

THE STRUCTURALISM OF LÉVI-STRAUSS:
PROBLEMS AND PROSPECTS

Introduction

Lévi-Strauss's structuralism is characterized by a certain ambiguity. On the one hand a growing number of anthropologists has come to acknowledge the merits of this structuralism: old data could be analysed in new contexts which often made it possible to relate phenomena in unexpected ways. On the other hand the limitations of this approach have also become increasingly clear. Structuralism now faces the task of transcending these shortcomings. As these failings are not primarily due to careless practice but to the hard core of its basic assumptions, this deadlock can be broken only to the extent that structuralists are willing to change cherished ideas.

In this essay I shall make a few suggestions for a possible way out of this impasse. To prepare the ground I shall first give an outline of the basic presuppositions of Lévi-Strauss's structuralism. But at the same time the limitations of his approach also come into view, which means that certain principles to which Lévi-Strauss is committed will have to be questioned. Here I shall focus on the dangers of his reductionism and on the problems of the relation between structure and process. Finally I shall indicate a few broadly-conceived directives for future research.

I would like to thank Jan de Wolf for translating this article into English.

The General Framework of Structuralism

Lévi-Strauss has not only opened up new avenues which changed our perspective on specific areas of anthropological knowledge, but he has also laid the foundation for a new idea of what cultural anthropology could mean as a science through the elaboration of a certain combination of basic presuppositions about the nature of socio-cultural reality.¹ Ardener (1971:450) goes so far as to call this change an epistemological break with the anthropological past. The most important interdependent principles are: (1) naturalism; (2) the difference and the asymmetry between conscious and unconscious as well as between appearance and reality; (3) holism related to relationism; and (4) the priority accorded to synchrony as compared to diachrony.

Central to Lévi-Strauss's thought is his idea that man must be interpreted as a part of nature, i.e. in terms of biological and physical factors, because these determine man. This determination occurs by way of the unconscious functioning of human thought. The principles of human thought are rooted in his nature, in the physio-chemical conditions of the brain. Therefore the creation of culture is no more than the realisation of a potential system which already exists in nature. It is precisely because the human mind obeys the laws of nature that exchange - the universal source of social life - and attribution of meaning become possible. So through this tie with nature, symbolism, exchange and signification belong indissolubly and permanently together (see Simonis 1974:374).

Related to this naturalism is Lévi-Strauss's idea that reality is layered. Although he sometimes gives the impression that there are various levels (Lévi-Strauss 1973:30), he mostly recognizes two strata, variously designated as the distinction between experience and reality, appearance (empirical reality) and reality (real reality), meaning and grammar, conscious and unconscious. Although Lévi-Strauss fails to indicate the exact

¹ With regard to kinship one can point to the role of 'exchange', which results from an inner need to reciprocate, and to the importance of the sibling relationship between brother and sister. Lévi-Strauss has contributed in an important way to the theory of systems of classification through his demonstration that categorizations which at first sight appear to be irrational are characterized by an internal logic of their own. In his studies of myth he has made it clear that myths are pre-eminently a medium for reflecting on the conditions of existence and for giving a meaning to it. He has also demonstrated that this attribution of meaning is characterized by a universal, basic pattern.

relationship between these levels of reality - in particular the relative autonomy of these levels *vis-à-vis* each other remains vague - so much is clear that the level of unconscious reality in some way directs conscious reality. Thus according to Lévi-Strauss one should turn away from the 'evidence' of consciousness and the certainties of experience in order to reach that 'reality' which science is seeking. Conscious meaning can always be reduced: the discovery of meaning is secondary. The most essential scientific activity consists of the discovery of the mechanisms of thought (Lévi-Strauss 1958:75).

If ... unconscious activity of the mind consists in imposing forms upon content, and if these forms are fundamentally the same for all minds - ancient and modern, primitive and civilized (as the study of the symbolic function, expressed in language, so strikingly indicates) - it is necessary and sufficient to grasp the unconscious structure underlying each institution and each custom, in order to obtain a principle valid for other institutions and other customs, provided of course that the analysis is carried far enough (Lévi-Strauss 1958:28).

