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Chapter 5 On the classification and framing of educational knowledge

Introduction

How a society selects, classifies, distributes, transmits and evaluates the educational knowledge it considers to be public, reflects both the distribution of power and the principles of social control. From this point of view, differences within, and change in, the organization, transmission and evaluation of educational knowledge should be a major area of sociological interest. (Bernstein, B., 1966, 1967; Davies, D. I., 1970a, 1970b; Musgrove, 1968; Hoyle, 1969; Young, M., 1970.) Indeed, such a study is a part of the larger question of the structure and changes in the structure of cultural transmission. For various reasons, British sociologists have fought shy of this question. As a result, the sociology of education has been reduced to a series of input-output problems; the school has been transformed into a complex organization or people-processing institution; the study of socialization has been trivialized.

Educational knowledge is a major regulator of the structure of experience. From this point of view, one can ask 'How are forms of experience, identity and relation evoked, maintained and changed by the formal transmission of educational knowledge and sensitivities?' Formal educational knowledge can be considered to be realized through three message systems: curriculum, pedagogy and evaluation. Curriculum defines what counts as valid knowledge, pedagogy defines what counts as a valid transmission of knowledge, and evaluation defines what counts as a valid realization of this knowledge on the part of the taught. The term, educational knowledge code, which will be introduced later, refers to the underlying principles which shape curriculum, pedagogy and evaluation. It

will be argued that the form this code takes depends upon social principles which regulate the classification and framing of knowledge made public in educational institutions. Both Durkheim and Marx have shown us that the structure of society's classifications and frames reveals both the distribution of power and the principles of social control. I hope to show, *theoretically*, that educational codes provide excellent opportunities for the study of classification and frames through which experience is given a distinctive form. The paper is organized as follows:

(1) I shall first distinguish between two types of curricula: collection and integrated.
(2) I shall build upon the basis of this distinction in order to establish a more general set of concepts: classification and frame.
(3) A typology of educational codes will then be derived.
(4) Sociological aspects of two very different educational codes will then be explored.
(5) This will lead on to a discussion of educational codes and problems of social control.
(6) Finally, there will be a brief discussion of the reasons for a weakening of one code and a strengthening of the movement of the other.

Two types of curricula

Initially, I am going to talk about the curriculum in a very general way. In all educational institutions there is a formal punctuation of time into periods. These may vary from ten minutes to three hours or more. I am going to call each such formal period of time a 'unit'. I shall use the word 'content' to describe how the period of time is used. I shall define a curriculum initially in terms of the principle by which units of time and their contents are brought into a special relationship with each other. I now want to look more closely at the phrase 'special relationship'.

First, we can examine relationships between contents in terms of the amount of time accorded to a given content. Immediately, we can see that more time is devoted to some contents rather than others. Second, some of the contents may, from the point of view

of the pupils, be compulsory or optional. We can now take a very crude measure of the relative status of a content in terms of the number of units given over to it, and whether it is compulsory or optional. This raises immediately the question of the relative status of a given content and its significance in a given educational career.

We can, however, consider the relationship between contents from another, perhaps more important, perspective. We can ask about any given content whether the boundary between it and another content is clear-cut or blurred. To what extent are the various contents well insulated from each other. If the various contents are well insulated from each other, I shall say that the contents stand in a *closed* relation to each other. If there is reduced insulation between contents, I shall say that the contents stand in an *open* relationship to each other. So far, then, I am suggesting that we can go into any educational institution and examine the organization of time in terms of the relative status of contents, and whether the contents stand in an open/closed relationship to each other. I am deliberately using this very abstract language in order to emphasize that there is nothing intrinsic to the relative status of various contents, there is nothing intrinsic to the relationships between contents. Irrespective of the question of the intrinsic logic of the various forms of public thought, the *forms* of their transmission, that is their classification and framing, are social facts. There are a number of alternative means of access to the public forms of thought, and so to the various realities which they make possible. I am therefore emphasizing the social nature of the system of alternatives from which emerges a constellation called a curriculum. From this point of view, any curriculum entails a principle or principles whereby of all the possible contents of time, some contents are accorded differential status and enter into open or closed relation to each other.

I shall now distinguish between two broad types of curricula. If contents stand in a closed relation to each other, that is if the contents are clearly bounded and insulated from each other, I shall call such a curriculum a *collection* type. Here, the learner has to collect a group of favoured contents in order to satisfy some criteria of evaluation. There may of course be some underlying concept to a collection: the gentleman, the educated man, the skilled man, the non-vocational man.

Now I want to juxtapose against the collection type, a curriculum

where the various contents do not go their own separate ways, but where the contents stand in an open relation to each other. I shall call such a curriculum an integrated type. Now we can have various types of collection, and various degrees and types of integration.

Classification and frame

I shall now introduce the concepts, classification and frame, which will be used to analyse the underlying structure of the three message systems, curriculum, pedagogy and evaluation, which are realizations of the educational knowledge code. The basic idea is embodied in the principle used to distinguish the two types of curricula: collection and integrated. Strong insulation between contents pointed to a collection type, whereas reduced insulation pointed to an integrated type. The principle here is the strength of the *boundary* between contents. This notion of boundary strength underlies the concepts of classification and frame.

Classification, here, does not refer to *what* is classified, but to the *relationships* between contents. Classification refers to the nature of the differentiation between contents. Where classification is strong, contents are well insulated from each other by strong boundaries. Where classification is weak, there is reduced insulation between contents, for the boundaries between contents are weak or blurred. *Classification thus refers to the degree of boundary maintenance between contents.* Classification focuses our attention upon boundary strength as the critical distinguishing feature of the division of labour of educational knowledge. It gives us, as I hope to show, the basic structure of the message system, curriculum.

The concept, frame, is used to determine the structure of the message system, pedagogy. Frame refers to the form of the *context* in which knowledge is transmitted and received. Frame refers to the specific pedagogical relationship of teacher and taught. In the same way as classification does not refer to contents, so frame does not refer to the contents of the pedagogy. Frame refers to the strength of the boundary between what may be transmitted and what may not be transmitted, in the pedagogical relationship. Where framing is strong, there is a sharp boundary, where framing is weak, a blurred boundary, between what may and may not be transmitted. Frame refers us to the range of options available to

teacher and taught in the *control* of what is transmitted and received in the context of the pedagogical relationship. Strong framing entails reduced options; weak framing entails a range of options. *Thus frame refers to the degree of control teacher and pupil possess over the selection, organization, pacing and timing of the knowledge transmitted and received in the pedagogical relationship.*[1]

There is another aspect of the boundary relationship between what may be taught and what may not be taught and, consequently, another aspect to framing. We can consider the relationship between the non-school everyday community knowledge of the teacher or taught, *and* the educational knowledge transmitted in the pedagogical relationship. We can raise the question of the strength of the boundary, the degree of insulation, between the everyday community knowledge of teacher and taught and educational knowledge. Thus, we can consider variations in the strength of frames as these refer to the strength of the boundary between educational knowledge and everyday community knowledge of teacher and taught.

