sciences) in Geneva; and 28% of pupils wound up in the terminal section in France, whereas 18% of the Geneva pupils entered an applied studies section;
- the institutional criteria in France for selection of parents' applications could differ from one school to the next, whereas in Geneva the criteria were uniform (See Perrenoud, *Stratification socioculturelle et réussite scolaire*, p. 45).

reacted to the application. In the Geneva system, children were oriented within a single school divided up into sections (Latin and sciences, general studies, applied studies): this is referred to as the Orientation Cycle. Their orientation depended on their earlier achievement, and the parents could react by accepting or by taking issue.

Table 6. Comparison of respective distributions by achievement level of children of managers and blue-collar workers in Geneva and the Paris region.

Academic level	Geneva		Paris	
	All	Difference managers – blue collar	All	Difference managers – blue collar
Good	41%	62%–28% = +34%	48%	67%–34% = +33%
Average	37%	30%–40% = -10%	29%	23%–34% = -11%
Poor	22%	8%–32% = -24%	23%	10%–32% = -22%
Total	100% (2,078)	100%–100%	100% (3,221)	100%–100%

Source: Perrenoud: *Stratification socioculturelle et réussite scolaire*, Table XIII, p. 49.

The data for the two countries are not entirely homogeneous. In particular, the family social-status and achievement variables cannot be completely superposed. The distribution of children's educational achievement by socioeconomic category of origin, at the end of the core curriculum, were nevertheless similar in the two countries, as Table 6 shows. In other words, the social inequalities of achievement at the end of the core curriculum were practically identical.

Now if we compare the actual orientations chosen by children of managers and blue-collar workers in the upper, middle and lower courses of study (Latin and sciences, general studies and applied studies for Geneva, and *lycée*, CEG and terminal section of primary schooling for the Paris region), it appears that the children's social inequalities of orientation were on the order of ten percent greater in France, as Table 7 shows.



Table 7. Comparison of respective orientations without controlling for academic level, of children of managers and blue-collar workers in Geneva and the Paris region.

Course of studies	<i>Geneva</i>		<i>Paris</i>	
	All	Difference managers – blue collar	All	Difference managers – blue collar
Upper LS/lycée	43%	70%–28% = +42%	29%	65%–12% = +53%
Middle G/CEG	39%	25%–44% = -19%	43%	28%–46% = -18%
Lower A/Terminal section	18%	5%–28% = -23%	28%	7%–42% = -35%
Total	100% (2,078)	100%–100%	100% (3,221)	100%–100%

Source: Perrenoud, *Stratification socioculturelle et réussite scolaire*, Table XIIIV, p. 50.

Comparing Tables 6 and 7, Perrenoud advances the following propositions:

1. Social inequalities of achievement at the end of the core curriculum are the same in the two educational systems.
2. Social inequalities of orientation are greater in France.
3. Social inequalities of orientation for the same level of achievement are greater in France.

To confirm statement 3, the children's educational attainment can be broken down into the product of the opportunities for attaining an achievement level according to social background and the opportunities for orientation towards a given course of studies as a function of achievement level and social background. Two hypothetical situations can be compared.

- educational attainment of the children if they all had the achievement levels of children of managers;
- educational attainment of the children if, for a given achievement level, their likelihood of accessing a given course of studies were the same as that of children of managers.

Table 8. Observed rates and simulated rates of entry into the Latin-sciences section of Geneva's Orientation Cycle and entry into the *sixième* in the Paris region (in %)

	Geneva			Paris				
	P	S	A	P	S	A		
Senior managers	70	70	=	70	65	65	=	65
Middle managers	49	63	>	57	36	40	<	62
White-collar workers	45	62	>	54	22	29	<	57
Trades, Shopkeepers	36	57	>	49	36	42	<	60
Skilled workers	31	59	>	42	12	20	<	54
Unskilled workers	21	52	>	34				
All	43	62	>	51	29	36	<	59

P: observe rate

S: rate calculated with success of senior managers' children

A: rate calculated with attitude of senior managers' children

Source: P. Perrenoud, *Stratification socioculturelle et réussite scolaire*, after Tables XVI, XVII, p. 53.

In Table 8, comparison of the simulations of pupils' hypothetical orientations in the Swiss and French systems shows that:

- social differences of achievement discriminate orientations more than social differences of orientation in the Geneva system;
- social differences of orientation discriminate orientation more than social differences of achievement in the French system.

The French system thus proved to be less “meritocratic” than the Geneva system, even though the latter was less selective, because, in leaving the choice of orientation up to the family, it gave greater weight to social differences of orientation for the same level of achievement.

## Effect of types of schools on academic achievement

The survey used in the analyses of A. H. Halsey, A. F. Heath and J. M. Ridge in *Origins and Destinations*<sup>3</sup> was carried out on a sample of nearly 10,000 men between the ages of 20 and 60 living in England and Wales in 1972.

3 A. H. Halsey, A. F. Heath and J. M. Ridge, *Origins and Destinations. Family, Class and Education in Modern Britain*, Oxford, Clarendon Press, 1980.

The object of the research was to analyze the role of the school in reducing social inequalities with regard to its meritocratic objective. The authors set out in particular to study the consequences of the 1944 Education Act, which made secondary education free for everyone, on the evolution of the meritocratic character of British society. In this perspective, the analyses are guided by the following questions:

1. What is the impact of the type of school attended (private/public, modern/classic) on educational attainment with respect to the other variables influencing academic success (IQ, social background, cultural capital)?
2. What are the social differentiations of access to the various types of secondary schools?
3. What consequences can be expected from the substitution of comprehensive schools for the tripartite system (classical, modern, technical)?

British reformers had hoped that streaming within the comprehensive schools would be more flexible than the tripartite system that had been in place since the 1944 Act. Before 1944 in Great Britain, secondary education had never been seen as the natural continuation of primary education. Since 1902 and for nearly half a century, equality of educational opportunity referred to pupil selection based on IQ testing, with no social discrimination. This selection was performed by an examination given at the end of primary school. Those who passed obtained a non-paying place in one of the grammar schools. Pupils who failed the examination were able to follow an equivalent course of studies only in a private school.