So the assumption that reality can be known by the senses is mistaken. Reality never appears on the surface; it remains hidden beneath empirical data and directs the latter. This unconsciously active structure of thought - the sum total of mechanisms and conditions which determines the activity of consciousness - can be discovered according to Lévi-Strauss by means of a comparative analysis of institutions and ideas. In other words, Lévi-Strauss's method consists of the analysis of cultural products, with the revelation of processes of thought as its aim. Yet one should proceed carefully, as these cultural products do not represent processes of thought in their pure form, because they are the result of a process of interaction between socio-cultural reality and unconscious principles of categorizing thought. Thus, although structures of thought are universal, they nevertheless continually produce other structures, in the sense of orderings.

Through this attempt to mediate between what might be called reason and senses - or rationalism and empiricism (Lévi-Strauss 1955:50; 1971:618) - order becomes the central problem of structuralism. In this context emphasis is put less on the recording of individual cultures or their constituent parts than on the determination of the limitations which the brain imposes on the experience of the senses. This emphasis is closely connected with Lévi-Strauss's rejection of Durkheim's thesis that cultural classifications are the outcome of social conditions. In structuralism there is no place for sociological determinism: after all, socio-cultural orderings are the result of the activity of unassailable laws of thought. More specifically, Lévi-Strauss is of the opinion that the brain functions by means

of a mechanism of opposition and correlation, also designated as the principle of reciprocity and bipolarity, or as the unconscious; that is,

... the system of postulates and axioms required to establish a code which allows the least unfaithful translation possible of the other's into 'ours' and *vice versa*, the set of conditions in which we can best understand ourselves.... Ultimately, *pensée sauvage* as I intend it is *me* putting myself in *their* place and by *them* being put by me in *my* place (Lévi-Strauss 1970:62).

Thus this universal *pensée sauvage* forms the foundation of cross-cultural comparison.

His belief in the structuring activity of the human mind and the structuredness of reality clearly leads Lévi-Strauss to maintain that phenomena present themselves as structures. This view represents an atomistic or 'Aristotelian' concept of science, which sees reality as an aggregate of separate entities and which pays insufficient attention to the mutual relationships between phenomena. Lévi-Strauss bases himself on a 'Gestalt perspective' or 'Galilean' outlook (Lévi-Strauss 1958: 332). Two inter-related principles play an important role in this Gestalt perspective: (1) the sum total is assigned priority over its constituent part: 'the unity of the whole is more "essential" than each of its parts' (Lévi-Strauss 1950:xxxviii; see also 1973:14); and (2) the manner of explanation must be relational and integrative. This latter view has been elevated to a most important methodological rule. Relations are the only object of analysis for science (Lévi-Strauss 1968:175). Phenomena must be explained on the basis of their inter-relationships. It is the relationships which link phenomena to each other that are basic, not the phenomena themselves (Lévi-Strauss 1949a:196).

The methodological principle that relations are more important than elements causes Lévi-Strauss to emphasize synchrony. In his view, it is above all the relations which exist at a given point in time which determine the meaning of an element. He finds support for this idea in Saussure's thesis that 'facts in the synchronic order are structured and facts in the diachronic order are disconnected events' (cited in Ricoeur 1970:62). Taken together, this implies that Lévi-Strauss sees the relationship between structure - in the sense of ordering - and event (*événement*) as asymmetric. Change, events and history are all subordinated to structure. Structure - as preceding reality - makes some sense of events, which thus become integrated in this way into structure, or into a pre-existing order. Changes in orderings are caused by external factors such as raids, wars, migrations, demographic fluctuations and adaptations to new environments.

In view of the core assumptions outlined in the preceding part it

should cause no surprise that Lévi-Strauss relates cultural anthropology especially to linguistics, psychology and history.