From the perspective of this analysis, the basic structure of the message system, curriculum is given by variations in the strength of classification, and the basic structure of the message system pedagogy is given by variations in the strength of frames. It will be shown later that the structure of the message system, evaluation, is a function of the strength of classification and frames. It is important to realize that the strength of classification and the strength of frames can vary independently of each other. For example, it is possible to have weak classification and exceptionally strong framing. Consider programmed learning. Here the boundary between educational contents may be blurred (weak classification) but there is little control by the pupil (except for pacing) over *what* is learned (strong framing). This example also shows that frames may be examined at a number of levels and the strength can vary as between the levels of selection, organization, pacing and timing of the knowledge transmitted in the pedagogical relationship.

I should also like to bring out (this will be developed more fully later in the analysis) the power component of this analysis and what can be called the 'identity' component. Where classification is strong, the boundaries between the different contents are

sharply drawn. If this is the case, then it pre-supposes strong boundary maintainers. Strong classification also creates a strong sense of membership in a particular class and so a specific identity. Strong frames reduce the power of the pupil over what, when and how he receives knowledge, and increases the teacher's power in the pedagogical relationship. However, strong *classification* reduces the power of the *teacher* over what he transmits, as he may not over-step the boundary between contents, *and* strong classification reduces the power of the teacher *vis-à-vis* the boundary maintainers.

It is now possible to make explicit the concept of educational knowledge codes. The code is fully given *at the most general level* by the relationship between classification and framing.

A typology of educational knowledge codes

In the light of the conceptual framework we have developed, I shall use the distinction between collection and integrated curricula in order to realize a typology of types and sub-types of educational codes. The *formal* basis of the typology is the strength of classification and frames. However, the sub-types will be distinguished, initially, in terms of substantive differences.

Any organization of educational knowledge which involves strong classification gives rise to what is here called a collection code. Any organization of educational knowledge which involves a marked attempt to reduce the strength of classification is here called an integrated code. Collection codes may give rise to a series of sub-types, each varying in the relative strength of their classification and frames. Integrated codes can also vary in terms of the strength of frames, as these refer to the *teacher/pupil/student* control over the knowledge that is transmitted.

Figure 5.1 sets out general features of the typology.

Collection codes

The first major distinction *within* collection codes is between specialized and non-specialized types. The extent of specialization can be measured in terms of the number of closed contents publicly examined at the end of the secondary educational stage.

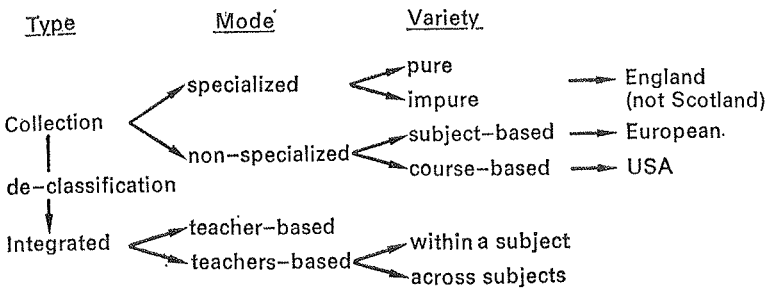


Figure 5.1

Thus in England, *although there is no formal limit*, the student usually sits for three 'A' level subjects, compared with the much greater range of subjects which make up the Abitur in Germany, the Baccalauréat in France, or the Studente Exam in Sweden.

Within the English specialized type, we can distinguish two varieties: a pure and an impure variety. The pure variety exists where 'A' level subjects are drawn from a common universe of knowledge, e.g. Chemistry, Physics, Mathematics. The impure variety exists where 'A' level subjects are drawn from different universes of knowledge, e.g. Religion, Physics, Economics. The latter combination, although formally possible, very rarely substantively exists, for pupils are not encouraged to offer—neither does timetabling usually permit—such a combination. It is a matter of interest that until very recently the pure variety at the university level received the higher status of an honours degree, whereas the impure variety tended to lead to the lower status of the general degree.[2] One can detect the beginnings of a shift in England from the pure to the impure variety, which appears to be trying to work towards the non-specialized type of collection.

Within the non-specialized collection code, we can distinguish two varieties, according to whether a subject or course is the basic knowledge unit. Thus the standard European form of the collection code is non-specialized, *subject*-based. The USA form of the collection is non-specialized, course-based.

I have so far described sub-types and varieties of the collection code in simple descriptive terms; as a consequence it is not easy to see how their distinctive features can be translated into sociological concepts in order to realize a specific sociological problem. Clearly, the conceptual language here developed has built into it a

specific perspective: that of power and social control. In the process of translating the descriptive features into the language of classification and frames, the question must arise as to whether the hypotheses about their relative strength fits a particular case.

Here are the hypotheses, given for purposes of illustration:
(1) I suggest that the European, non-specialized, subject-based form of collection involves strong classification but *exceptionally* strong framing. That is, at levels *below* higher education, there are relatively few options available to teacher, and especially taught, over the transmission of knowledge. Curricula and syllabus are very explicit.
(2) The English version, I suggest, involves *exceptionally* strong classification, but relatively weaker framing than the European type. The fact that it is specialized determines what contents (subjects) may be put together. There is very strong insulation between the 'pure' and the 'applied' knowledge. Curricula are graded for particular ability groups. There can be high insulation between a subject and a class of pupils. 'D' stream secondary pupils will not have access to certain subjects, and 'A' stream students will also not have access to certain subjects. However, I suggest that framing, relative to Europe, is weaker. This can be seen particularly at the primary level. There is also, *relative* to Europe, less *central* control over what is transmitted, although, clearly, the various requirements of the university level exert a strong control over the secondary level.[3] I suggest that, although again this is *relative*, there is a weaker frame in England between educational knowledge and the everyday community knowledge for certain classes of students: the so-called less able. Finally, relative to Europe, I suggest that there are more options available to the pupil within the pedagogical relationships. The frame as it refers to pupils is weaker. Thus, I suggest that framing as it relates to teachers and pupils is relatively weaker, but that classification is relatively much stronger in the English than in the European system. Scotland is nearer to the European version of the collection.
(3) The course-based, non-specialized USA form of the collection, I suggest, has the weakest classification *and* framing of the collection code, especially at the secondary and university level. A far greater range of subjects can be taken at the secondary and university level, and are capable of combination; this indicates weak

classification. The insulation between educational knowledge and everyday community knowledge is weaker, as can be evidenced by community control over school; this indicates weak frames. The range of options available to pupils within the pedagogical relationship is, I suggest, greater. I would guess, then, that classification and framing in the USA is the weakest of the collection codes.

