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(Photographs by the author)

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$\left\{ \begin{array}{l} \Delta \\ \circ \end{array} \right.$  man  
woman

$\Delta = \circ$  marriage (disjunction of marriage : #)

$\left\{ \begin{array}{l} \Delta \\ \circ \end{array} \right.$  brother and sister (their disjunction : |—|)

$\left\{ \begin{array}{l} \Delta \\ \Delta \end{array} \right.$  ,  $\left\{ \begin{array}{l} \circ \\ \circ \end{array} \right.$  father and son, mother and daughter, etc.

T transformation

→ is transformed into

$\left\{ \begin{array}{l} : \\ :: \end{array} \right.$  is to . . .  
as . . .

/ contrast

$\left\{ \begin{array}{l} \equiv \\ \neq \end{array} \right.$  congruence, homology, correspondence  
noncongruence, nonhomology, noncorrespondence

$\left\{ \begin{array}{l} = \\ \neq \end{array} \right.$  identity  
difference

$\approx$  isomorphism

$\left\{ \begin{array}{l} U \\ // \end{array} \right.$  union, reunion, conjunction  
disunion, disjunction

$\left\{ \begin{array}{l} \longrightarrow \\ \nrightarrow \end{array} \right.$  conjoins with . . .  
is in a state of disjunction with . . .

/ function

$x^{(-1)}$  inverted  $x$

+ , - these signs are used with various connotations depending on the context: plus, minus; presence, absence; first or second term of a pair of opposites

# Overture

## I

The aim of this book is to show how empirical categories—such as the categories of the raw and the cooked, the fresh and the decayed, the moistened and the burned, etc., which can only be accurately defined by ethnographic observation and, in each instance, by adopting the standpoint of a particular culture—can nonetheless be used as conceptual tools with which to elaborate abstract ideas and combine them in the form of propositions.

The initial hypothesis demands therefore that from the outset we place ourselves at the most concrete level—that is, in the heart of a community or of a group of communities sufficiently alike in regard to their habitat, history, and culture. However, while this is undoubtedly an essential methodological precaution, it cannot mask or restrict my intention. Using a small number of myths taken from native communities which will serve as a laboratory, I intend to carry out an experiment which, should it prove successful, will be of universal significance, since I expect it to prove that there is a kind of logic in tangible qualities, and to demonstrate the operation of that logic and reveal its laws.

I shall take as my starting point *one* myth, originating from *one* community, and shall analyze it, referring first of all to the ethnographic context and then to other myths belonging to the same community. Gradually broadening the field of inquiry, I shall then move on to myths from neighboring societies, after previously placing them, too, in their particular ethnographic context. Step by step, I shall proceed to more remote communities but only after authentic links of a historical or a geographic nature have been established with them or can reasonably be assumed to exist. The present work will describe only the initial stages of a long journey through the native mythologies of the New World, starting in the heart of tropical America and leading, as I can already foresee, to the furthestmost regions of North America. The connecting thread throughout will be a myth of the Bororo Indians of central Brazil; this is not because this particular myth is more archaic than others that will be examined later, or because I consider it to be simpler or more complete. It attracted my attention in the

first place for reasons that are largely contingent. And if I have tried to make the explanation of my synthesis correspond as far as possible to the analytical procedure by which I have arrived at it, this is because I felt that the close link I observe in such matters between their empirical and systematic aspects would be brought out all the more clearly if the method followed exemplified it in the first place.

In fact, the Bororo myth, which I shall refer to from now on as the key myth, is, as I shall try to show, simply a transformation, to a greater or a lesser extent, of other myths originating either in the same society or in neighboring or remote societies. I could, therefore, have legitimately taken as my starting point any one representative myth of the group. From this point of view, the key myth is interesting not because it is typical, but rather because of its irregular position within the group. It so happens that this particular myth raises problems of interpretation that are especially likely to stimulate reflection.