As language is pre-eminently the medium which can reveal the activities of the brain, linguistics is of exemplary significance for the structuralism of Lévi-Strauss. Lévi-Strauss believes the linguistic system to be the prototype of various socio-cultural institutions. He views cultural anthropology, like linguistics, as a branch of semiology, the science of sign systems which studies 'the life of signs in the heart of social life' (Lévi-Strauss 1973:18). Culture is a system of codes through which man exchanges messages. All human forms of socio-cultural activity - be it kinship systems, systems of classifications, myths, culinary habits, or fashion - are in a formal sense 'codes' or systems of symbols. Objects and techniques are always connected with ideas, and therefore with signs. Apart from their context they appear simply as 'facts'. However, if the anthropologist placed them in that general inventory of societies which anthropology is trying to construct, they look quite different, and represent the choices which each society has made when faced with a number of different possibilities. 'Consequently, then, even the simplest techniques of any primitive society have hidden in them the character of a system, analyzable in terms of a more general system' (Lévi-Strauss 1973:20). Society is one big machine generating communication on different levels (Lévi-Strauss as cited in Tax 1953:323; see also Scholte 1966:1196). On this basis one may expect homologies between these socio-cultural regularities and the rules which govern language. Moreover one should not forget that all these codes are expressions and products of the human mind. The activity of the human mind, according to Lévi-Strauss, obeys the same laws in all fields. Thus everywhere the same basic pattern can be discovered.

As the explanation of phenomena consists of the indication of their logical order, anthropology is pre-eminently the study of 'anthropo-logics' (Lévi-Strauss 1962c:137). These anthropo-logics in their turn function within a 'psycho-logic' (Lévi-Strauss 1962b:75). The brain possesses a universal structure, but it processes material which differs in accordance with the technological environment and the historical era (Lévi-Strauss 1972:76). With regard to the basic explanation of its research objects, cultural anthropology can be related to cognition-psychology and ultimately perhaps to neuro-physiology.

On various occasions Lévi-Strauss has talked about the relation between cultural anthropology and the science of history (1949b, 1952, 1960, 1962b, 1964b). According to him these two disciplines have a special relationship with each other: 'the one unfolds the spectrum of human societies in time, the other in space' (Lévi-Strauss 1962b:339, my translation). The difference between cultural anthropology and history must be sought, on the one hand in the opposition individualizing/generalizing, and on the other in the opposition conscious/unconscious. Whereas history mainly emphasizes conscious actions and events which are individualized according to space and time, anthropology has to

stress the unconscious aspects of actions and events. While doing this, cultural anthropology attempts to reach the universal of which the observed is only an expression: its aim is the discovery of invariant characteristics underneath the visible variety of observed phenomena (Lévi-Strauss 1966:126-127). It tries to gain insight into the latent presence of potentialities. Anthropology and history 'have undertaken the same journey on the same road in the same direction; only their orientation is different.... A true two-faced Janus, it is the solidarity of the two disciplines that makes it possible to keep the whole road in sight' (Lévi-Strauss 1958:32).

Problems

(a) Reductionism

The thesis that sociocultural phenomena must not be viewed as phenomena *sui generis* or as the results of conscious human action, but as expressions of determining causes which have a primarily bio-psychological or even neuro-physiological character, leads to an unconditional surrender to a rationality which is rooted in nature. The most important consequence of this surrender has been a reductionism which manifests itself in various ways: the exclusion of conscious signification, explanations which lack emotional motives and the neglect of socio-cultural variables.

A clear indication of a reductionist method is already implied in the continual reference to language as a model for the analysis of culture. As a consequence, Lévi-Strauss shows insufficient awareness of the fact that cultural elements - in contrast to phonemes, for example - possess a rich polyvalent meaning and content which is not in any way completely determined by their position in the more inclusive socio-cultural system. It is even a question whether language and culture are analogous:

The point is that 'cultural rules' are basically concerned with specifying appropriate messages and social contexts; and 'linguistic rules' are basically concerned with the conversion of messages into verbal form. We cannot lightly or confidently assume that the formal organization of these two realms is sufficiently similar to make wholesale anthropological borrowing of linguistic concepts, formalisms or methods productive (Keesing 1972:315).