Integrated codes

It is important to be clear about the term 'integrated'. Because one subject uses the theories of another subject, this type of intellectual inter-relationship does not constitute integration. Such intellectual inter-relation may well be part of a collection code at some point in the history of the development of knowledge. Integration, as it is used here, refers minimally to the *subordination* of previously insulated subjects *or* courses to some *relational* idea, which blurs the boundaries between the subjects. We can distinguish two types. The first type is *teacher*-based. Here the teacher, as in the infant school, has an extended block of time with often the same group of children. The teacher may operate with a collection code and keep the various subjects distinct and insulated, or he can blur the boundaries between the different subjects. This type of integrated code is easier to introduce than the second type, which is *teachers*-based. Here, integration involves relationships with other teachers. In this way, we can have degrees of integration in terms of the number of teachers involved.

We can further distinguish two varieties according to whether the integration refers to a group of teachers *within* a common subject, or the extent to which integration involves teachers of different subjects. Whilst integrated codes, by definition, have the weakest classification, they may vary as to framing. During the initiating period, the frames the teachers enter will be weak, but other factors will effect the final frame strength. It is also possible that the frames the *pupils* enter can vary in strength.

Thus integrated codes may be confined to one subject or they can cross subjects. We can talk of code strength in terms of the range of different subjects co-ordinated by the code, or if this criterion cannot be applied, code strength can be measured in terms of the *number* of teachers co-ordinated through the code.

Integrated codes can also vary as to frame strength as this applies to teachers or pupils, or both.

Differences within, and between, educational knowledge codes from the perspective developed here, lie in variations in the strength and nature of the boundary maintaining procedures, as these are given by the classification and framing of the knowledge. It can be seen that the nature of classification and framing affects the authority/power structure which controls the dissemination of educational knowledge, and the *form* of the knowledge transmitted. In this way, principles of power and social control are realized through educational knowledge codes and, through the codes, enter into and shape consciousness. Thus, variations within and change of knowledge codes should be of critical concern to sociologists. The following problems arise out of this analysis:

(1) What are the antecedents of variations in the strength of classification and frames?[4]
(2) How does a given classification and framing structure perpetuate itself? What are the conditions of, and resistance to, change?
(3) What are the different socializing experiences realized through variations in the strength of classifications and frames?

I shall limit the application of this analysis to the consideration of aspects of the last two questions. I feel I ought to apologize to the reader for this rather long and perhaps tedious conceptual journey, before he has been given any notion of the view to which it leads.

Application

I shall examine the patterns of social relationship and their socializing consequences which are realized through the European, particularly English, version of the collection code, and those which are *expected* to arise out of integrated codes, *particularly those which develop weak framing.* I shall suggest that there is some movement towards forms of the integrated code and I shall examine the nature of the resistance towards such a change. I shall suggest some reasons for this movement.

Classification and framing of the European form of the collection code

There will be some difficulty in this analysis, as I shall at times switch from secondary to university level. Although the English system has the distinguishing feature of specialization, it does share certain features of the European system. This may lead to some blurring in the analysis. As this is the beginning of a limited sociological theory which explores the social organization and structuring of educational knowledge, it follows that all statements, including those which have the character of descriptive statements, are hypothetical. The descriptive statements have been selectively patterned according to their significance for the theory.

One of the major differences between the European and English versions of the collection code is that, with the specialized English type, a membership category is established early in an educational career, in terms of an early choice between the pure and the applied, between the sciences and the arts, between having and not having a specific educational identity. A particular status in a given collection is made clear by streaming and/or a delicate system of grading. One nearly always knows the social significance of where one is and, in particular, *who* one is with each advance in the educational career. (Initially, I am doing science, or arts, pure or applied; or I am not doing anything; later I am becoming a physicist, economist, chemist, etc.). *Subject loyalty* is then systematically developed in pupils and finally students, with each increase in the educational life, and then transmitted by them as teachers and lecturers. The system is self-perpetuating through this form of socialization. With the specialized form of the collection it is banal to say that as you get older you learn more and more about less and less. Another, more sociological, way of putting this is to say that as you get older, you become increasingly *different* from others. Clearly, this will happen at some point in any educational career, but, with specialization, this happens much earlier. Therefore, specialization very soon reveals *difference from* rather than communality with. It creates relatively quickly an educational identity which is clear-cut and bounded. The educational category or identity is *pure*. Specialized versions of the collection code tend to abhor mixed categories and blurred identities, for they represent

a potential openness, an ambiguity, which makes the consequences of previous socialization problematic. Mixed categories such as bio-physicist, psycho-linguist, are only permitted to develop after long socialization into a subject loyalty. Indeed, in order to change an identity, a previous one has to be weakened and a new one created. For example, in England, if a student has a first degree in psychology and he wishes to read for a higher degree in sociology, either he is not permitted to make the switch or he is expected to take a number of papers at first degree level in sociology. In the process of taking the papers, he usually enters into social relationships with accredited sociologists and students through whom he acquires the cognitive and social style particular to the sociological identity. Change of an educational identity is accomplished through a process of re-socialization into a *new* subject loyalty. A sense of the sacred, the 'otherness' of educational knowledge, I submit does not arise so much out of an ethic of knowledge for its own sake, but is more a function of socialization into subject loyalty; for it is the subject which becomes the linch-pin of the identity. Any attempt to weaken or *change* classification strength (or even frame strength) may be felt as a threat to one's identity and may be experienced as a pollution endangering the sacred. Here we have one source of the resistance to change of educational code.

The specialized version of the collection code will develop careful screening procedures to see who belongs and who does not belong, and once such screening has taken place, it is very difficult to change an educational identity. The various classes of knowledge are well insulated from each other. Selection and differentiation are early features of this particular code. Thus, the deep structure of the specialized type of collection code is *strong boundary maintenance creating control from within through the formation of specific identities.* An interesting aspect of the protestant spirit.

Strong boundary maintenance can be illustrated with reference to attempts to institutionalize new forms or attempts to change the strength of classification, within either the European or English type of collection. Because of the exceptional strength of classification in England, such difficulties may be greater here. Changes in classification strength and the institutionalizing of new forms of knowledge may become a matter of importance when there are changes in the structure of knowledge at the higher levels and/or changes in the economy. Critical problems arise with the question of new forms, as

to their legitimacy, at what point they belong, when, where and by whom the form should be taught. I have referred to the 'sacred' in terms of an educational identity, but clearly there is the 'profane' aspect to knowledge. We can consider as the 'profane' the property aspect of knowledge. Any new form or weakening of classification clearly derives from past classifications. Such new forms or weakened classifications can be regarded as attempts to break or weaken existing monopolies. Knowledge under collection is private property with its own power structure and market situation. This affects the whole ambience surrounding the development and marketing of new knowledge. Children and pupils are early socialized into this concept of knowledge as private property. They are encouraged to work as isolated individuals with their arms around their work. This phenomenon, until recently, could be observed in any grammar school. It can be most clearly observed in examination halls. Pupils and students, particularly in the arts, appear, from this point of view, to be a type of entrepreneur.