Even though I have thus stated my aims clearly, there is some danger that my project may meet with preliminary objections on the part of mythographers and specialists of tropical America. It cannot be contained within precise territorial limits or within the framework of any one system of classification. However it is approached, it spreads out like a nebula, without ever bringing together in any lasting or systematic way the sum total of the elements from which it blindly derives its substance, being confident that reality will be its guide and show it a surer road than any it might have invented. Starting with a myth chosen not so much arbitrarily as through an intuitive feeling that it was both rich and rewarding, and then, after analyzing it in accordance with rules laid down in previous works (L-S. 5, 6, 7, and 9),\* I establish the group of transformations for each sequence, either within the myth itself, or by elucidation of the isomorphic links between sequences derived from several myths originating in the same community. This itself takes us beyond the study of individual myths to the consideration of certain guiding patterns situated along a single axis. At each point on the axis where there is such a pattern or schema, we then draw, as it were, a vertical line representing another axis established by the same operation but carried out this time not by means of apparently different myths originating from a single community, but by myths that present certain analogies with the first, although they derive from neighboring communities. As a result, the guiding patterns are simplified, made more complex, or transformed. Each one becomes a source of new axes, which are perpendicular to the first on different levels, and to which will presently be connected, by a twofold prospective and retrospective movement, se-

\* See Bibliography, pages 361-370, for full information on this and other references.

quences derived either from myths originating in more remote communities or from myths initially neglected because they seemed useless or impossible to interpret, even though they belonged to peoples already discussed. It follows that as the nebula gradually spreads, its nucleus condenses and becomes more organized. Loose threads join up with one another, gaps are closed, connections are established, and something resembling order is to be seen emerging from chaos. Sequences arranged in transformation groups, as if around a germinal molecule, join up with the initial group and reproduce its structure and determinative tendencies. Thus is brought into being a multi-dimensional body, whose central parts disclose a structure, while uncertainty and confusion continue to prevail along its periphery.

But I do not hope to reach a stage at which the subject matter of mythology, after being broken down by analysis, will crystallize again into a whole with the general appearance of a stable and well-defined structure. Apart from the fact that the science of myths is still in its infancy, so that its practitioners must consider themselves fortunate to obtain even a few tentative, preliminary results, we can already be certain that the ultimate state will never be attained, since were it theoretically possible, the fact still remains that there does not exist, nor ever will exist, any community or group of communities whose mythology and ethnography (and without the latter the study of myths is ineffectual) can be known in their entirety. The ambition to achieve such knowledge is meaningless, since we are dealing with a shifting reality, perpetually exposed to the attacks of a past that destroys it and of a future that changes it. For every instance recorded in written form, there are obviously many others unknown to us; and we are only too pleased with the samples and scraps at our disposal. It has already been pointed out that the starting point of the analysis must inevitably be chosen at random, since the organizational principles governing the subject matter of mythology are contained within it and only emerge as the analysis progresses. It is also inevitable that the point of arrival will appear of its own accord, and unexpectedly: this will occur when, a certain stage of the undertaking having been reached, it becomes clear that its ideal object has acquired sufficient consistency and shape for some of its latent properties, and especially its existence as an object, to be definitely placed beyond all doubt. As happens in the case of an optical microscope, which is incapable of revealing the ultimate structure of matter to the observer, we can only choose between various degrees of enlargement: each one reveals a level of organization which has no more than a relative truth and, while it lasts, excludes the perception of other levels.

The above remarks go some way toward explaining the nature of a book which might otherwise be considered paradoxical. While it is complete in itself and leads to conclusions that, I hope, the reader will accept as answers to the problems posed at the beginning, it makes reference to a second volume, beyond which can be glimpsed the outline of yet a third. But if these works



ever see the light of day, they will not be so much a continuation as a different handling of the same material, a new attack on the same problems, in the hope that they will bring out hitherto blurred or unnoticed features, by means of different lighting or by a different coloring of histological cross sections. Therefore, if my inquiry proceeds in the way I hope, it will develop not along a linear axis but in a spiral; it will go back over previous findings and incorporate new objects only in so far as their examination can deepen knowledge that had previously existed only in rudimentary form.