In other words, the assumption that language as well as culture are products of the human mind does not necessarily imply that the one system can be used profitably to throw light on the other. It could be that the differences which are the result of their different functions and contexts completely overshadow such an

assumed common substratum. However this may be, the reductionism which is implied in the analogy becomes intensified through the connection of culture to the grammatical level of language. The basic problem for Lévi-Strauss is not "what do symbols mean?" but "how do they mean?" (Sperber 1975:51). As a consequence Lévi-Strauss pays insufficient attention to semantics and pragmatics:

The structuralist is no more interested in the semantic and pragmatic role of language than he is in the purpose and praxis of historical events. He is primarily concerned with the logic or code which is said to make both history and language possible and intelligible.... In semiotic terms, the structuralist is interested in *homo significans*, not *homo faber*, nor *homo symbolicum* (Scholte 1979:44).

Lévi-Strauss's firm conviction that final explanations can be found in unconsciously active innate determinants also implies that intermediate variables are pushed into a corner. Put differently, his predilection for 'the unconscious' leads to a search for final explanations, and the relegation to the background of specific factors which distinguish one person or group of people from another person or group. He is only too quick to forget to incorporate all kinds of factors into his explanatory model. It must be obvious that this results in numerous ambiguities and contradictions. A good example can be found in Lévi-Strauss's analysis of myths. He defines a myth as an orally-transmitted, problem-oriented story, and therefore as a dialogue which man has with his environment in order to make disagreeable experiences and problems into a subject of discourse, which thus finally become acceptable to him. At the same time however, he describes myth as thought which reflects upon itself. In this case he speaks of myths which operate in men's minds without their being aware of the fact (Lévi-Strauss 1964a:20). Myths are, in this way, liberated from their dependence on concreteness and therefore become detached from everyday socio-cultural reality. They present an image of the world which is already implied in the '*architecture de l'esprit*' (Lévi-Strauss 1964a:346), which means that they reveal the unconscious activity of thought. Although one could object that Lévi-Strauss has in mind different levels on which myths can be analysed, the question remains how the relationship between these levels ought to be seen. To say that one level refers to the conscious while another refers to the unconscious makes matters too simple, for disagreeable psycho- and socio-logical (and logical) problems also often show a distorted or disguised character.

A consequence of his focus on unconscious structures of thought is that no consideration is given to the possibility that the social, historical and demographic situation of a people may be of decisive importance for the structure of myth. The

question ought to be raised whether it is possible to exclude the influence of the situational context, or to view this context as always subjected to the principles of thought. Is it not possible that structural similarities in the myths of peoples separated by vast distances are caused by the structure of primitive societies, which is determined by historical, social and material conditions rather than a *pensée sauvage* (see Godelier 1971)?

To the extent that Lévi-Strauss's analysis of myths becomes more comparative, this neglect of the context of myths increases. In his treatment of the Asdiwal myth Lévi-Strauss is still occupied with inter-relating various institutions, but in his *Mythologiques* this process of tracing relationships is already much less complete and less specific. Undoubtedly, in this way a part of the meaning of these myths is lost. For example, rites provide keys for the understanding of certain symbols present in the myths (Maybury-Lewis 1970:157). Among certain groups the anthropologist cannot but consider these rites, as there exists no mythology apart from ritual. Rites contribute to the wealth of mythical systems 'by drawing upon tangible signs which derive their meaning and currency from the words of articulated language, the primary constituent of myth' (Heusch 1975:371). Another reason for drawing attention to the importance of ritual is the fact that rites display very clearly the emotional and social functions of myths. Myths not only constitute a totality of cognitive classifications aiming at ordering the universe, they are also - and perhaps primarily - a medium for the evocation, channelling and repression of such feelings as hatred, anxiety, tenderness and sorrow. Thus they are goal-directed, and therefore possess a 'conative' aspect (Turner 1969:42-43; see also Fortes 1967:8-9 and Leach 1970:128). Myths also often contain a charter, as Malinowski used to call it. It must also be pointed out that the exclusion of the emotional and affective incentives of human action from the explanation cannot be related only to Lévi-Strauss's increasing preoccupation with the *how* of thought at the expense of the *what* and *why* of phenomena, but also to his epistemology: 'Actually, impulses and emotions explain nothing: they are always results, either of the power of the body or of the impotence of the mind. In both cases they are consequences, never causes' (Lévi-Strauss 1962a:103). Although Lévi-Strauss counters the criticism that he disregards the emotional aspects of man (see Fox 1967:161-162) with the argument that his comparison between myth and music, for example, shows that he does take emotions into account (see Lévi-Strauss 1971:596), the fact remains that he only perceives this emotion as a reaction to an already-conceptualized world, within a systematized and intellectualized form, such as music. The price which has to be paid for this one-sided view is the neglect of the psycho-emotional load of 'cognitive' paradoxes. Because he disregards this primarily emotional foundation, Lévi-Strauss also finds it impossible to answer the question why miracles occupy such an important position in myths. The true