The 1944 Act recommended an important change in the way pupils were allocated to secondary schools. Public secondary education was made entirely free of charge and open to all pupils. Student orientation was based usually on the results of their “eleven +” examinations, which were completed to a varying extent by previous academic achievement. Following the 1944 Act, the secondary system was divided into three types of schools: grammar schools, which prepared for university; modern secondary schools, which prepared mainly for higher technical and business studies; and secondary technical common schools, which were usually the end of the line. Controversy over the organization of the British educational system subsequently focused on the opposition be-

tween the tripartite system and comprehensive schools. In 1965, 92% of public secondary-school students still attended schools in the tripartite system. By 1976, 76% were in comprehensive schools, 8% in grammar schools, 2% in technical schools and 15% in modern secondary schools.<sup>4</sup>

According to the authors, owing to the small number of forks in the British educational system as it was until the early 1960s and to the impact of selection by the schools, the effect of social differentiations on school choice, as analyzed by Boudon, were minimized. Furthermore, the authors show that, contrary to the “reproduction” thesis, students in the different social classes within the grammar schools displayed relatively similar levels when it came to respective performances. In reality, the higher the students’ social background, the greater the likelihood of their entering a grammar school, but once they were there, the differences in respective performances were relatively slight. Two thirds of those who went to grammar schools were “first-generation” students, and the likelihood of their succeeding was not very different from that of the “second generation”: the schooling received by their parents was only a weak predictor of student success in these schools.<sup>5</sup>

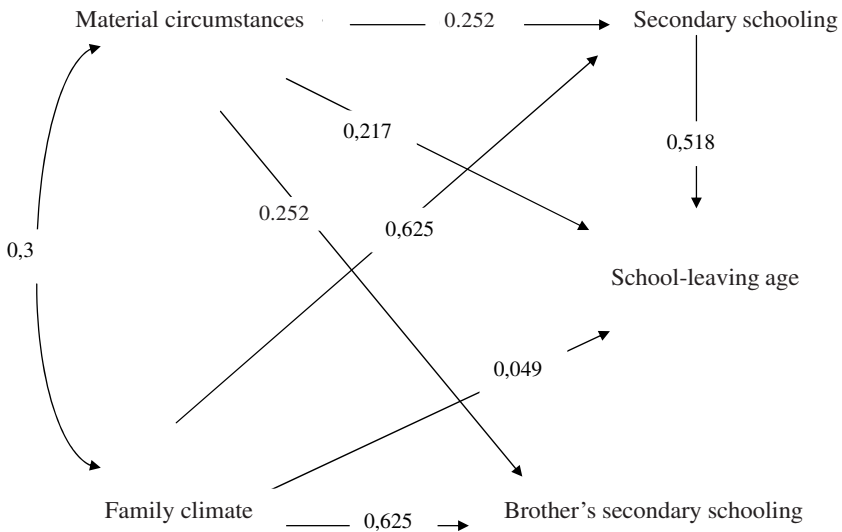
The survey thus shows that, from the 1920s to the 1960s in the British system, children’s educational inequality as a function of social background was strongly linked to inequality of access to the selective grammar schools. This inequality did not evolve significantly between 1920 and the 1960s. Secondary education opened up because of the 1944 Act, but all social categories benefited from this opening.

The authors use causal analysis to estimate the influence of the different factors involved in determining student educational attainment in Britain. One of the strengths of path analysis is that it makes it possible to include correlations from other studies and to calculate the resulting path coefficients. It is nevertheless a tricky technique to handle, as the correlations derived from other studies are based on measures calculated in different ways. In the model in Figure 8, introduction of a brother’s school results – on the hypothesis that brothers’ respective school achievements do not have a direct causal effect on each other – makes it possible to infer the effects on individuals’ schooling of a hypo-

4 A. H. Halsey, A. F. Heath and J. M. Ridge, *Origins and Destinations*, p. 212.

5 A. H. Halsey, A. F. Heath and J. M. Ridge, *Origins and Destinations*, p. 199.

Figure 8. Model for estimating the influence of different variables on educational attainment in Great Britain in 1972.



Source: Halsey, Heath and Ridge, *Origins and Destinations*, p. 157.

thetical variable having to do with the idea of “family climate”. The models developed yield the following results:

1. importance of the effect of “family climate” on “type of secondary schooling”;<sup>6</sup>
2. primordial importance of the type of secondary school attended in educational attainment;
3. direct influence of material inequalities much greater than family climate on educational attainment;
4. relatively slight direct effect on secondary schooling of measured aptitude if an IQ variable is introduced.

In other words, comparing family backgrounds and IQ effects, it appears that, in a supposedly meritocratic system, children in the same family

6 The variable “secondary schooling” is located on a scale of 1 to 4: 1 for non-selective schools, 2 for technical schools, 3 for grammar schools and 4 for private schools or Direct Grant schools.

should have had less similar school careers than they do in reality. This result holds when one considers the public sector separately from the private sector. The notion of “meritocracy” is however understood in a specific sense, comparable to that used by Bowles: it relates the idea of merit not to educational achievement but to an aptitude level (seen as predicting success) measured by IQ. Furthermore, in the pre-1944 system, allocation of non-paying places in the grammar schools favored children from disadvantaged social categories if one refers to a comparison between theoretical distribution of places according to the distribution of IQ per social category and the actual distribution of such places.<sup>7</sup> The authors sum up their analyses as follows:

Selection for secondary schooling is relatively meritocratic, but once in a particular type of school, neither ability nor family climate have much impact on the length of a boy’s school career. Class origins are somewhat more important, but above all it is the character of the school which is crucial.<sup>8</sup>

Relating the evaluation of the meritocratic effects of an educational system to the impact of aptitudes measured by IQ on educational attainment, the authors raise the question of the effectiveness in this respect of other school structures: is the overall effect of the aptitudes measured on educational attainment greater in a sponsorship system than in a contest system? A preliminary and very partial answer to this question can be provided by comparing correlations between the educational attainment of brothers in the United States and in Great Britain. This correlation is 0.556 in the United States, according to Blau and Duncan’s analyses, and 0.504 for the 1933–1952 cohort in the British survey sample. According to the authors, the two educational systems are fairly similar when it comes to the relative roles played by family background and aptitudes in educational attainment. But while the links between background and educational destination are comparable, the predictability of the latter as a function of schooling is not as great in the United States.

7 J. E. Floud (ed.), A. H. Halsey and F. M. Martin, *Social Class and Educational Opportunity*, London, Heinemann, 1956.

8 A. H. Halsey, A. F. Heath and J. M. Ridge, *Origins and Destinations*, p. 167.

## Institutional construction of academic identity

Mohamed Cherkaoui's research<sup>9</sup> brings out, on new bases, the role played by the school as a social institution. In this respect, his work can be compared with that of Michael Rutter<sup>10</sup> and his team on the evolution of student achievement in several London schools. These studies contradict the skeptical views on education sparked by the social-reproduction theories as well as by the work of Coleman and Jencks. Alternatively, their results tally with the Durkheimian conception of the relative autonomy of the educational system. *Les Paradoxes de la réussite scolaire* and *Fifteen Thousand Hours* show the importance of a set of variables that are indicative of new ways of looking at the processes of in-school socialization: teachers' explicit expectations of students' behavior and work, frequency of assessments, agreement on school values and norms, in Rutter (the vague notion of school "atmosphere" or "climate" is also listed); visibility of school rules and selection criteria, clarity of requirements and norms, in Cherkaoui.

Cherkaoui's analyses are based on the data contained in the *International Project for the Evaluation of Educational Achievement*, a major international survey that makes it possible to compare the status of twelve educational systems in Europe and the United States. The data are taken from random samples of students under the minimum school-leaving age in the different countries studied (ages ranging from 13 yrs to 13 yrs 11 mos) in 1970–71. Comparison of the results of the social processes in different contexts brought out the limits of certain hypotheses formulated in a particular context but also showed similarities among these processes in the different national contexts analyzed.

With regard to identity construction, school life is placed on an equal footing with home. It provides the child with a context in which to construct a personal identity. School is a specific source of objectivity for the child and his family. That is why a clear statement of the rules and stakes at issue in school is important; these explicit elements enable

9 M. Cherkaoui, *Les Paradoxes de la réussite scolaire. Sociologie comparée des systèmes d'enseignement*, Paris, Presses Universitaires de France, 1979.