There are, then, strong inbuilt controls on the institutionalizing of new knowledge forms, on the changing of strength of classification, on the production of new knowledge which derives from both 'sacred' and 'profane' sources.

So far, I have been considering the relationship between strong classification of knowledge, the concept of property and the creation of specific identities with particular reference to the specialized form of the collection code. I shall now move away from the classification of knowledge to its *framing* in the process of transmission.

Any collection code involves a hierarchical organization of knowledge, such that the ultimate mystery of the subject is revealed very late in the educational life. By the ultimate mystery of the subject, I mean its potential for creating new realities. It is also the case, and this is important, that the ultimate mystery of the subject is not coherence, but incoherence: not order, but disorder, not the known but the unknown. As this mystery, under collection codes, is revealed very late in the educational life—and then only to a select few who have shown the signs of successful socialization—then only the few *experience* in their bones the notion that knowledge is permeable, that its orderings are provisional, that the dialectic of knowledge is closure and openness. For the many, socialization into knowledge is socialization into order, the existing order,

into the experience that the world's educational knowledge is impermeable. Do we have here another version of alienation?

Now, clearly, any history of any form of educational knowledge shows precisely the power of such knowledge to create endlessly new realities. However, socialization into the specific framing of knowledge in its transmission may make such a history experientially meaningless. The key concept of the European collection code is discipline. This means learning to work *within* a received frame. It means, in particular, *learning* what questions can be put at any particular time. Because of the hierarchical ordering of the knowledge in *time*, certain questions raised may not enter into a particular frame.

This is soon learned by both teachers and pupils. Discipline then means accepting a given selection, organization, pacing and timing of knowledge realized in the pedagogical frame. With increases in the educational life, there is a progressive weakening of the frame for both teacher and taught. Only the few who have shown the signs of successful socialization have access to these relaxed frames. For the mass of the population the framing is tight. In a sense, the European form of the collection code makes knowledge safe through the process of socialization into its frames. There is a tendency, which varies with the strength of specific frames, for the young to be socialized into assigned principles and routine operations and derivations. The evaluative system places an emphasis upon attaining *states* of knowledge rather than *ways* of knowing. A study of the examination questions and format, the symbolic structure of assessment, would be, from this point of view, a rewarding empirical study. Knowledge thus tends to be transmitted, particularly to élite pupils at the secondary level, through strong frames which control the selecting, organization, pacing[5] and timing of the knowledge. The receipt of the knowledge is not so much a right as something to be won or earned. The stronger the classification and the framing, the more the educational relationship tends to be hierarchical and ritualized, the educand seen as ignorant, with little status and few rights. These are things which one earns, rather like spurs, and are used for the purpose of encouraging and sustaining the motivation of pupils. Depending upon the strength of frames, knowledge is transmitted in a context where the teacher has maximal control or surveillance, as in hierarchical secondary school relationships.

We can look at the question of the framing of knowledge in the pedagogical relationship from another point of view. In a sense, educational knowledge is uncommonsense knowledge. It is knowledge freed from the particular, the local, through the various languages of the sciences or forms of reflexiveness of the arts which make possible either the creation or the discovery of new realities. Now this immediately raises the question of the relationship between the uncommonsense knowledge of the school and the *commonsense* knowledge, everyday community knowledge, of the pupil, his family and his peer group. This formulation invites us to ask how strong are the frames of educational knowledge in relation to experiential, community-based non-school knowledge? I suggest that the frames of the collection code, very early in the child's life, socialize him into knowledge frames which discourage connections with everyday realities, or that there is a highly selective screening of the connection. Through such socialization, the pupil soon learns what of the outside may be brought into the pedagogical frame. Such framing also makes of educational knowledge something not ordinary or mundane, but something esoteric, which gives a special significance to those who possess it. I suggest that when this frame is relaxed to include everyday realities, it is often, and sometimes validly, not simply for the transmission of educational knowledge, but for purposes of social control of forms of deviancy. The weakening of this frame occurs usually with the less 'able' children whom we have given up educating.

In general, then, and depending upon the specific strength of classification and frames, the European form of the collection code is rigidly differentiating and hierarchical in character; highly resistant to change particularly at the secondary level. With the English version, this resistance to change is assisted by the discretion which is available to headmasters and principals. In England, within the constraints of the public examination system, the heads of schools and colleges have a relatively wide range of discretion over the organization and transmission of knowledge. Central control over the educational code is relatively weak in England, although clearly the schools are subject to inspection from both central and local government levels. However, the relationship between the inspectorate and the schools in England is very ambiguous. To produce widespread change in England would require the co-operation of hundreds of individual schools. Thus,

rigidity in educational knowledge codes may arise out of highly centralized *or* weak central control over the knowledge codes. Weak central control does permit a series of changes which have, initially, limited consequences for the system as a whole. On the other hand, there is much stronger central control over the organizational style of the school. This can lead to a situation where there can be a change in the organizational style *without* there being *any* marked change in the educational knowledge code, particularly where the educational code itself creates specific identities. This raises the question, which cannot be developed here, of the relationships between organizational change and change of educational knowledge code, i.e. change in the strength of classification and framing.

In general, then, the European and English form of the collection code may provide for those who go beyond the novitiate stage, order, identity and commitment. For those who do not pass beyond this stage, it can sometimes be wounding and seen as meaningless. What Bourdieu calls 'la violence symbolique'.

Integrated and collection codes

I shall now examine a form of the integrated code which is realized through very weak classification and frames. I shall, during this analysis, bring out further aspects of collection codes.

There are a number of attempts to institutionalize forms of the integrated code at different strengths, above the level of the infant school child. Nuffield Science is an attempt to do this with the physical sciences, and the Chelsea Centre for Science Education, Chelsea College of Technology, University of London, is concerned almost wholly in training students in this approach. Mrs Charity James, at Goldsmiths' College, University of London, is also producing training courses for forms of the integrated code. A number of comprehensive schools are experimenting with this approach at the middle school level. The SDS in Germany, and various radical student groups, are exploring this type of code in order to use the means of the university against the meaning. However, it is probably true to say that the code at the moment exists at the level of ideology and theory, with only a relatively small number of schools and educational agencies attempting to institutionalize it with any seriousness.

Now, as we said at the beginning of the paper, with the integrated code we have a shift from content closure to content openness, from strong to markedly reduced classification. Immediately, we can see that this disturbance in classification of knowledge will lead to a disturbance of existing authority structures, existing specific educational identities and concepts of property.