Moreover, it must not be considered surprising if this work, which is avowedly devoted to mythology, draws unhesitatingly on material provided by folk tales, legends, and pseudo-historical traditions and frequently refers to ceremonies and rites. I cannot accept overhasty pronouncements about what is mythology and what is not; but rather I claim the right to make use of any manifestation of the mental or social activities of the communities under consideration which seems likely to allow me, as the analysis proceeds, to complete or explain the myth, even though it may not constitute an obligatory accompaniment of the myth in a musician's sense of the term (on this point cf. L.S. 5, chap. 12). On another level—and in spite of the fact that my inquiry is centered on the myths of tropical America, which supply most of the examples—the analysis itself, as it progresses, demands that use be made of myths originating in more remote regions, just as primitive organisms, although enclosed within a membrane, still retain the ability to move their protoplasm within this covering and to achieve such extraordinary distention that they put forth pseudopodia; their behavior appears less strange, once we have ascertained that its object is the capture and assimilation of foreign bodies. Finally I have been careful to avoid grouping the myths into preconceived classifications, under such headings as cosmological, seasonal, divine, heroic, technological, etc. Here again the myth itself, on being put to the test of analysis, is left to reveal its nature and to show the type to which it belongs; such an aim is beyond the scope of the mythographer if he relies on external and arbitrarily isolated characteristics.

In short, the peculiarity of this book is that it has no subject: it is restricted in the first place to the study of one myth; yet to achieve even partial success, it must assimilate the subject matter of two hundred others. Anxious though I am to keep within a clearly defined geographic and cultural area, I cannot prevent the book from taking on, from time to time, the appearance of a general treatise on mythology. It has no beginning, since it would have developed along similar lines if it had had a different starting point; and it has no end, since many problems are dealt with in summary fashion, and others are simply mentioned in the hope that they may be treated more fully at some later date. In order to draw my map, I have been obliged to work outward from the center: first I establish the semantic field surrounding a given myth, with the help of ethnography and by means of other myths; and then I repeat the operation in the case of each of these myths. In this way

the arbitrarily chosen central zone can be crisscrossed by various intersecting lines, although fewer overlappings occur as we move further out. In order to make the grid or mesh even, one would have to repeat the process several times, by drawing more circles around points situated along the periphery. But at the same time this would increase the size of the original area. And so we see that the analysis of myths is an endless task. Each step forward creates a new hope, realization of which is dependent on the solution of some new difficulty. The evidence is never complete.

I must, however, admit that the curious conception underlying this book, far from alarming me, seems rather to be a sign that I have perhaps succeeded in grasping certain fundamental properties of my subject, thanks to a plan and a method that were not so much chosen by me as forced upon me by the nature of the material.

Durkheim has said (p. 142) of the study of myths: "It is a difficult problem which should be dealt with in itself, for itself, and according to its own particular method." He also suggested an explanation of this state of affairs when later (p. 190) he referred to the totemic myths, "which no doubt explain nothing and merely shift the difficulty elsewhere, but at least, in so doing, appear to attenuate its crying illogicality." This is a profound definition, which in my opinion can be extended to the entire field of mythological thought, if we give it a fuller meaning than the author himself would have agreed to.

The study of myths raises a methodological problem, in that it cannot be carried out according to the Cartesian principle of breaking down the difficulty into as many parts as may be necessary for finding the solution. There is no real end to mythological analysis, no hidden unity to be grasped once the breaking-down process has been completed. Themes can be split up *ad infinitum*. Just when you think you have disentangled and separated them, you realize that they are knitting together again in response to the operation of unexpected affinities. Consequently the unity of the myth is never more than tendential and projective and cannot reflect a state or a particular moment of the myth. It is a phenomenon of the imagination, resulting from the attempt at interpretation; and its function is to endow the myth with synthetic form and to prevent its disintegration into a confusion of opposites. The science of myths might therefore be termed "anaclastic," if we take this old term in the broader etymological sense which includes the study of both reflected rays and broken rays. But unlike philosophical reflection, which claims to go back to its own source, the reflections we are dealing with here concern rays whose only source is hypothetical. Divergence of sequences and themes is a fundamental characteristic of mythological thought, which manifests itself as an irradiation; by measuring the directions and angles of the rays, we are led to postulate their common origin, as an ideal point on which those deflected by the structure of the myth would have converged had they not started, precisely, from some other point and