10 M. Rutter, *Fifteen Thousand Hours, Secondary Schools and their Effects on Children*, Cambridge MA, Harvard University Press, 1979.

the child to differentiate between in-home socialization and at-school socialization. They play on the rationality of the child's attitude and choices over his school career. From this standpoint, the school is not really "meritocratic" in the sense that it is less apt to act as an agency of downward mobility, but it does play a potentially important role as an agency of upward mobility. The school not only performs its function of knowledge transmission by providing the child with specific intellectual tools, it also informs him, more or less clearly depending on the context, about his potentialities with respect to school norms. This rational shaping of an identity that is imbedded in the margins of the social legacy in turn influences the child's educational attainment.

Comparison of the school systems teaches us that the more visible, explicit and immediately intelligible the selection criteria are, the greater the accuracy of the predictions and therefore the lower the risks, the more seemingly justified the investment in schooling and finally the higher the achievement of working-class students. Conversely, the less visible the rules are, the greater the risks, the more often students from disadvantaged families stay in the background and the lower their educational achievement.<sup>11</sup>

Cherkaoui's principal conclusions concerning cross-national variations in the respective impacts of institutional and social parameters on students' educational destinies are the following:<sup>12</sup>

1. In all of the European educational systems, educational stratifications (sections and types of school) have a much greater impact on achievement than do social stratifications.
- 1a. In America the reverse is true. This finding, which corroborates the conclusions of the Coleman Report, shows that its conclusions cannot be generalized.
2. Likewise, in all of the European educational systems, educational stratifications (sections and types of school) play a greater role in

11 M. Cherkaoui, *Les Paradoxes de la réussite scolaire*, p. 202.

12 For the sake of comparison between the different systems and the statistical validity of the findings, students' social categories of origin were divided into five classes ("ideological professions", "capitalist class", "small owners", "white collar", "working class"). The educational stratification parameters are the section (classical, modern and technical) and the type of school (grammar school, comprehensive or secondary modern, in the case of England; classic and modern *lycée*, Collège d'Enseignement Secondaire [CES] or terminal section, in the case of France), etc.



determining students' aspirations than do social stratifications. In particular, the influence of father's level of instruction has much less effect on the level of students' aspirations than their own academic achievement.

- 2a. However, for comparable levels of achievement (e.g. within the most selective sections), family socioeconomic status has a significant influence on aspirations. In the case of French students, this influence is especially strong.

Thus, depending on the institutional context, the effects of the "socialization" carried out by the school exceed or not those of the "socialization" carried out in the home. The more explicit the parameters involved and the clearer the school rules, the fewer social differences there are in attitude towards school. In the case of the United States, the institutional forms of selection are less apparent and formally have less influence in determining social destinies. However, for these same reasons, assignment of students to the different parts of the educational system and the choice of schooling and training depend more strongly on social parameters. These characteristics are supposed to account for the permeability of the American system to the direct influence of the social structure.

## Institutional factors in academic success

The major national survey of American high schools, *High School and Beyond*, on which James Coleman, Thomas Hoffer and Sally Kilgore based their analyses,<sup>13</sup> was carried out in the spring of 1980 on a sample of 893 public-sector schools and 111 private-sector schools, 84 of which were Catholic run.<sup>14</sup> It contains interviews of nearly 60,000 sophomores

13 Cf. J.S. Coleman, T. Hoffer and S. Kilgore, *High School Achievement*, New York, Basic Books, 1982; J.S. Coleman, *Equality and Achievement in Education*, San Francisco, Westview Press, 1990.

14 At the time of the survey, public schools represented 74% of all American schools, and 91% of American students attended them (grades 9–12). Catholic private schools represented 8% of American schools, and 6% of American students attended them (grades 9–12). Cf. J.S. Coleman, T. Hoffer and S. Kilgore, *High School Achievement*, Table 2.1, p. 17.

(2nd year of high school, or 14–15 year olds) and seniors (4th year of high school, or 17–18 or 19 year olds). Of these, 50,000 attended public schools and 5,500 went to Catholic-run private schools. Given the heterogeneity of the non-Catholic private schools and the less reliable statistical base for these schools, the comparisons between the two sectors oppose here public schools to Catholic private institutions.

The main finding of the report is the clearly greater effectiveness of the private-sector (Catholic) schools with respect to student educational attainment and aspirations. The analyses carried out to control the effect of selection on entering the private sector, based on controlling for home-background variables most correlated with student achievement, tend to reduce the differences between the two sectors, but do not eliminate them altogether. In addition, for comparable grades and parental incomes, the discriminating effect of private-sector schools on minority students' results is less than that of public-sector schools. Analysis of the sector characteristics that might account for the differences in their effect on students' success shows that the factors having the greatest effect on student achievement are:

1. academic orientation of studies;
2. students' respect for disciplinary standards.

Students with comparable sociocultural backgrounds and academic levels are more inclined to choose rigorous courses of study when they attend a Catholic private school. Furthermore their results are slightly affected by the average greater amount of time spent on homework in the private sector and, more significantly, by respect for school discipline (attendance, behavior towards peers and teachers).

The frequent criticism<sup>15</sup> addressed to the survey findings rests on the intangible factors involved in the implicit selection implied in families' choice of the private sector. The parents' involvement in their children's education, which is shown by this choice, supposes, more than in the public sector overall, a pre-existing harmony between school and home, which facilitates the school's action and thus increases its potential impact on students' achievement. A first argument can be op-

15 Concerning the controversy raised by the analyses of Coleman, Hoffer and Kilgore, see *Sociology of Education*, vol. 55, n°s 2, 3, 1982, pp. 63–161; *Harvard Educational Review*, vol. 51, 1981, pp. 481–545.

posed to this criticism which does not entirely exclude the hypothesis of a selection bias: public schools that are comparable to private schools with respect to their control of educational norms and standards tend to have comparable results in terms of student achievement.

One way of partially eliminating the selection bias is to look at individual student's evolution in each of the sectors. Nevertheless this does not entirely do away with the selection bias, as the influence of home environment may continue to have an effect. Such observation was made possible by a new series of data gathered in spring 1982. The tests, given to sophomores, act as a substitute for controlling differences in aptitudes, motivations, knowledge, etc. between students in the two sectors. As Table 9 shows, private (Catholic) schools show a clear advantage when it comes to improvement in student achievement over two years, all other things being equal. Furthermore, it is the students from the most disadvantaged backgrounds and those with the lowest achievement level in their sophomore year that show the most improvement in the private sector.

The analyses carried out by John Chubb and Terry Moe,<sup>16</sup> like those of Coleman, Hoffer and Kilgore, are based on data from the national survey *High School and Beyond*, conducted in spring 1980, completed by the *Administrator and Teacher Survey*.<sup>17</sup> This complementary survey enabled the authors to identify institutional factors that might account for the differences in the schools' performances using regression analysis. They concluded that the institutional factors that account for the schools' influence on student achievement depend on characteristics of the institutions themselves. According to the complementary survey, these factors are: clarity of institutional goals, ambitious academic program, strong educational leadership and high levels of teacher professionalism. The most successful schools<sup>18</sup> had organizational structures that favored rather

16 J.E. Chubb and T.M. Moe, *Politics, Markets and America's Schools*, Washington DC, The Brookings Institution, 1990.

17 Half of the schools in the sample were subjected to a second survey using a questionnaire administered to the principal, a sample of 30 teachers and to staff members.