character of myth is the explanation of the existing order of things by reference to a different order. This different order, however, defines the laws of everyday experience. The mythical order always contains elements which are different from and irreconcilable with the ordinary, every-day order. According priority to human cognition implies that Lévi-Strauss is confronted by the problem that myths must solve problems of thought - as a myth is, according to him, a solution of a logical problem - by means of an impossibility (Van Baal 1977:344; 1981: 164).

Perhaps this impoverished uni-dimensional image of humanity used by Lévi-Strauss is an expression of his search for harmony. It is obvious that this harmony cannot be found in the struggle between various primary springs of action, but in the activity of the human mind, which aims at the creation of order out of chaos, and which acts therefore in a harmonizing manner. It is precisely this metaphysical conviction of harmony that constitutes the final foundation of an important part of his pre-suppositions and explains why Lévi-Strauss puts a one-sided emphasis on certain aspects of phenomena in his substantive analyses, at the expense of others. For instance, in his studies of kinship hardly any attention, if at all, is paid to conflicts about contracting marriages or to attempts to withdraw from marital duties. Nor does he pay attention to the problem of the separation and fission of kin-groups. The question of total political and economic organisation - as well as differential access to and command over natural resources and means of power - is absent from his studies. His almost complete failure to take into account these relations of power, and the antagonism which they stimulate or channel, also brings him into difficulties when he has to explain social transformations.

Lévi-Strauss views cultures as self-regulating systems which are in equilibrium, or at least show a tendency towards it. In Wilden's terminology (1974:286) system stands for 'law and order', and change is the work of 'outside agitators'. Moreover a disturbance is only temporary. An orientation exists towards a new equilibrium which is a 'compromise' between the antecedent state of the system and the disorder which was introduced from the outside (Lévi-Strauss 1962b:92). This is indeed another indication of the priority accorded by Lévi-Strauss to structure as compared with process: an existing structure cannot be explained by reference to historical events, but only to a preceding structure. In other words, he believes that historical reality is of secondary importance *vis-à-vis* structural reality (see also Scholte 1974, 1979). Diachrony is dependent on synchrony. Historical reality is especially important insofar as 'eventualities' make it possible 'to abstract the structure which underlies the many manifestations and remains permanent throughout a succession of events' (Lévi-Strauss 1958:29).

The asymmetric relationship which Lévi-Strauss claims to exist between history and anthropology is equally clear from his

correlation of history with the conscious and anthropology with the unconscious. Now, the conscious is an epiphenomenon of the unconscious. The unconscious provides the grammar and determines the possibilities available for the conscious. Thus we have come to the problem of the relation between structure and process, between order and change which can be found on the cognitive-psychological as well as on the macro-sociological level.