remained parallel throughout their entire course. As I shall show in my conclusion, this multiplicity is an essential characteristic, since it is connected with the dual nature of mythological thought, which coincides with its object by forming a homologous image of it but never succeeds in blending with it, since thought and object operate on different levels. The constant recurrence of the same themes expresses this mixture of powerlessness and persistence. Since it has no interest in definite beginnings or endings, mythological thought never develops any theme to completion: there is always something left unfinished. Myths, like rites, are "in-terminable." And in seeking to imitate the spontaneous movement of mythological thought, this essay, which is also both too brief and too long, has had to conform to the requirements of that thought and to respect its rhythm. It follows that this book on myths is itself a kind of myth. If it has any unity, that unity will appear only behind or beyond the text and, in the best hypothesis, will become a reality in the mind of the reader.

But I shall probably incur the severest criticism on the ethnographic level. Although the book is carefully documented, I have disregarded certain sources of information, and some others have proved inaccessible.<sup>1</sup> Those I have made use of do not always appear in the final draft. To avoid making the demonstration too unwieldy, I had to decide which myths to use, to opt for certain versions, and in some measure to simplify the variants. Some people will accuse me of having adapted the subject matter of my inquiry to suit my own purposes. If I had selected, from the vast quantity of available myths, only those that were most likely to support my thesis, my argument would have lost much of its force. It might therefore be said that I ought to have gone through all the known myths of tropical America before venturing to embark on a comparison between them.

The objection may seem particularly telling in the light of the circumstances that delayed the appearance of this book. It was almost completed when the publication of the first volume of the *Enciclopédia Boróro* was announced; and I waited until the work had reached France and I had studied it before putting the finishing touches to my text. But, following the same line of reasoning, I ought perhaps to have waited another two or three years for the second volume, which will deal with myths and will include a section on

<sup>1</sup> Certain works, such as *Die Tacana* by Hissink and Hahn (Stuttgart, 1961) have been only skimmed through, because of their relatively recent publication; while others, which did not reach France until after the completion of this book, have not been consulted at all: e.g., J. Wilbert, *Indios de la región Orinoco-Ventuari* (Caracas, 1963); and *Warao Oral Literature* (Caracas, 1964); and N. Fock, *Waiwai, Religion and Society of an Amazonian Tribe* (Copenhagen, 1963). However, in this last book I have already noted a myth about the opossum which confirms my analyses in the third and fourth parts. This new material will be utilized in a later volume.

proper names. Actually the study of the volume already to hand suggested a different conclusion, in spite of the wealth of detail it provides. The Salesians, who record their own changes of opinion with great serenity, when they do not simply fail to mention them, can be harshly critical if a piece of information published by some author does not coincide with their own most recent findings. In both cases they are committing the same methodological error. The fact that one item of information contradicts another poses a problem but does not solve it. I have more respect for the informants, whether they are our own or those who were employed in the old days by the missionaries, and whose evidence is consequently of particular value. The merits of the Salesians are so indisputable that, without failing in the debt of gratitude that is owed them, we can voice one slight criticism: they have an unfortunate tendency to believe that the most recent piece of information cancels out everything else.

I do not doubt for a moment that further information already available or as yet unpublished will affect my interpretations. Some that are no more than tentative will perhaps be confirmed; others will be abandoned or modified. No matter; in a subject such as this, scientific knowledge advances haltingly and is stimulated by contention and doubt. Unlike metaphysics, it does not insist on all or nothing. For this book to be worthwhile, it is not necessary in my view that it should be assumed to embody the truth for years to come and with regard to the tiniest details. I shall be satisfied if it is credited with the modest achievement of having left a difficult problem in a rather less unsatisfactory state than it was before. Nor must we forget that in science there are no final truths. The scientific mind does not so much provide the right answers as ask the right questions.