18 The authors distinguished school performance with respect to students' average achievement level. The analyses retained the most successful schools (first quartile) and the least successful (last quartile).

than inhibited good performances.<sup>19</sup> In other words, the institutional factors in question can really be improved only through structural change. According to the authors, an effective institutional organization of the school should, contrary to the bureaucratic mode of control, naturally promote the effects sought.<sup>20</sup>

Chubb's and Moe's analyses have the same limitations as all of the statistical analyses devoted to the factors involved in student achievement whenever an attempt is made to go from observation of correlations to attribution of causality. Nevertheless, they challenge the very institutional framework to which analyses in this area are usually confined and thus open up the field of research.

*Table 9.* Advantage of Catholic schools with respect to improvement in student achievement between the sophomore and senior years (by socioeconomic background)<sup>21</sup>

	<i>Advantage of Catholic schools</i>	<i>Sample size</i>	
		Public sector	Catholic sector
By socioeconomic status			
Last quartile	2.37	4,096	311
Mean quartile	1.68	7,736	9,992
First quartile	1.86	3,390	736
By membership group			
Minority	3.94	4,108	664
White	1.76	11,269	1,394
By sophomore test scores			
Last quartile	2.65	3,410	215
Mean quartile	3.47	7,762	1,095
First quartile	1.16	4,205	748

Source: J. Coleman, *Equality and Achievement in Education*, Table 1.2, p. 273.

19 Chubb and Moe achieve the same result by eliminating from their sample those private schools that represent a high proportion of the most successful schools (38%).

20 For a discussion of Chubb's and Moe's analyses, see R. Rothstein (ed.), *School Choice, Examining the Evidence*, Washington D.C., Economic Policy Institute, 1993.

21 The scores are obtained from a composite variable constructed from the sum of the scores on five different tests (verbal and mathematical ability). The scores of the public-sector students rose from 37.22 to 44.22 between the sophomore and senior years, while the scores of the Catholic-school students rose from 47.51 to 56.78.

## References

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- Alexander, J., "The Reality of Reduction: The Failed Synthesis of Pierre Bourdieu", in *Fin de Siècle Social Theory. Relativism, Reduction and the Problem of Reason*, Verso, 1995, pp. 128–217.
- Anyon, J., "Social Class and the Hidden Curriculum of Work", *Journal of Education*, 162, 1, 1980, pp. 67–92.
- Apple, M., "Education, Culture, and Class Power: Basil Bernstein and the Neo-Marxist Sociology of Education", *Educational Theory*, vol. 42, n° 2, 1992, pp. 127–145.
- Archer, M., *Social Origins of Educational Systems*, London, Sage Publications, 1979.
- Arendt, H. (1958), *The Human Condition*, New York, Anchor Books, 1959.
- Aron, R., *Industrial Society*, Glasgow, Simon & Schuster 1968, transl. from the French: *Dix-huit leçons sur la société industrielle*, Paris, Gallimard, 1962.
- Ausubel, D.P., *The Psychology of Meaningful Verbal Learning*, New York, Grune and Stratton, 1963.
- Baechler, J. (1994), *Democracy: An Analytical Survey*, Paris, Unesco; Calmann-Lévy, 1995; translated from the French: *Précis de la démocratie*, Paris, Calmann-Lévy, 1994.
- Bateson, G., "Communication", in N. MacQuown (gen. ed.), "The Natural History of an Interview", Chicago, University Library, microfilm collection of cultural anthropology manuscripts, n° 95, series XV, 1971, pp. 1–40.
- Bateson, G., D.D. Jackson, J. Haley & J. Weakland, "Towards a Theory of Schizophrenia", *Behavioral Science*, vol. 1, 1956, pp. 251–264.
- Becker, G., *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, New York, National Bureau of Economic Research, 1964.
- Bell, D. (1973), *The Coming of Postindustrial Society*, Boulder CO, The Perseus Books Group, 1976.
- Bereiter, C. & M. Scardamalia, "Cognition and Curriculum", in P.-W. Jackson (ed.), *Handbook of Research on Curriculum*, New York, Macmillan Publishing Company, 1992, pp. 517–569.
- Berg, I., *Education and Jobs: The Great Training Robbery*, New York, Praeger, 1970.
- Bergson, H. (1889), *Time and Free Will. An Essay on the Immediate Data of Consciousness*, authorized transl. by F.L. Pogson, Mineola NY, Dover Publications, 2001, p. 183; translated from the French: *Essais sur les données immédiates de la conscience*, Paris, Presses Universitaires de France, 1927.
- Bernstein, B., *Class, Codes and Control*, London, Routledge and Kegan Paul, 1971, 3 vol.
- , "Développement linguistique et classe sociale: une théorie sociologique de l'apprentissage", in *Langage et classes sociales*, Paris, Editions de Minuit (coll. "Le Sens commun"), 1975, chap. 1.
- , *Class, Codes and Control*, London, Routledge and Kegan Paul, 1990, vol. 4.

- Besnard, P., Borlandi, M., Vogt, P., *Division du travail et lien social. Durkheim, un siècle après*, Paris, Presses Universitaires de France, 1993.
- Beth, E.-W. & J. Piaget, *Mathematical Epistemology and Psychology*, transl. W. Mays, Dordrecht, Holland, D. Reidel, 1966; translated from the French: *Épistémologie mathématique et psychologie, Essai sur les relations entre la logique formelle et la pensée réelle*, Paris, Presses Universitaires de France, 1961.
- Blau, P.M. & O.D. Duncan, *The American Occupational Structure*, New York, Wiley, 1967.
- Blaug, M., “The Empirical Status of Human Capital Theory: A Slightly Jaundiced Survey”, *Journal of Economic Literature*, vol. 14, Sept.–Dec. 1976, pp. 827–855.
- , “Where Are We Now in the Economics of Education?”, *Economics of Education Review*, vol. 4, n° 1, 1985, pp. 322–325.
- Blumer, H., *Symbolic Interactionism. Perspective and Method*, Englewood Cliffs NJ, Prentice-Hall Inc., 1969.
- Boudon, R., *The Uses of Structuralism*, Portsmouth, Heinemann, 1971; translated from the French: *A quoi sert la notion de “structure” dans les sciences humaines*, Paris, Gallimard, 1968.
- , (1973), *Education, Opportunity, and Social Inequality: Changing Prospects in Western Society*, New York, John Wiley & Sons, 1974, translated from the French: *L’Inégalité des chances*, Paris, A. Colin, 1973.
- , “La Sociologie des inégalités dans l’impasse? En marge du livre de Christopher Jencks: *Inequality*”, *Analyse & prévision*, t. XVII, 1974, pp. 83–95.
- , *The Logic of Social Action: an introduction to social analysis*, transl. by David Silberman with the assistance of Gillian Silverman, London/Boston, Routledge and Kegan Paul, 1981, p. xv; translated from the French: *La Logique du social*, Paris, Hachette, 1979.
- , *The Unintended Consequences of Social Action*, New York, MacMillan, 1982.
- , *The Analysis of Ideology*, transl. M. Slater, Chicago, University of Chicago Press, 1986; translated from the French: *L’Idéologie ou l’origine des idées reçues*, Paris, Fayard, 1986.
- , “Explication, interpretation, idéologie”, in A.J. Jacob (dir.), *L’Univers philosophique*, Paris, Presses Universitaires de France, 1989, pp. 241–254.
- , (1990), *The Art of Self-Persuasion: The Social Explanation of False Beliefs*, transl. Malcom Slater, Cambridge UK and MA, Polity, 1994; translated from the French: *L’Art de se persuader des idées douteuses, fragiles ou fausses*, Paris, Fayard, 1990.
- , *Le Juste et le vrai. Études sur l’objectivité des valeurs et de la connaissance*, Paris, Fayard, 1995.
- , *The Origin of Values: Philosophy and Sociology of Beliefs*, Piscataway, Transaction Publisher, 2001, translated from the French: *Le sens des valeurs*, Paris PUF, 1999.
- Boudon, R. & F. Bourricaud, “Institutions”, *Critical Dictionary of Sociology*, transl. P. Hamilton, Chicago, University of Chicago Press; translated from the French: *Dictionnaire critique de la sociologie*, Paris, Presses Universitaires de France, 1982.