(b) Structure and process

Although Lévi-Strauss's choice for structure at the expense of process can be explained by reference to Saussure's structuralist model of language, this does not of course justify such a choice. In fact it is impossible to do this in the light of recent developments in linguistics and psychology, the two disciplines most relevant here. An important insight which will not be given up so easily and which was gained especially in cognitive psychology is the acknowledgement that 'cognitive structure' should be seen not merely as a product of categorization, but also as a mechanism, constantly changing in the process of categorization. In this view earlier experiences (the past) have been processed and have resulted in a certain codification, which influences new information which has not yet been codified. Constant interaction occurs as new experiences become integrated. This continuing interaction leads to new results and possibly even to structural principles differing qualitatively. It is precisely this permanent duality, always and at the same time structuring and being structured, which ought to be the central issue (Piaget 1968:10). Therefore, it would seem to be dogmatic to accord priority to either of the two. Significantly, at a later stage Lévi-Strauss started increasingly to use the concept of transformation, perhaps also influenced by the generative grammar as developed by Chomsky.² He now sees structures as 'generative matrices' which continually cause new orders to come into being through successive transformations (Lévi-Strauss 1971:33, 561), but these continue to belong to one and the same type, because they are being generated according to the same basic rules. In other words he does not renounce his thesis that a limited number of unchangeable principles of ordering do exist, forcing one to the conclusion that Lévi-Strauss does not know how to deal with the concepts of biological and socio-cultural evolution. It is perhaps relevant in this context to refer to the 'Finale' of *L'Homme Nu* (1971). In this passage Lévi-Strauss evokes the ultimate end of all life. For him human existence is only an episode in the development of nature, and human interference itself is just a part of this.

² In Lévi-Strauss's own work one also sees a growing interest in 'structural history' (Lévi-Strauss 1975:71-80).

The final destiny of life is the ultimate destruction implied in the second law of thermodynamics, which states that entropy always increases in time.

At the macro-sociological level Lévi-Strauss's point of view makes it difficult to explain societal transformations, although the incorporation of primitive societies in more inclusive systems is one of the most prominent societal phenomena:

Numerous primitive and peasant societies, the traditional subject-matter of our discipline, if not wiped out altogether or conceptually interred in the 'ethnographic present' have been transformed into or (re-) discovered as components of earlier or present-day encompassing global social formations (Pouwer 1981:2).

This is acknowledged by Lévi-Strauss himself:

... those societies which today we call 'underdeveloped' are not such through their own doing, and one would be wrong to conceive of them as exterior to Western development or indifferent to it. In truth, they are the very societies whose direct or indirect destruction between the sixteenth and the nineteenth centuries have made possible the development of the Western World (Lévi-Strauss 1973:315).³

In an attempt to indicate the causes of societal development, Lévi-Strauss mentions the difference between peoples with history and those without it. Of course every community has its own history, but the reaction of societies to this fact differs greatly. Lévi-Strauss proposes a dichotomy between Western and primitive concepts of history. The Western concept is of a history which is cumulative and proceeds strongly in one direction. The historical process becomes internalized and becomes the impetus of development. The primitive concept, by contrast, is of a stationary, less cumulative history which does not follow one main direction (Lévi-Strauss 1973:391). In societies which are characterized by the latter concept, history is only accepted as form without content; although past and future do exist, their only meaning is contained in the fact that

³ This perspective also has consequences for evolutionism. 'Now instead of linking the units of the scheme through a *succession* of time, one had rather conceive them as *simultaneous* constituents of articulated, segmented global systems. Evolution should be conceived as a shift, a transformation from one *global system* to another' (Pouwer 1981:2). See also especially Friedman 1979:9-19 and Ekholm and Friedman 1980:61-77, on whose argument the statements of Pouwer are based.

they are mirror images (Lévi-Strauss 1962b:341). The difference between cumulative history and stationary or fluctuating history is the difference between the categories of time which are being used. Cumulative history is characterized by irreversible time, stationary history by reversible time.

Lévi-Strauss compares this difference in concepts of time to the difference between the functioning of clocks or mechanical machines and that of steam engines or thermodynamic machines (Charbonnier 1961:35-47). In the 'clockwork model' one notices the regular occurrence of cyclical processes, which start again once they have returned to their point of departure. Thus primitive societies which are characterized by the clockwork model - by no means all primitive societies (Charbonnier 1961:39) - appear as static societies with no history. In the 'steam-engine model' the relative temperatures of the constituent parts are different. The functioning of steam engines is based on a difference in potential between their parts. In societies this difference manifests itself in different kinds of social hierarchies. In these societies Lévi-Strauss sees a connection between - on the one hand - the development and consumption of energy, and - on the other hand - great tensions caused by strong social contrasts. These contrasts tend to become equalized, only for new contrasts then to arise in a different guise (Charbonnier 1961:46).