I can go further. If critics reproach me with not having carried out an exhaustive inventory of South American myths before analyzing them, they are making a grave mistake about the nature and function of these documents. The total body of myth belonging to a given community is comparable to its speech. Unless the population dies out physically or morally, this totality is never complete. You might as well criticize a linguist for compiling the grammar of a language without having complete records of the words pronounced since the language came into being, and without knowing what will be said in it during the future part of its existence. Experience proves that a linguist can work out the grammar of a given language from a remarkably small number of sentences, compared to all those he might in theory have collected (not to mention those he cannot be acquainted with because they were uttered before he started on his task, or outside his presence, or will be uttered at some later date). And even a partial grammar or an outline grammar is a precious acquisition when we are dealing with unknown languages. Syntax does not become evident only after a (theoretically limitless) series of events has been recorded and examined, because it is itself the body of rules governing their production. What I have tried to

give is an outline of the syntax of South American mythology. Should fresh data come to hand, they will be used to check or modify the formulation of certain grammatical laws, so that some are abandoned and replaced by new ones. But in no instance would I feel constrained to accept the arbitrary demand for a total mythological pattern, since, as has just been shown, such a requirement has no meaning.

Another more serious objection is possible. Someone may question my right to choose myths from various sources, to explain a myth from the Gran Chaco by means of a variant from Guiana, or a Ge myth by a similar one from Colombia. But structural analysis—however respectful it may be of history and however anxious to take advantage of all its teachings—refuses to be confined within the frontiers already established by historical investigation. On the contrary, by demonstrating that myths from widely divergent sources can be seen objectively as a set, it presents history with a problem and invites it to set about finding a solution. I have defined such a set, and I hope I have supplied proof of its being a set. It is the business of ethnographers, historians, and archeologists to explain how and why it exists.

They can rest assured that, as regards the explanation of the group nature of the myths assembled here (and which have been brought together solely for the purposes of my investigation), I do not expect that historical criticism will ever be able to reduce a system of logical affinities to an enormous list of borrowings, either successive or simultaneous, made by contemporary or ancient communities from each other, over distances and intervals of time often so vast as to render any interpretation of this kind implausible, and in any case impossible to verify. From the start then, I ask the historian to look upon Indian America as a kind of Middle Ages which lacked a Rome: a confused mass that emerged from a long-established, doubtless very loosely textured syncretism, which for many centuries had contained at one and the same time centers of advanced civilization and savage peoples, centralizing tendencies and disruptive forces. Although the latter finally prevailed through the working of internal causes and as a result of the arrival of the European conquerors, it is nonetheless certain that a set, such as the one studied here, owes its character to the fact that in a sense it became crystallized in an already established semantic environment, whose elements had been used in all kinds of combinations—not so much, I suppose, in a spirit of imitation but rather to allow small but numerous communities to express their different originalities by manipulating the resources of a dialectical system of contrasts and correlations within the framework of a common conception of the world.

Such an interpretation, which I shall leave in this tentative form, is obviously based on historical conjecture: it supposes that tropical America was inhabited in very early times; that numerous tribes were frequently in movement in various directions; that demographic fluidity and the fusion

of populations created the appropriate conditions for a very old-established syncretism, which preceded the differences observable between the groups; and that these differences reflect nothing or almost nothing of the archaic conditions but are in most cases secondary or derivative. Therefore, in spite of its formal approach, structural analysis establishes the validity of ethnographic and historical interpretations that I put forward more than twenty years ago; at the time they were thought to be somewhat rash (cf. L.-S. 5, p. 118 ff. and all of chap. 6), but they have continued to gain ground. If any ethnographic conclusion is to be deduced from the present work, it is that the Ge, far from being the “marginal” people they were supposed to be in 1942, when Volume I of *The Handbook of South American Indians* came out (I protested at the time against this assumption), represent a pivotal element in South America, whose function is comparable to the part played in North America by the old settlements along the Fraser and Columbia rivers, and their survivors. When I extend my inquiry to the northern areas of North America, the basis for the comparison will appear more clearly.

It was necessary to mention at least the concrete results achieved by structural analysis (certain others, relating only to the peoples of tropical America, will be explained in the course of this book) to put the reader on his guard against the charge of formalism, and even of idealism, that has sometimes been leveled against me. It may be said that the present book, even more than my previous works, takes ethnographic research in the direction of psychology, logic, and philosophy, where it has no right to venture. Am I not helping to deflect ethnography from its real task, which should be the study of native communities and the examination, from the social, political, and economic points of view, of problems posed by the relations among individuals and groups within a given community? Such misgivings, which have often been expressed, seem to me to arise from a total misunderstanding of what I am trying to do. And what is more serious, I think, is that they cast doubt on the logical continuity of the program I have been pursuing since I wrote *Les Structures élémentaires de la parenté*, a work about which the same objection cannot reasonably be made.