Where we have integration, the various contents are subordinate to some idea which reduces their isolation from each other. Thus integration reduces the authority of the separate contents, and this has implications for existing authority structures. Where we have collection, it does permit in principle considerable differences in pedagogy and evaluation, because of the high insulation between the different contents. However, the autonomy of the content is the other side of an authority structure which exerts jealous and zealous supervision. I suggest that the integrated code will not permit the variations in pedagogy and evaluation which are possible within collection codes. On the contrary, I suggest there will be a pronounced movement towards a common pedagogy and tendency towards a common system of evaluation. In other words, integrated codes will, at the level of the teachers, probably create homogeneity in teaching practice. Thus, collection codes increase the discretion of teachers (within, always, the limits of the existing classification and frames) whilst integrated codes will reduce the discretion of the teacher in direct relation to the strength of the integrated code (number of teachers—co-ordinated by the code). On the other hand, it is argued that the increased discretion of the teachers within collection codes is paralleled by *reduced* discretion of the pupils and that the reduced discretion of the teachers within integrated codes is paralleled by *increased* discretion of the pupils. In other words, there is a shift in the balance of power, in the pedagogical relationship between teacher and taught.

These points will now be developed. In order to accomplish any form of integration (as distinct from different subjects focusing upon a common problem, which gives rise to what could be called a *focused* curriculum) there must be some relational idea, a supra-content concept, which focuses upon general principles at a high level of abstraction. For example, if the relationships between sociology and biology are to be opened, then the relational idea (amongst many) might be the issue of problems of order and change examined through the concepts of genetic and cultural

codes. Whatever the relational concepts are, they will act selectively upon the knowledge within each subject which is to be transmitted. The particulars of each subject are likely to have reduced significance. This will focus attention upon the *deep* structure of each subject, rather than upon its surface structure. I suggest this will lead to an emphasis upon, and the exploration of, *general* principles and the concepts through which these principles are obtained. In turn, this is likely to affect the orientation of the pedagogy, which will be less concerned to emphasize the need to acquire *states* of knowledge, but will be more concerned to emphasize *how* knowledge is created. In other words, the pedagogy of integrated codes is likely to emphasize various *ways* of knowing in the pedagogical relationships. With the collection code, the pedagogy tends to proceed from the surface structure of the knowledge to the deep structure, as we have seen, only the élite have access to the deep structure and therefore access to the realizing of new realities or access to the experiential knowledge that new realities are possible. *With integrated codes, the pedagogy is likely to proceed from the deep structure to the surface structure.* We can see this already at work in the new primary school mathematics. Thus, I suggest that integrated codes will make available from the beginning of the pupil's educational career, clearly in a way appropriate to a given age level, the deep structure of the knowledge, i.e. the principles for the generating of new knowledge. Such emphasis upon various *ways* of knowing, rather than upon the attaining of *states* of knowledge, is likely to affect, not only the emphasis of the pedagogy, but the underlying theory of learning. The underlying theory of learning of collection is likely to be didactic, whilst the underlying theory of learning of integrated codes may well be more group or self-regulated. This arises out of a different concept of what counts as having knowledge, which in turn leads to a different concept of how the knowledge is to be acquired. These changes in emphasis and orientation of the pedagogy are initially responsible for the relaxed frames, which teacher and taught enter. Relaxed frames not only change the nature of the authority relationships by increasing the rights of the taught, they can also weaken or blur the boundary between what may or may not be taught, and so *more* of the teacher and taught is likely to enter this pedagogical frame. The inherent logic of the integrated code is likely to create a change in the structure of teaching groups,

which are likely to exhibit considerable flexibility. The concept of relatively weak boundary maintenance which is the core principle of integrated codes is realized both in the structuring of educational knowledge *and* in the organization of the social relationships.

I shall now introduce some organizational consequences of collection and integrated codes which will make explicit the difference in the distribution of power and the principles of control which inhere in these educational codes.

Where knowledge is regulated through a collection code, the knowledge is organized and distributed through a series of well insulated subject hierarchies. Such a structure points to oligarchic control of the institution, through formal and informal meetings of heads of department with the head or principal of the institution. Thus, senior staff will have strong horizontal work relationships (that is, with their peers in other subject hierarchies) and strong vertical work relationships within their own department. However, junior staff are likely to have only vertical (within the subject hierarchy) allegiances and work relationships.

The allegiances of junior staff are vertical rather than horizontal for the following reasons. First, staff have been socialized into strong subject loyalty and through this into specific identities. These specific identities are continuously strengthened through social interactions *within* the department *and* through the insulation between departments. Second, the departments are often in a competitive relationship for strategic teaching resources. Third, preferment within the subject hierarchy often rests with its expansion. Horizontal relationships of junior staff (particularly where there is no *effective* participatory administrative structure) are likely to be limited to *non-task-based* contacts. There may well be discussion of control problems ('X of 3b is a —— How do you deal with him?' or 'I can't get X to write a paper'). Thus the collection code within the framework of oligarchic control creates for *senior* staff strong horizontal and vertical based relationships, whereas the work relationships of junior staff are likely to be vertical and the horizontal relationships limited to non-work-based contacts. This is a type of organizational system which encourages gossip, intrigue and a conspiracy theory of the workings of the organization, for *both* the *administration* and the *acts of teaching* are *invisible* to the majority of staff. (See Figure 5.2.)

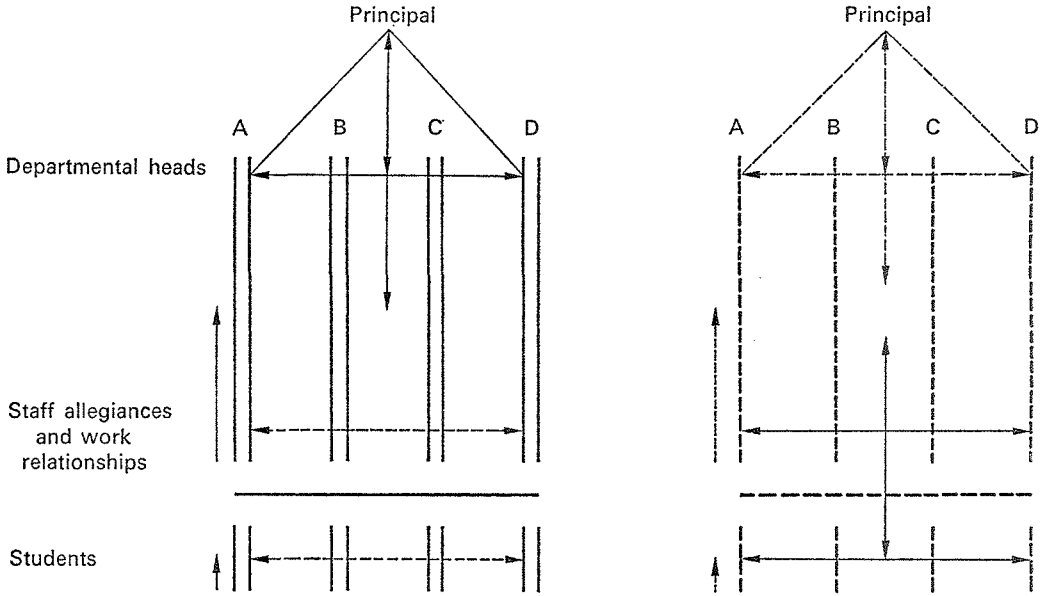
Now the integrated code will require teachers of different subjects