However, this exposition of Lévi-Strauss does not touch on a basic problem. In his statements which relate anthropology to linguistics and psychology we find a clear explanatory mechanism, viz. structures of thought. Such an explanatory mechanism is absent from the 'macro-sociological' statements of Lévi-Strauss concerning the connection of anthropology to the science of history. Lévi-Strauss does not answer the important question of how different concepts of time in various societies as well as their associated characteristics could come into being. Both possibilities are given in the simultaneity of *diachrony* and *synchrony*, of process and structure, but why does one society choose reversible time and another irreversible time? Why is society A a 'clockwork society' and society B a 'steam-engine society'? Why and how does the transition from the one type of time to the other occur in any particular society? Lévi-Strauss merely establishes that these two types of time can be distinguished. For an answer to these questions he should have considered technological and economic development, but apart from a few references to Marx he remains silent on this issue. It should be mentioned, however, that Lévi-Strauss has his reasons for letting this question rest. First of all, he maintains that his aim is the outline of a theory of 'collective representations' or 'suprastructures'. This implies that he is passing over or paying insufficient attention to more important phenomena (Lévi-

Strauss 1962b:155).⁴ Moreover he believes that it is the task of the science of history - assisted by demography, technology, historical geography and ethnography - to develop the study of real infra-structures (Lévi-Strauss 1962b:174).

Prospects

The argument so far has brought us to the point where we have to ask what is the task and position of anthropology if on the one hand the basic explanation of its subject-matter has to be found in psychology, and on the other hand the techno-economical aspects of reality have to be studied by the historical sciences. What is left over is merely the study of the consequences - supra-structures - of causes which are the subject-matter of other disciplines. Moreover Lévi-Strauss's reductionist method does not do sufficient justice to these causes, for the structuralism of Lévi-Strauss in its present form has become increasingly the 'negation of all anthropology' (Simonis 1968:344; see also Diamond 1974, Scholte 1979). Lévi-Strauss (1962b:283) himself remarks that the ultimate aim of the human sciences is not the construction but the solution of man. Leaving aside man as a consciously acting and choosing being - because he is the mere concomitant of a determined natural phenomenon - results unavoidably in an impoverishing reductionism no longer dealing with basic anthropological questions concerning what, how and why. One can only escape this reductionism if sufficient attention is given to the different levels of human existence. In my opinion these levels have to a certain extent an existence *sui generis*. In other words knowledge of unconsciously acting structures of thought is perhaps a necessary condition for gaining knowledge about cultural phenomena, but not a sufficient condition. I would prefer to say that there has to be compatibility between the physiological, psychological and socio-cultural levels of human existence. Each of these levels

⁴ More than once Lévi-Strauss has warned against idealistic interpretations. Only societal transformations cause ideological transformations, but the reverse is not true: 'the idea which people conceive of the relations between nature and culture depends on the way in which their own social relations are subject to change' (Lévi-Strauss 1962b:155, my translation; see also 1962b:173). His own work, however, is not entirely consistent with this view. Idealistic arguments can be found in various places, especially in *Le Totémisme Aujourd'hui* (1962a: 130, 142).

is characterized by its own laws, which have to be inter-related.

In theory Lévi-Strauss would agree completely with this point of view, but his research has become increasingly limited to the level of the unconsciously acting principles of thought. This reduces the scope and explanatory power of his structuralism quite unnecessarily. Therefore I would advocate first of all a return to the pre-*mythologiques* stage of his studies, which showed his twofold aim in substantive research: on the one hand the discovery and description of different patterns of socio-cultural phenomena, and on the other hand the demonstration that these 'systems of signs' are a manifestation of the human mind, adapted to specific environments. This twofold aim can be achieved especially if research is oriented towards concrete institutions and ideas. Only if myths, classifications, systems of kinship, forms of art etc., are seen in a wider socio-cultural and politico-economic context is it possible to make connections between the *ordre conçu* and *ordre vécu*. The aim should be what Lévi-Strauss himself has called the construction of an *ordre des ordres*: a description of the formal properties of the whole, made of parts which each correspond to a definite structural level (Lévi-Strauss 1958:365). Lévi-Strauss assumes that all these different parts are inter-related through transformations, which must be annihilated in order to discover a logically ideal homological relationship between the various structural levels (Lévi-Strauss 1958:366). Such a holistic procedure gives greater possibilities in mapping similarities and differences, i.e. relations of transformation. This idea of totality can also be found in the structural-Marxist concept of 'social formation': '... a complex internally structured totality of various layers and levels inter-related in all sorts of relations of determination' (Glucksmann 1974:106). This structural Marxism in particular offers many points of contact for further development of structuralism, not only because of the study of the interaction between various sub-systems (Althusser and Balibar 1970; Godelier 1973, 1975; Meillassoux 1964), but also because of a different view of the relation structure-process. The result is that the problem area is approached from two angles which contrast, but which are at the same time complementary.⁵