The fact is, however, that *La Pensée sauvage* represented a kind of pause in the development of my theories: I felt the need for a break between two bursts of effort. It is true that I took advantage of the situation to scan the scene before me, to estimate the ground covered, to map out my future itinerary, and to get a rough idea of the foreign territories I would have to cross, even though I was determined never to deviate for any length of time from my allotted path and—apart from some minor poaching—never to encroach on the only too closely guarded preserves of philosophy. . . . Nevertheless, the pause that some people misinterpreted as marking a conclusion



was meant to be a merely temporary halt between the first stage that had been covered by *Les Structures* and the second, which the present work is intended to open.

Throughout, my intention remains unchanged. Starting from ethnographic experience, I have always aimed at drawing up an inventory of mental patterns, to reduce apparently arbitrary data to some kind of order, and to attain a level at which a kind of necessity becomes apparent, underlying the illusions of liberty. In *Les Structures*, behind what seemed to be the superficial contingency and incoherent diversity of the laws governing marriage, I discerned a small number of simple principles, thanks to which a very complex mass of customs and practices, at first sight absurd (and generally held to be so), could be reduced to a meaningful system. However, there was nothing to guarantee that the obligations came from within. Perhaps they were merely the reflection in men's minds of certain social demands that had been objectified in institutions. If so, their effect on the psychological level would be the result of mechanisms about which all that remains to be determined is their mode of operation.

The experiment I am now embarking on with mythology will consequently be more decisive. Mythology has no obvious practical function: unlike the phenomena previously studied, it is not directly linked with a different kind of reality, which is endowed with a higher degree of objectivity than its own and whose injunctions it might therefore transmit to minds that seem perfectly free to indulge their creative spontaneity. And so, if it were possible to prove in this instance, too, that the apparent arbitrariness of the mind, its supposedly spontaneous flow of inspiration, and its seemingly uncontrolled inventiveness imply the existence of laws operating at a deeper level, we would inevitably be forced to conclude that when the mind is left to commune with itself and no longer has to come to terms with objects, it is in a sense reduced to imitating itself as object; and that since the laws governing its operations are not fundamentally different from those it exhibits in its other functions, it shows itself to be of the nature of a thing among things. The argument need not be carried to this point, since it is enough to establish the conviction that if the human mind appears determined even in the realm of mythology, *a fortiori* it must also be determined in all its spheres of activity.<sup>2</sup>

In allowing myself to be guided by the search for the constraining structures of the mind, I am proceeding in the manner of Kantian philosophy, although along different lines leading to different conclusions. The ethnologist, unlike the philosopher, does not feel obliged to take the conditions in which his own thought operates, or the science peculiar to his society and his

<sup>2</sup> "If law is anywhere, it is everywhere." Such was the conclusion reached by Tylor in the passage that I used seventeen years ago as an epigraph for *Les Structures élémentaires de la parenté*.

period, as a fundamental subject of reflection in order to extend these local findings into a form of understanding, the universality of which can never be more than hypothetical and potential. Although concerned with the same problems, he adopts an opposite approach in two respects. Instead of assuming a universal form of human understanding, he prefers to study empirically collective forms of understanding, whose properties have been solidified, as it were, and are revealed to him in countless concrete representational systems. And since for him, belonging as he does to a given social milieu, culture, region, and period of history, these systems represent the whole range of possible variations within a particular type, he chooses those that seem to him to be the most markedly divergent, in the hope that the methodological rules he will have to evolve in order to translate these systems in terms of his own system and vice versa, will reveal a pattern of basic and universal laws: this is a supreme form of mental gymnastics, in which the exercise of thought, carried to its objective limits (since the latter have been previously explored and recorded by ethnographic research), emphasizes every muscle and every joint of the skeleton, thus revealing a general pattern of anatomical structure.