- Boudon, R., in R. Boudon & M. Clavelin, *Le Relativisme est-il résistible? Regards sur la sociologie des sciences*, Paris, Presses Universitaires de France, 1994.
- Bourdieu, P., “Systèmes d’enseignement et systèmes de pensée”, *Revue internationale des sciences sociales*, vol. XIX, n° 3, 1967, pp. 338–388.
- Bourdieu, P. & J.-C. Passeron, *Reproduction in Education, Society and Culture*, transl. by Richard Nice, with a foreword by Tom Bottomore, London, Beverly Hills, Sage Publications, 1977, p. 54; translated from the French: *La Reproduction. Éléments pour une théorie du système d’enseignement*, Paris, Éd. de Minuit, 1970.
- Bourdieu, P., J. Chamboredon & J.-C. Passeron, *Le Métier de sociologue*, Paris, La Haye, Mouton, 1973.
- Bourdieu, P. & L. Wacquant, *An Invitation to Reflexive Sociology*, Chicago, University of Chicago Press, 1992.
- Bowles, S. & H. Gintis, *Schooling in Capitalist America, Educational Reform and the Contradictions of Economic Life*, New York, Basic Books, 1976.
- Brophy, J. E., “Teacher Praise, a Functional Analysis”, *Review of Educational Research*, vol. 51, n° 1, 1981, pp. 5–32.
- Brophy, J. E. & T. L. Good, “Teacher Behavior and Student Achievement”, in M. C. Wittrock (ed.), *Handbook of Research on Teaching*, New York, Macmillan, 1986, pp. 328–375.
- Bruner, J., “Foreword to the English edition”, in L. Vygotsky (1933–35), *Mind in Society, The Development of Higher Psychological Processes*, Cambridge MA, Harvard University Press, 1978.
- Bulle, N., *La Rationalité des décisions scolaires. Analyse comparée de l’évolution de l’enseignement secondaire français et américain au cours du XX<sup>e</sup> siècle*, Paris, Presses Universitaires de France, 1999.
- , “Pierre Bourdieu”, *L’Année sociologique*, vol. 52, 2, 2002, pp. 231–237.
- , *L’école et son double. Essai sur l’évolution pédagogique en France*, Paris, Hermann, 2008.
- Canfield, R. & S. Ceci, “Integrating Learning into a Theory of Intellectual Development”, in R. Sternberg & C. Berg (eds), *Intellectual Development*, Cambridge, Cambridge University Press, 1993, pp. 278–297.
- Chazel, F., *La Théorie analytique de la société dans l’œuvre de T. Parsons*, Paris, Mouton, 1974.
- Cherkaoui, M., *Les Paradoxes de la réussite scolaire. Sociologie comparée des systèmes d’enseignement*, Paris, Presses Universitaires de France, 1979.
- , *Les Changements du système éducatif en France 1950–1980*, Paris, Presses Universitaires de France, 1982.
- Chi, M., P. Feltovitch & R. Glaser, “Categorization and Representation of Physics Problems by Experts and Novices”, *Cognitive Science*, 5, 1981, pp. 121–152.
- Chubb, J. E. & T. M. Moe, *Politics, Markets and America’s Schools*, Washington DC, The Brookings Institution, 1990.
- Cicourel, A., *Cognitive Sociology: Language and Meaning in Social Interaction*, New York, The Free Press, 1972.
- Clark, B., *Educating the Expert Society*, San Francisco, Chandler, 1961.
- Clark, K. B., *Dark Ghetto, Dilemmas of Social Power*, New York, Harper & Row, 1965.

- Clerc, P., "La Famille et l'orientation scolaire au niveau de la sixième, Enquête de juin 1963 dans l'agglomération parisienne", in A. Girard (ed.), "*Population*" et enseignement, Paris, Presses Universitaires de France, 1970, pp. 143–188.
- Cohen, A., *Delinquent Boys*, New York, The Free Press, 1955.
- Cole, M., "The Zone of Proximal Development: Where Culture and Cognition Create Each Other", in J.V. Wertsch (ed.), *Culture, Communication and Cognition: Vygotskian Perspectives I*, New York, Cambridge University Press, 1985, pp. 146–161.
- Cole, M. & S. Scribner, *Culture & Thought, A Psychological Introduction*, New York, John Wiley and Sons, 1974.
- Coleman, J.S., *Equality of Educational Opportunity*, Washington DC, US Department of Health, Education and Welfare, 1966.
- , *Equality and Achievement in Education*, San Francisco, Westview Press, 1990.
- Coleman, J.S. et al., *The Adolescent Society: The Social Life of the Teenager and its Impact on Education*, New York, The Free Press, 1966.
- Coleman, J.S., T. Hoffer & S. Kilgore, *High School Achievement*, New York, Basic Books, 1982.
- Collins, R., "Functional and Conflict Theories of Educational Stratification", *American Sociological Review*, vol. 36, 1971, pp. 1002–1019.
- , *The Credential Society*, New York, Academic Press, 1979.
- Cooper, H.M. & T.L. Good, *Pygmalion Grows Up: Studies in the Expectation Communication Process*, New York, Longman, 1983.
- Cremin, L.A., *The Transformation of the School, Progressivism in American Education 1876–1957*, New York, Vintage Books.
- Davis, A. & J. Dollard, *Children of Bondage*, Harper Torch Book, 1940.
- Demaine, J., *Contemporary Theories in the Sociology of Education*, London, Macmillan, 1981.
- Dewey, J. (1899), *The School and Society*, Chicago, University of Chicago Press, 1990.
- , "The Philosophical Work of Herbert Spencer", *Philosophical Review*, I, 1904.
- , (1915), *Democracy and Education*, New York, The Free Press, 1966, pp. 159–175.
- Duncan, O.D., "Path Analysis: Sociological examples", *The American Journal of Sociology*, vol. 72, n° 1, 1966, pp. 1–16.
- Durkheim, É. (1893), *The Division of Labor in Society*, transl. by G. Simpson, New York, The Free Press, 1933, p. 79; translated from the French: *De la division du travail social*, Paris, Presses universitaires de France, 1991.
- , (1895), *The Rules of Sociological Method*, edited, with an introduction, by Steven Lukes, transl. by W.D. Halls, New York: The Free Press, 1982, pp. 56–57; translated from the French: *Les Règles de la méthode sociologique*, Paris, Presses Universitaires de France, 1990.
- , "Représentations individuelles et représentations collectives", *Revue de métaphysique et de morale*, 1898, pp. 273–302.
- , (1912), *The Elementary Forms of Religious Life*, transl. by Karen E. Fields, New York, The Free Press, 1995, p. 18; translated from the French: *Les Formes élémentaires de la vie religieuse*, Paris, Presses Universitaires de France, 1985.
- , (1918), *Montesquieu and Rousseau forerunners of sociology*, transl. by R. Mannheim, Ann Arbor, The University of Michigan Press, 1960, p. 103; translated from the