to enter into social relationships with each other which will arise not simply out of non-task areas, but out of a shared, co-operative educational task. The centre of gravity of the relationships between teachers will undergo a radical shift. Thus, instead of teachers and lecturers being divided and insulated by allegiances to subject hierarchies, the conditions for their unification exist through a common work situation. I suggest that this changed basis of the relationships, between teachers or between lecturers, may tend to weaken the separate hierarchies of collection. These new work-based horizontal relationships between teachers and between lecturers may alter both the structure and distribution of power regulated by the collection code. Further, the administration and specific acts of teaching are likely to shift from the relative invisibility to *visibility*.

We might expect similar developments at the level of students and even senior pupils. For pupils and students, with each increase in their educational life, are equally sub-divided and educationally insulated from each other. They are equally bound to subject hierarchies and, for similar reasons, to staff; their identities and their future is shaped by the department. Their vertical allegiances and work-based relationships are strong, whilst their horizontal relationships will tend to be limited to non-task areas (student/pupil societies and sport) or peripheral non-task based administration. Here again, we can see another example of the strength of boundary maintenance of collection codes; this time between task and non-task areas. Integrated codes may well provide the conditions for strong horizontal relationships and allegiances in students and pupils, based upon a common work task (the receiving and offering of knowledge).[6] In this situation, we might expect a weakening of the boundary between staff, especially junior staff, and students/pupils.

Thus, a move from collection to integrated codes may well bring about a disturbance in the structure and distribution of power, in property relationships and in existing educational identities. This change of educational code involves a fundamental change in the nature and strength of boundaries. It involves a change in what counts as having knowledge, in what counts as a valid transmission of knowledge, in what counts as a valid realization of knowledge, *and* a change in the organizational context. At the cultural level, it involves a shift from the keeping of categories pure to the mixing of categories; whilst at the level of socialization the outcomes of

Ideal typical organizational structures



Key: Continuous lines represent strong boundaries, continuous arrows represent direction of strong relationships. Dotted lines represent weak boundaries Dotted line arrows represent direction of weak relationships

Collection code type = Strong classification: strong frames

Integrated code type = Weak classification: weak frames

Figure 5.2

integrated codes *could* be less predictable than the outcomes of collection codes. This change of code involves fundamental changes in the classification and framing of knowledge and so changes in the structure and distribution of power and in principles of control. It is no wonder that deep-felt resistances are called out by the issue of change in educational codes.

Collection, integrated codes and problems of order

I shall now turn to aspects of the problem of order. Where knowledge is regulated by collection codes, social order arises out of the hierarchical nature of the authority relationships, out of the systematic ordering of the differentiated knowledge in time and space, out of an explicit, usually predictable, examining procedure. Order internal to the individual is created through the formation of specific identities. The institutional expression of strong classification and framing creates predictability in time and space. Because of strong classification, collection does allow a range of variations between subjects in the organization, transmission and evaluation of knowledge. Because of strong classification, this code does permit *in principle* staff to hold (within limits) a range of ideologies because conflicts can be contained *within* its various insulated hierarchies. At levels below that of the university, the strong frames between educational knowledge and non-educational relevant knowledge *in principle* may facilitate diversity in ideology held by staff because it cannot be explicitly offered. At the same time, strong framing makes such intrusion highly visible. The range of personal freedoms at the *university* level are symbolized in the ethical system of some collection codes and so form the basis for the cohesion of the differentiated whole.

Whilst it is usually the case that collection codes, relative to integrated codes, create strong frames between the uncommonsense knowledge of the school and the everyday community-based knowledge of teacher and taught, it is also the case that such insulation creates areas of privacy. For, inasmuch as community-based experience is irrelevant to the pedagogical frame, these aspects of the self informed by such experiences are also irrelevant. These areas of privacy reduce the penetration of the socializing process, for it is possible to distance oneself from it. This still means, how-

ever, that the socialization can be deeply wounding, either for those who wish for, but do not achieve, an identity, or for the majority for whom the pursuit of an identity is early made irrelevant.

Order created by integrated codes may well be problematic. I suggest that if four conditions are not satisfied, then the openness of learning under integration may produce a culture in which neither staff nor pupils have a sense of time, place or purpose. I shall comment briefly on these four conditions as I give them.

(1) There must be consensus about the integrating idea and it must be very explicit. (It is ironic that the movement towards integration is going on in those countries where there is a low level of moral consensus.) It may be that integrated codes will only work[7] when there is a *high* level of ideological consensus among the staff. We have already seen that, in comparison with collection, integrated codes call for greater homogeneity in pedagogy and evaluation, and therefore reduce differences between teachers in the form of the transmission and assessment of knowledge. Whereas the teaching process under collection is likely to be invisible to other teachers, unless special conditions prevail, it is likely that the teaching process regulated through integrated codes may well become visible as a result of developments in the pedagogy in the direction of flexibility in the structure of teaching groups. It is also the case that the weak classification and relaxed frames of integrated codes permit greater expressions of differences between teachers, and possibly between pupils, in the selection of what is taught. The moral basis of educational choices is then likely to be explicit at the initial planning stage. Integrated codes also weaken specific identities. For the above reasons, integrated codes may require a high level of ideological consensus, and this may affect the recruitment of staff. Integrated codes at the surface level create weak or blurred boundaries, but at bottom they may rest upon closed explicit ideologies. Where such ideologies are not shared, the consequences will become visible and threaten the whole at every point.

(2) The nature of the linkage between the integrating idea and the knowledge to be co-ordinated must also be coherently spelled out. It is this linkage which will be the basic element in bringing teachers *and* pupils into their working relationship. *The development of such a co-ordinating framework will be the process of socialization of teachers into the code. During this process, the*

teachers will internalize, as in all processes of socialization, the interpretative procedures of the code so that these become implicit guides which regulate and co-ordinate the behaviour of the individual teachers in the relaxed frames and weakened classification. This brings us to a major distinction between collection and integrated codes. With a collection code, the period of socialization is facilitated by strong boundary maintenance both at the level of *role* and at the level of knowledge. Such socialization is likely to be continuous with the teacher's own educational socialization. With integrated codes both the role and the form of the knowledge have to be *achieved* in relation to a range of different others, and this may involve re-socialization if the teacher's previous educational experience has been formed by the collection code. The collection code is capable of working when staffed by mediocre teachers, whereas integrated codes call for much greater powers of synthesis, analogy and for more ability to both tolerate and enjoy ambiguity at the level of knowledge *and* social relationships.