Apart from entering into a dialogue with structural Marxism, the structuralism of Lévi-Strauss will also have to come closer to bio-genetic or, more generally, evolutionary structuralism. Here I have in mind especially the work of American anthropologists such as Brady, D'Aquili, Laughlin,

⁵ For a scheme of similarities and differences see Foster-Carter 1978, Pouver 1981:17.

Rubinstein and Stephens.⁶ Their research is a development of Jean Piaget's constructive structuralism. Structure and development of thought are not investigated primarily through a comparative analysis of culture products, but much more directly through empirical cognitive-psychological research, involving experiments when possible.

In general, evolutionary structuralist thinkers may be said to hold to the proposition that the explanation of observed phenomena must be made by reference to ontologically real, knowable but rarely observable structures that are systematic in function, pan-human or pan-societal universals, and usually, but not always, unconscious to the actors. In addition, the evolutionary structuralist approach to these structures is developmental, biologically grounded, and neurophysiological or cognitive in attributing the locus of structure (Rubinstein 1981:11).

The basic principle behind this research is the hierarchy of structural levels (Rubinstein 1980, 1981). A good example of this view is the scheme proposed by Laughlin and Brady in which four levels are distinguished. These levels, which function in the human organism, when seen as acting in a social system, are:

(1) the neural infrastructure, the central and peripheral nervous systems, structure and function; (2) the cognitive infrastructure, the mechanisms for processing perceptual material; (3) the societal infrastructure, the mechanisms for organizing individual cognitive infrastructures, such as ritual, institutionalization, bureaucratization, etc.; (4) the surface structure, behavioral expressions of symbolic and meaningful information in the culture pool, including economic, political, social, ideational content, etc. (Laughlin and Brady 1978:4).

The advantages of this approach are a much more explicitly stated research methodology and a reduced dependence on language as a model for cultural analysis. In my opinion this is an important positive development, in view of the problematic relation between culture, language and thought.

⁶ See D'Aquili, E. (1972); D'Aquili, E., C.D. Laughlin, and J. McManus (1979); Laughlin, C.D. and E. D'Aquili (1974); Laughlin, C.D. and I. Brady (1978); Rubinstein, R.A. (1980); Rubinstein, R.A. (1981); Rubinstein, R.A. and C.D. Laughlin (1977).

Considering the above-mentioned problems in the structuralism of Lévi-Strauss - namely reductionism and emphasis on synchrony - developments in these related scientific orientations will have to be integrated into it, if the self-imposed barriers surrounding this paradigm are to be brought down. This should not be too difficult because 'orthodox structuralism', structural Marxism and biogenetic structuralism constitute a set of contrasts, a system of similarities and differences. The similarities can be found in the basic postulates, while the differences are mainly of a lower order: they are limited partly to some principles and partly to research priorities. The structuralism of Lévi-Strauss itself, however, is also in need of further extension and reformulation. Here I have in mind the systematization of the conceptual apparatus and the formulation of an explicit research methodology, especially the unequivocal statement of the rules of argumentation, through which scientific proof can be established. Having regard to the start which several anthropologists have made in this direction (Pouwer 1974; Rossi 1974) we may expect that structuralism will continue to become a paradigm bearing scientific fruits for a long time to come.

A,DE RUIJTER

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