- French: "Le 'contrat social' de Rousseau", *Revue de métaphysique et de morale*, t. XXXV, 1918.
- , (1922), *Education and Sociology*, transl., and with an introduction, by Sherwood D. Fox, Foreword by Talcott Parsons, New York, The Free Press, 1956, p. 71; translated from the French: *Éducation et sociologie*, Paris, Presses Universitaires de France, 1989.
- , (1935), *Moral Education; A Study in the Theory and Application of the Sociology of Education*, Foreword by Paul Fauconnet; transl. by Everett K. Wilson & Herman Schnurer; edited, with a new introduction, by Everett K. Wilson. New York, The Free Press, 1961, p. 120; translated from the French: *L'Éducation morale*, Paris, Presses Universitaires de France, 1992.
- , *The Evolution of Educational Thought: Lectures on the Formation and Development of Secondary Education in France*, transl. Peter Collins. London, Boston, Routledge & Kegan Paul, 1977; translated from the French: *L'évolution pédagogique en France* (1938), Paris, Presses Universitaires de France, 1990.
- , *Pragmatism and Sociology*, Cambridge, Cambridge university Press, 1983; translated from the French: *Pragmatisme et sociologie*, Paris, Vrin, 1955.
- Durkheim, É. & M. Mauss, *Primitive classification*, transl. R. Needham, Chicago, University of Chicago Press, 1967; translated from the French: "De quelques formes primitives de classifications, contribution à l'étude des représentations collectives", *L'Année sociologique*, 1901.
- Egan, K., *Getting it Wrong from the Beginning: Our Progressivist Inheritance From Herbert Spencer, John Dewey and Jean Piaget*, Yale University Press, 2004.
- Esperet, E., *Langage et origine sociale des élèves*, Berne, Peter Lang, 1979.
- Feinberg, W. & J.F. Soltis, *School and Society*, New York, Teachers College Press, 1992.
- Floud, J.E. (ed.), A.H. Halsey & F.M. Martin, *Social Class and Educational Opportunity*, London, Heinemann, 1956.
- Floud, J. & A.-H. Hasley, "The Sociology of Education. A Trend Report and Bibliography", *Current Sociology*, VII, 3, 1958, p. 171.
- Gerth, H.H. & C.W. Mills, *From Max Weber: Essays in Sociology*, London, Oxford University Press, 1958.
- Gibson, R., *Structuralism and Education*, London, Hodder and Stoughton, 1984.
- Goslin, D.A., *The School in Contemporary Society*, Boston, Scott, Foresman, 1965.
- Grize, J.-B., *Langage naturel et communication*, Paris, Presses Universitaires de France, 1996.
- Grize, J.-B. & B. Matalon (eds), *Introduction à une étude expérimentale et formelle du raisonnement naturel*, Paris, Presses Universitaires de France, 1962.
- Grize, J.-B. & G. Piérait-Le Bonniec, *La Contradiction, essai sur les opérations de la pensée*, Paris, Presses Universitaires de France, 1985.
- Hall, G.S., *Adolescence: Its Psychology and Its Relation to Anthropology, Sociology, Sex, Crime, Religion, and Education*, New York, 1905, 2 vols.
- Halsey, A.H., "The Changing Function of Universities in Advanced Industrialized Societies", *Harvard Educational Review*, XXX, Spring 1960, pp. 19–127.
- Halsey, A.H., A.F. Heath & J.M. Ridge, *Origins and Destinations. Family, Class, and Education in Modern Britain*, Oxford, Clarendon Press, 1980.

- Hasan, R., "On Social Conditions for Semiotic Mediation: The Genesis of Mind in Society", in A.-R. Sadovnik (ed.), *Knowledge & Pedagogy*, Norwood, Ablex Publishing Corp., 1995, pp. 171–196.
- Hofstadter, R., *Social Darwinism in American Thought*, New York, G. Braziller, 1959.
- , *Anti-intellectualism in American Life*, New York, Vintage Books, 1962.
- Horton, R., "Lévy-Bruhl, Durkheim and the Scientific Revolution", in R. Horton & R. Finnegan, *Modes of Thought*, London, Faber, 1973, pp. 249–305.
- Hudson, W.H., *An Introduction to the Philosophy of Herbert Spencer*, London, 1911.
- Hyman, H. (1953), "The Value Systems of Different Classes: A Social Psychological Contribution to the Analysis of Stratification", in R. Bendix & S.M. Lipset (eds), *Class, Status and Power*, New York, The Free Press, 1953, pp. 426–442.
- James, L.R., S.A. Mulaik & J.-M. Brett, *Causal Analysis, Assumptions, Models and Data*, Beverly Hills, Sage Publications, 1982.
- James, W., "The Chicago School", *The Psychological Bulletin*, vol. 1, n° 1, 1904, pp. 1–5.
- Jencks, C. et al., *Inequality, A Reassessment of the Effect of Family and Schooling in America*, New York, Basic Books, 1972.
- Kahl, J., *The American Class Structure*, New York, Rinehart, 1953; "Educational and Occupational Aspirations of 'Common Man' Boys", *Harvard Educational Review*, XXIII, 1953, pp. 186–203.
- Kasamias, A.M., *Herbert Spencer on Education*, New York, Teachers' College Press, 1966.
- Keller, S. & M. Zavalloni, "Ambition and Social Class: a Respecification", *Social Forces*, 43, 1964, pp. 58–70; originally published as: "Classe sociale, ambition et réussite", *Sociologie du travail*, n° 4, 1962, pp. 1–14.
- Kenneth, J., "The Sociology of Pierre Bourdieu", *Educational Review*, 1974, pp. 237–249.
- Kerr, C., *The Uses of the University*, Cambridge MA, Harvard University Press, 1964.
- Kett, J.F., *Rites of Passage. Adolescence in America 1790 to the Present*, New York, Basic Books, 1977.
- Khôi, L.T., *Marx, Engels et l'éducation*, Paris, Presses Universitaires de France, 1991.
- Kimball, E.P. (1932), *Sociology and Education*, New York, AMS Press, 1968.
- Koestler, A., *The Sleepwalkers, A History of Man's Changing Vision of the Universe*, London, Penguin Books, 1959.
- Koyré, A., *A l'aube de la science classique*, Paris, Hermann, 1939.
- Krug, E. A., *The Shaping of the American High School*, New York, Harper and Row, 1964.
- Lalande, A. (1926), *Vocabulaire technique et critique de la philosophie*, Paris, Presses Universitaires de France, 1997.
- Lazear, E., "Academic Achievement and Job Performance: Note", *The American Economic Review*, vol. 67, n° 2, March 1977, pp. 251–254.
- Lévi-Strauss, C., *Structural Anthropology*, transl. Claire Jacobson & Brooke Grundfest Schoepf, New York, Basic Books, 2000; translated from the French: *Anthropologie structurale*, Paris, Plon, 1974.
- Lévy-Bruhl, L. (1900), *Philosophy of Auguste Comte*, New York, Augustus M. Kelley Publishers, 2003 (rep. of 1903 edition), translated from the French: *La Philosophie d'Auguste Comte*, Paris, Alcan, 1900.