(3) A committee system of staff may have to be set up to create a sensitive feed-back system and which will also provide a further agency of socialization into the code. It is likely that evaluative criteria are likely to be relatively weak, in the sense that the criteria are less likely to be as explicit and measurable as in the case of collection. As a result, it may be necessary to develop committees for both teachers, students, and, where appropriate, pupils, which will perform monitoring functions.

(4) One of the major difficulties which inhere in integrated codes arises over what is to be assessed, and the form of assessment: also the place of specific competencies in such assessment. It is likely that integrated codes will give rise to multiple criteria of assessment compared with collection codes. In the case of collection codes, because the knowledge moves from the surface to the deep structure, then this progression creates ordered principles of evaluation in time. The form of temporal cohesion of the knowledge regulated through the integrated code has yet to be determined, and made explicit. Without clear criteria of evaluation, neither teacher nor taught have any means to consider the significance of what is learned, nor any means to judge the pedagogy. In the case of collection codes, evaluation at the secondary level often consists of the fit between a narrow range of specific competencies and states of knowledge, and previously established criteria (varying in explicit-

ness) of what constitutes a right or appropriate or convincing answer. The previously established criteria together with the specific social context of assessment create a relatively objective procedure. I do not want to suggest that this necessarily gives rise to a form of assessment which entirely disregards distinctive and original features of the pupil's performance. In the case of the integrated code under discussion (weak frames for teacher and taught), this form of assessment may well be inappropriate. The weak frames enable a greater range of the student's behaviour to be made public, and they make possible considerable diversity (at least in principle) between students. It is possible that this might lead to a situation where assessment takes more into account 'inner' attributes of the student. Thus if he has the 'right' attitudes, then this will result later in the attainment of various specific competencies. The 'right' attitude may be assessed in terms of the fit between the pupil's attitudes and the current ideology. It is possible, then, that the evaluative criteria of integrated codes with weak frames may be weak as these refer to specific cognitive attributes but strong as these refer to dispositional attributes. If this is so, then a new range of pupil attributes become candidates for labels. It is also likely that the weakened classification and framing will encourage more of the pupil/student to be made public; more of his thoughts, feelings and values. In this way more of the pupil is available for control. As a result the socialization could be more intensive and perhaps more penetrating. In the same way as pupils/students defend themselves against the wounds of collection, or distance themselves from its overt code, so they may produce new defences against the potential intrusiveness of the integrated code and its open learning contexts.

We can summarize this question of the problem of order as follows. Collection codes have explicit and strong boundary maintaining features and they rest upon a tacit ideological basis. Integrated codes have implicit and weak boundary maintaining features and they rest upon an explicit and closed ideological basis. The ideological basis of the collection code is a condensed symbolic system communicated through its explicit boundary maintaining features. Its covert structure is that of mechanical solidarity. The ideological basis of integrated codes is *not* a condensed symbolic system, it is verbally elaborated and explicit. It is an *overt* realization of organic solidarity and made substantive through weak

forms of boundary maintenance (low insulations). Yet the covert structure of mechanical solidarity of collection codes creates through its specialized outputs *organic* solidarity. On the other hand the overt structure of organic solidarity of integrated codes creates through its *less* specialized outputs *mechanical* solidarity. And it will do this to the extent to which its ideology is explicit, elaborated and closed *and* effectively and *implicitly* transmitted through its low insulations. Inasmuch as integrated codes do not accomplish this, then order is highly problematic at the level of social organization and at the level of the person. Inasmuch as integrated codes do accomplish such socialization, then we have the covert deep closure of mechanical solidarity. This is the fundamental paradox which has to be faced and explored.

Change of educational code

I have tried to make explicit the relationships between educational codes and the structure of power and principles of social control. Attempts to change or modify educational codes will meet with resistance at a number of different levels, irrespective of the intrinsic educational merit of a particular code. I shall now briefly discuss some reasons for a movement towards the institutionalizing of integrated codes *of the weak classification and weak framing (teacher and taught) type*,[8] above the level of the primary school.[9]

(1) The growing differentiation of knowledge at the higher levels of thought, together with the integration of previously discrete areas, may set up requirements for a form of socialization appropriate to these changes in the structure of knowledge.

(2) Changes in the division of labour are creating a different concept of skill. The in-built obsolescence of whole varieties of skills reduces the significance of context-tied operations and increases the significance of general principles from which a range of diverse operations may be derived. In crude terms, it could be said that the nineteenth century required submissive and inflexible man, whereas the late twentieth century requires conforming but flexible man.

(3) The less rigid social structure of the integrated code makes it a potential code for egalitarian education.

(4) In advanced industrial societies which permit, within limits, a range of legitimizing beliefs and ideologies, there is a major problem of control. There is the problem of making sense of the differentiated, weakly co-ordinated and changing symbolic systems and the problem of inner regulation of the person. Integrated codes, with their stress on the underlying unity of knowledge, through their emphasis upon analogy and synthesis, could be seen as a response to the first problem of 'making sense'. The *inter-personal* rather than *inter-positional* control of the integrated code may set up a penetrating, intrusive form of socialization under conditions of ambiguity in the system of beliefs and the moral order.

If these reasons operate, we could consider the movement towards integrated codes as stemming from a technological source. However, it is possible that there is another and deeper source of the movement away from collection. I suggest that the movement away from collection to integrated codes symbolizes that there is a crisis in society's basic classifications and frames, and therefore a crisis in its structures of power and principles of control. The movement from this point of view represents an attempt to de-classify and so alter power structures and principles of control; in so doing to unfreeze the structuring of knowledge and to change the boundaries of consciousness. From this point of view integrated codes are symptoms of a moral crisis rather than the terminal state of an educational system.

Conclusion

In this paper, I have tried to explore the concept of boundary in such a way that it is possible to see *both* the power and control components. The analysis focuses directly upon the structuring of transmitted educational knowledge.

Although the concept, 'classification', appears to operate on a single dimension, i.e. differences in degrees of insulation between content (subjects/courses, etc.) it explicitly points to power and control components. In the same way, the concept, 'frame', appears to operate in a single dimension; what may or may not be taught in the pedagogical relationship. Yet the exploration of the concept

again points to power and control components. Through defining educational codes in terms of the relationship between classification and framing, these two components are built into the analysis at all levels. It then becomes possible in one framework to derive a typology of educational codes, to show the inter-relationships between organizational and knowledge properties, to move from macro- to micro-levels of analysis, to relate the patterns internal to educational institutions to the external social antecedents of such patterns, and to consider questions of maintenance and change. At the same time, it is hoped that the analysis makes explicit tacit assumptions underlying various educational codes. It attempts to show at a *theoretical* level, the relationships between a particular symbolic order and the structuring of experience. I believe that it offers an approach which is well capable of exploration by diverse methods at the empirical level.