I am perfectly aware that it is this aspect of my work that Ricoeur is referring to when he rightly describes it as "Kantism without a transcendental subject."<sup>3</sup> But far from considering this reservation as indicating some deficiency, I see it as the inevitable consequence, on the philosophical level, of the ethnographic approach I have chosen; since, my ambition being to discover the conditions in which systems of truths become mutually convertible and therefore simultaneously acceptable to several different subjects, the pattern of those conditions takes on the character of an autonomous object, independent of any subject.

I believe that mythology, more than anything else, makes it possible to illustrate such objectified thought and to provide empirical proof of its reality. Although the possibility cannot be excluded that the speakers who create and transmit myths may become aware of their structure and mode of operation, this cannot occur as a normal thing, but only partially and intermittently. It is the same with myths as with language: the individual who conscientiously applied phonological and grammatical laws in his speech, supposing he possessed the necessary knowledge and virtuosity to do so, would nevertheless lose the thread of his ideas almost immediately. In the same way the

<sup>3</sup> P. Ricoeur, "Symbole et temporalité," *Archivio di Filosofia*, Nos. 1-2 (Roma, 1963), p. 24. Cf. also p. 9: "A Kantian rather than a Freudian unconscious, a combinative, categorizing, unconscious . . ."; and p. 10: "a categorizing system unconnected with a thinking subject . . . homologous with nature; it may perhaps be nature. . ."

With his customary subtlety and insight Roger Bastide (pp. 65-79) anticipated the whole of the preceding argument. The coincidence of our views is a most eloquent indication of his clear-sightedness, since I did not see his work (which he himself kindly sent me) until I was busy correcting the proofs of this book.

practice and the use of mythological thought demand that its properties remain hidden: otherwise the subject would find himself in the position of the mythologist, who cannot believe in myths because it is his task to take them to pieces. Mythological analysis has not, and cannot have, as its aim to show how men think. In the particular example we are dealing with here, it is doubtful, to say the least, whether the natives of central Brazil, over and above the fact that they are fascinated by mythological stories, have any understanding of the systems of interrelations to which we reduce them. And when by appealing to such myths we justify the existence of certain archaic or colorful expressions in our own popular speech, the same comment can be made, since our awareness is retrospective and is engineered from without and under the pressure of a foreign mythology. I therefore claim to show, not how men think in myths, but how myths operate in men's minds without their being aware of the fact.

And, as I have already suggested, it would perhaps be better to go still further and, disregarding the thinking subject completely, proceed as if the thinking process were taking place in the myths, in their reflection upon themselves and their interrelation.<sup>4</sup> For what I am concerned to clarify is not so much what there is *in* myths (without, incidentally, being in man's consciousness) as the system of axioms and postulates defining the best possible code, capable of conferring a common significance on unconscious formulations which are the work of minds, societies, and civilizations chosen from among those most remote from each other. As the myths themselves are based on secondary codes (the primary codes being those that provide the substance of language), the present work is put forward as a tentative draft of a tertiary code, which is intended to ensure the reciprocal translatability of several myths. This is why it would not be wrong to consider this book itself as a myth: it is, as it were, the myth of mythology.

However, this code, like the others, has neither been invented nor brought in from without. It is inherent in mythology itself, where we simply discover its presence. One ethnographer working in South America expresses surprise at the way in which the myths were conveyed to him: "The stories are told differently by almost every teller. The amount of variation in important details is enormous." Yet the natives do not seem to worry about this state of affairs: "A Caraja, who traveled with me from village to village, heard all sorts of variants of this kind and accepted them all in almost equal confidence. It was not that he did not see the discrepancies, but they did not matter to him . . ." (Lipkind 1, p. 251). A naïve observer from some other planet might more justifiably (since he would be dealing with history, not myths) be amazed that in the mass of works devoted to the French Revo-

lution the same incidents are not always quoted or disregarded, and that the same incidents are presented in different lights by various authors. And yet these variants refer to the same country, the same period, and the same events, the reality of which is scattered throughout the various levels of a complex structure. The criterion of validity is, therefore, not to be found among the elements of history. Each one, if separately pursued, would prove elusive. But some of them at least acquire a certain solidity through being integrated into a series, whose terms can be accorded some degree of credibility because of their over-all coherence.