- Lévy-Garboua, L., “Les Demandes de l’étudiant ou les contradictions de l’université de masse”, *Revue française de sociologie*, XVII, 1976, pp. 53–80.
- Luria, A.-R., *Cognitive Development. Its Cultural and Social Foundations*, Cambridge MA, Harvard University Press, 1976.
- Mannheim, K. (1933), *Essays on the Sociology of Culture*, London, Routledge & Kegan Paul, 1956.
- Mannheim, K. & W. A. C. Stewart, *An Introduction to the Sociology of Education*, London, Routledge and Kegan Paul, 1962.
- Marx, K. (1845), “Third Thesis on Feuerbach”, in *Marx/Engels, Selected Works*, transl. by W. Lough, Moscow, Progress Publishers, 1969, vol. I.
- , (1859), *A Contribution to the Critique of Political Economy*, edited, with an Introduction by Maurice Dobb, New York, International Publishers, 1970.
- , (1867), *Capital*, vol. 1, Introduced by Ernest Mandel, transl. by Ben Fowkes, New York, Vintage Books, 1977, Postface to the Second German Edition.
- Marx, K. & F. Engels (1848), *The German Ideology, Includes: Theses on Feuerbach and the Introduction to the Critique of Political Economy*, New York, Prometheus Books, 1998.
- Mathews, M.-R., *Constructivism in Science Education. A Philosophical Examination*, Dordrecht, Kluwer Academic Publisher, 1998.
- McBride, W. L., “Psychology and Human Values in the Context of Dewey’s Critique of Marx”, in W. J. Gavin (ed.), *Context over Foundation, Dewey and Marx*, Dordrecht, D. Reidel Publishing Co., 1988, pp. 37–47.
- McDonald, F. J., “The Influence of Learning Theories on Education (1900–1950)”, in *The Sixty-third Yearbook of the National Society for the Study of Education*, I, Chicago, The University of Chicago Press, 1964.
- Mead, G.H. (1934), *Works of George Herbert Mead*, vol. 1: *Mind, Self, and Society, from the Standpoint of a Social Behaviorist*, Edited and with an Introduction by Charles W. Morris, Chicago and London, The University of Chicago Press, 1934; paperback edition, 1967.
- Mead, M., “Our Educational Emphasis in Primitive Perspective”, *American Journal of Sociology*, 48, 1953, pp. 633–636; *The School in American Culture*, Cambridge MA, Harvard University Press, 1951.
- Mehan, H., “Structuring School Structure”, *Harvard Educational Review*, vol. 48, n° 1, 1978, pp. 32–64.
- , “Understanding Inequality in Schools; the Contribution of Interpretative Studies”, *Sociology of Education*, vol. 65, n° 1, 1992, pp. 1–20.
- Merton, K., *Social Theory and Social Structure*, Glencoe IL, The Free Press, 1957.
- Mincer, J., “Investment in Human Capital and Personal Income Distribution”, *The Journal of Political Economy*, n° 66, 1958, pp. 281–302.
- Morgan, H.P., “Sponsored and Contest Mobility Revisited: An Examination of Britain and the USA today”, *Oxford Review of Education*, vol. 16, n° 1, 1990, pp. 39–54.
- Morin, J.-M., *Boudon, un sociologue classique*, Paris, L’Harmattan, 2006.
- Newell, A. & H. A. Simon, *Human Problem-Solving*, Englewood Cliffs NJ, Prentice Hall, 1972.

- Newton, I. (1693), *Papers & Letters On Natural Philosophy and related documents*, ed. I. Bernard Cohen, Cambridge MA, Harvard University Press, 1958.
- Nogueira, L. G., “Éducation, savoir, production chez Marx et Engels”, Thesis in Education Sciences, Université de Paris V, 1986.
- Novak, J. D., *A Theory of Education*, Ithaca NY and London, Cornell University Press, 1977.
- Olson, M. (1966), *Logic of Collective Action: Public Goods and the Theory of Groups*, Boston, Harvard University Press, 1966.
- Orel, T., “Analyse spectrale de la conception de l’éducation chez Marx”, Thesis in Human Sciences, Université de Paris V, 1981.
- Parsons, T. (1951), *The Social System*, Glencoe, The Free Press.
- , *Family, Socialisation and Interaction Process*, Glencoe, The Free Press, 1955.
- , “The School Class as a Social System: Some of Its Functions in American Society”, *Harvard Educational Review*, 29, 4, 1959, pp. 297–318.
- , *Social Structure and Personality*, Glencoe, The Free Press, 1964.
- , *The System of Modern Societies*, Upper Saddle River, Prentice-Hall, 1971.
- Parsons, T. & G.M. Platt, *The American University*, Cambridge MA, Harvard University Press, 1973.
- Peel, J. D. Y., *Herbert Spencer. On Social Evolution*, Chicago, the University of Chicago Press, 1972.
- Perrenoud, P., *Stratification socioculturelle et réussite scolaire, les défaillances de l’explication causale*, Geneva, Droz, 1970.
- Piaget, J., *The Language and Thought of the Child*, transl. M. Gabain, London, Routledge and Kegan Paul, 1926; translated from the French: *Le Langage et la pensée chez l’enfant*, Genève, Delachaux & Niestlé, 1923.
- , *Judgment and Reasoning in the Child*, transl. M. Warden, New York, Harcourt, Brace and World, 1926; translated from the French: *Le Jugement et le raisonnement chez l’enfant*, Genève, Delachaux & Niestlé, 1924.
- , *The Child’s Conception of the World*, transl. J. & A. Tomlinson, New York, Harcourt, Brace and World, 1929; translated from the French: *La Représentation du monde chez l’enfant*, Paris, F. Alcan, 1926.
- , (1947), *The Psychology of Intelligence*, transl. M. Percy & Berlyne, London, Routledge and Kegan Paul, 1950; translated from the French: *La Psychologie de l’intelligence*, Paris, A. Colin, 1967.
- , *Études sociologiques*, Genève, Droz, 1965.
- , “Les Courants de l’épistémologie scientifique contemporaine”, in J. Piaget (dir.), *Logique et connaissance scientifique*, Paris, Gallimard, 1967, pp. 1225–1271.
- , *Structuralism*, transl. C. Maschler, New York, Basic Books, 1970; translated from the French: *Le Structuralisme*, Paris, Presses Universitaires de France, 1968.
- Piaget, J. & R. Garcia, *Psychogenesis and the History of Science*, transl. Helga Feider, New York, Columbia University Press, 1989; translated from the French: *Psychogenèse et histoire des sciences*, Paris, Flammarion, 1993.
- Popper, K. (1967), “The Rationality Principle”, in D. Miller (ed.), *Popper Selections*, Princeton, Princeton University Press, 1985.
- Powell, A. G., E. Farrar & D. K. Cohen, *The Shopping Mall High School, Winners and Losers in the Educational Marketplace*, Boston, Houghton Mifflin Company, 1985.