It should be quite clear that the specific application of the concepts requires at every point empirical evidence. I have not attempted to bolster the argument with references, because in many cases the evidence which is required does not exist in a *form* which bears directly upon the chain of inferences, and therefore would offer perhaps spurious support. We have, for example, little *first*-hand knowledge which bears upon aspects of framing as this concept is used in the paper. We also have next to no *first*-hand knowledge of the day-by-day encounters realized by various types of integrated codes.

I hope that the kinds of questions raised by this approach will encourage sociologists of education to explore both theoretically and empirically the structure of educational knowledge which I take to be the distinctive feature of this field.

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Notes

1 It follows that frame strength for teacher and taught can be assessed at the different levels of selection, organization, pacing and timing of the knowledge.

2 Consider the recent acrimonious debate over the attempt to obtain permission at Oxford to develop a degree in anthropology, sociology, psychology and biology—a relatively 'pure' combination.

3 The content of public examinations between the secondary and the tertiary level is controlled by the tertiary level directly or indirectly, through control over the various syllabuses. Thus, if there is to be any major shift in secondary schools' syllabuses and curricula, then this will require changes in the tertiary level's policy, as this affects the acceptance of students. Such a change in policy would involve changes in the selection, organization, pacing and timing of knowledge at the tertiary level. Thus, the conditions for a major shift in the knowledge code at the secondary level is a major shift in the knowledge code at the tertiary level. Changes in the knowledge code at the secondary level are likely to be of a somewhat limited nature without similar changes at the tertiary level. There clearly are other interest groups (industry) which may affect a given curriculum and syllabus.

4 Such variations may well be linked to variations in the development of class structure, see chapter 6.

5 What is often overlooked is that the pacing of the knowledge (i.e. the rate of expected learning) is implicitly based upon the middle-class socialization of the child. Middle-class family socialization of the child is a hidden subsidy, in the sense that it provides both a physical and psychological environment which immensely facilitates, in diverse ways, school learning. The middle-class child is oriented to learning almost anything. Because of this hidden subsidy, there has been little incentive to change curriculum and pedagogy, for the middle-class child is geared to learn; he may not like, or indeed approve of, what he learns, but he learns. Where the school system is not subsidized by the home, the pupil often fails. In this way, even the *pacing* of educational knowledge is class based. It may well be that frame strength, as this refers to pacing, is a critical variable in the study of educability. It is possible that the weak frame strength (as this refers to *pacing*) of integrated

codes indicates that integrated codes pre-suppose a longer average educational life. Middle-class children may have been potential pupils for progressive schools because of their longer educational life.

6 It is possible that the weak boundary maintaining procedures of integrated codes at the level of the organizational structure, knowledge structure and identity structure may increase the pupils/students informal age group affiliations as a source of identity, relation and organization.

7 In the sense of creating order.

8 In the paper, I suggested that integrated codes rest upon a closed explicit ideology. It should then follow that this code would stand a better chance of successful institutionalization in societies where (1) there were strong and effective constraints upon the development of a range of ideologies and (2) where the educational system was a major agency of political socialization. Further, the weak boundary maintaining procedures of the integrated code would (1) increase the penetration of the socialization as more of the self of the taught is made public through the relaxed frames and (2) deviancy would be more visible. On the other hand, integrated codes carry a potential for change in power structures and principles of control. I would therefore guess that in such societies integrated codes would possess weak classification, but the frames for teacher and taught would be strong.

9 It is a matter of interest that, in England, it is only in the infant school that there is relatively widespread introduction of this form of integrated code. This raises the general question of how this level of the educational system was open to such change. Historically, the primary school developed distinct concepts of infant and junior stages, and distinct heads for these two stages. Given the relative autonomy over the transmission of knowledge which characterizes the British system of education, it was in principle possible to have change. Although only a ceiling may separate infant from junior departments, two quite distinct and often incompatible educational codes can develop. We can regard this as a necessary, but not sufficient, condition for the emergence of integrated codes at the infant school level. It was also the case, until very recently, that the selection function started in the junior department, because that department was the gateway to the grammar school. This left the infant school relatively free of control by levels higher than itself. The form of integration in the infant school, again until recently, was *teacher*-based, and therefore did not set up the problems which arise out of *teachers*-based integration. Finally, infant school teachers are not socialized into strong educational identities. Thus the English educational system, until recently, had two potential points of openness—the period between the ages of five to seven years, before selection began, and the period post-eighteen years of age, when selection is

virtually completed. The major control on the structuring of knowledge at the secondary level is the structuring of knowledge at the tertiary level, specifically the university. Only if there is a major change in the structuring of knowledge at this level can there be effective code change at lower levels; although in any one school there may be a variety of knowledge codes.

References

BERNSTEIN, B. (1967), 'Open schools, open society?' *New Society*, 14 September. Reprinted as Chapter 3 of the present volume.

BERNSTEIN, B., ELVIN, L. and PETERS, R. (1966), 'Ritual in education', *Philosophical Transactions of the Royal Society of London*, Series B, 251, No. 772.

DAVIES, D. I. (1970a), 'The management of knowledge: a critique of the use of typologies in educational sociology', *Sociology* 4, No. 1.

DAVIES, D. I. (1970b), 'Knowledge, education and power', paper presented to the British Sociological Association Annual Conference, Durham.

DOUGLAS, M. (1966), *Purity and Danger*, Routledge & Kegan Paul.

DOUGLAS, M. (1970), *Natural Symbols*, Barrie & Rockliff, The Cresset Press.

DURKHEIM, E. (1947), *The Division of Labour in Society*, Free Press, Chicago.

DURKHEIM, E. (1961), *Moral Education*, Free Press, Chicago.

DURKHEIM, E. and MAUSS, M. (1963), *Primitive Classification* (translated by R. Needham), Cohen & West.

HOYLE, E. (1969), 'How does the curriculum change? (1) A proposal for enquiries (2) Systems and Strategies', *Journal of Curriculum Studies*, Vol. 1, Nos 2 and 3.

JEFFREY, G. B. (1950), *The Unity of Knowledge: Reflections on the Universities of Cambridge and London*, Cambridge University Press.

KEDDIE, N. G. (1970), 'The social basis of classroom knowledge', MA dissertation, University of London Institute of Education.

MUSGROVE, F. (1968), 'The contribution of sociology to the study of the curriculum', in *Changing the Curriculum*, ed. J. F. Kerr, University of London Press.

YOUNG, M. (1970), 'Curricula as socially organised knowledge', in *Knowledge and Control*, ed. M. Young, Collier-Macmillan.