- Ravitch, D., *Left Back. A Century of Battles Over School Reform*, New York, Simon & Schuster, 2000.
- Reynolds, D. & M. Sullivan, "Towards a New Socialist Sociology of Education", in L. Barton, R. Meighan & S. Walker (eds), *Schooling, Ideology and the Curriculum*, London, The Falmer Press, 1980.
- Richards, R.J., *Darwin and the Emergence of Evolutionary Theories of Mind and Behavior*, Chicago, The University of Chicago Press, 1987.
- Riessman, F., *The Culturally Deprived Child*, New York, Harper and Row, 1962.
- Rosenthal, R. A. & L. Jacobson, *Pygmalion in the Classroom; Teacher Expectation and Pupil's Intellectual Development*, New York, Holt, Rinehart and Winston, 1968.
- Ross, E. A., "Social Control", *The American Journal of Sociology*, January 1900, pp. 475–487.
- Rothstein, R. (ed.), *School Choice, Examining the Evidence*, Washington D.C., Economic Policy Institute, 1993.
- Rutter, M., *Fifteen Thousand Hours, Secondary Schools and their Effects on Children*, Cambridge MA, Harvard University Press, 1979.
- Schultz, T. W., *The Economic Value of Education*, New York, Columbia University Press, 1963.
- Schütz, A. (1940–1955), in A. Brodersen (ed.), *Alfred Schütz. Collected Papers*, vol. I, The Hague, Martinus Nijhoff, 1962.
- Simmel, G. (1892), *The Problems of the Philosophy of History: An Epistemological Essay*, New York, The Free Press, 1977.
- , (1900), *The Philosophy of Money*, Routledge and Kegan Paul, London, 1978.
- , "How is Society Possible?", *Journal of Sociology*, 1910, XVI, 3, pp. 372–391.
- Simon, H. A., *Models of Bounded Rationality*, vol. 2, Cambridge MA, The MIT Press, 1982.
- Small, M. Y., *Cognitive Development*, New York, Harcourt Brace Jovanovich Publishers, 1990.
- Spence, A. M., "Job Market Signaling", *Quarterly Journal of Economics*, Aug. 1973, n° 3, vol. 87, pp. 355–374.
- , *Market Signaling, Informational Transfer in Hiring and Related Screening Processes*, Cambridge MA, Harvard University Press, 1974.
- Spencer, H. (1855), *Principles of Psychology*, Boston, Longwood Press, 1977.
- , (1879), *The Principles of Sociology*, Boston, Longwood Press, 1977, vol. II.
- , *Education: Intellectual, Moral and Physical*, New York, D. Appleton, 1860.
- , (1862), *First Principles*, Westport, Greenwood Press, 1976.
- , (1873), *The Principles of Sociology*, New York, D. Appleton and Company, 1897.
- Thomas, W.I. & F. Znaniecki (1918–1920), *The Polish Peasant in Europe and America*, New York, Knopf, 1927.
- Trow, M., "The Second Transformation of American Secondary Education", *International Journal of Comparative Sociology*, vol. 2, 1961, pp. 144–166.
- Turner, R. H., "Sponsored and Contest Mobility and the School System", *American Sociological Review*, 1960, vol. XXV, n° 5, pp. 855–867.
- Veer, R. & J. Valsiner, *The Vygotsky Reader*, Oxford, Blackwell, 1994.
- Volpicelli, L., *L'Évolution de la pédagogie soviétique*, Paris, Delachaux and Niestlé, 1966.

- Vygotsky, L. (1933–1935), *Mind in Society. The Development of Higher Psychological Processes*, Cambridge MA, Harvard University Press, 1978.
- , (1934), *Thought and language*, translation newly revised and edited by A. Kozulin, Cambridge MA, London, The MIT Press, 1986.
- Vygotsky, L. & A.-R. Luria (1930), *Studies on the History of Behavior, Ape, Primitive, and Child*, Hillsdale, Lawrence Erlbaum Associates, 1993.
- Waller, W., (1932), *The Sociology of Teaching*, New York, John Wiley and Sons, 1967.
- Wallon, H., *L'Évolution psychologique de l'enfant*, Paris, A. Colin, 1968.
- Ward, L., *Dynamic Sociology*, New York, D. Appleton, 1883.
- Watzlawick, P., J.H. Beavin & Don D. Jackson, *Pragmatics of Human Communication. A Study of Interactional Patterns, Pathologies, and Paradoxes*, New York, Norton & Company, 1967.
- Weber, M. (1919), “Science As a Vocation”, in H.H. Gerth & C.W. Mills, *From Max Weber: Essays in Sociology*, New York, Oxford University Press, 1958.
- , (1921), *Economy and Society. An Outline of Interpretive Sociology*, edited by Guenther Roth & Claus Wittich, transl. Ephraim Fischoff [and others], New York, Bedminster Press, 1965.
- , (1904–1905), *The Protestant Ethic and the Spirit of Capitalism*, transl. Talcott Parsons, New York, Routledge, 1972, pp. 122–125.
- , “Subjectivity and Determinism”, in A. Giddens (ed.), *Positivism and Sociology*, London, Heinemann, 1974, pp. 23–32.
- Wertsch, J.V., *Vytotsky and the Social Formation of Mind*, Cambridge MA, Harvard University Press, 1985.
- , (ed.), *Culture, Communication and Cognition: Vygotskian Perspectives I*, New York, Cambridge University Press, 1985.
- , *Voices of Mind: A Sociocultural Approach to Mediated Action*, Cambridge MA, Harvard University Press, 1991.
- Whitty, G., *Sociology and School Knowledge*, London, Methuen, 1985.
- Wilson, P., “Normative and Interpretive Paradigms in Sociology”, in J.D. Douglas (ed.), *Understanding Everyday Life*, Chicago, Aldine Publishing Company, 1970, pp. 57–79.
- Wise, D.A., “Academic Achievement and Job Performance”, *The American Economic Review*, vol. 65, n° 3, June 1965, pp. 350–356.
- Wittrock, M.C. (ed.), *Handbook of Research on Teaching*, New York, Macmillan Publishing Company, 1980.
- Young, M. (ed.), *Knowledge and Control: New Directions for the Sociology of Education*, London, Collier-MacMillan, 1971.
- , “Taking Sides Against the Probable, Problems of Relativism and Commitment in Teaching and the Sociology of Knowledge”, *Educational Review*, vol. 25, n° 3, 1973.

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