In spite of worthy, and indeed indispensable, attempts to become different, history, as its clear-sighted practitioners are obliged to admit, can never completely divest itself of myth. What is true for history is, therefore, *a fortiori* truer still in regard to myth itself. Mythological patterns have to an extreme degree the character of absolute objects, which would neither lose their old elements nor acquire new ones if they were not affected by external influences. The result is that when the pattern undergoes some kind of transformation, all its aspects are affected at once. And so if one aspect of a particular myth seems unintelligible, it can be legitimately dealt with, in the preliminary stage and on the hypothetical level, as a transformation of the homologous aspect of another myth, which has been linked with the same group for the sake of the argument, and which lends itself more readily to interpretation. This I have done on more than one occasion: for instance, by explaining the episode of the jaguar's closed jaws in M<sub>7</sub> by the reverse episode of the wide-open jaws in M<sub>55</sub>; or the episode of the genuine willingness to help shown by the vultures in M<sub>1</sub> by their false willingness in M<sub>65</sub>. The method does not, as one might expect, create a vicious circle. It merely implies that each myth taken separately exists as the limited application of a pattern, which is gradually revealed by the relations of reciprocal intelligibility discerned between several myths.

I shall no doubt be accused of overinterpretation and oversimplification in my use of this method. Let me say again that all the solutions put forward are not presented as being of equal value, since I myself have made a point of emphasizing the uncertainty of some of them; however, it would be hypocritical not to carry my thought to its logical conclusion. I therefore say in advance to possible critics: what does this matter? For if the final aim of anthropology is to contribute to a better knowledge of objectified thought and its mechanisms, it is in the last resort immaterial whether in this book the thought processes of the South American Indians take shape through the medium of my thought, or whether mine take place through the medium of theirs. What matters is that the human mind, regardless of the identity of those who happen to be giving it expression, should display an increasingly intelligible structure as a result of the doubly reflexive forward movement of two thought processes acting one upon the other, either of which can in turn provide the spark or tinder whose conjunction will shed light on both.

<sup>4</sup> The Ojibwa Indians consider myths as "conscious beings, with powers of thought and action." (W. Jones, "Ojibwa Texts," *Publications of the American Ethnological Society*, Vol. III, Part II [New York, 1919], p. 574, n. 1.)



And should this light happen to reveal a treasure, there will be no need of an arbitrator to parcel it out, since, as I declared at the outset (L.-S. 9), the heritage is untransferable and cannot be split up.

## II

At the beginning of this introduction I explained that I had tried to transcend the contrast between the tangible and the intelligible by operating from the outset at the sign level. The function of signs is, precisely, to express the one by means of the other. Even when very restricted in number, they lend themselves to rigorously organized combinations which can translate even the finer shades of the whole range of sense experience. We can thus hope to reach a plane where logical properties, as attributes of things, will be manifested as directly as flavors or perfumes; perfumes are unmistakably identifiable, yet we know that they result from combinations of elements which, if subjected to a different selection and organization, would have created awareness of a different perfume. Our task, then, is to use the concept of the sign in such a way as to introduce these secondary qualities into the operations of truth.

It was natural that the search for a middle way between aesthetic perception and the exercise of logical thought should find inspiration in music, which has always practiced it. Nor did the parallel suggest itself only from a general point of view. At a very early stage, almost from the moment of beginning to write, I realized that it was impossible to organize the subject matter of this book according to a plan based on traditional principles. The division into chapters not only did violence to the movement of thought; it weakened and mutilated the thought itself and blunted the force of the demonstration. The latter, to be convincing, seemed, paradoxically enough, to require greater suppleness and freedom. I also came to see that the documentary data could not be presented in unilinear fashion, and that the different stages of the commentary were not interlinked merely in order of sequence. Certain devices of composition were indispensable to provide the reader from time to time with a feeling of simultaneity; the impression would no doubt remain illusory, since an expository order had to be respected, but a near equivalent to it might be achieved by an alternation in style between the discursive and the diffuse, by varying the rhythm between fast and slow, and by sometimes piling examples one on top of another and sometimes giving them separate presentation. I saw that the process of analysis would take place along different axes: there would be the sequential axis, of course, but also the axis of relatively greater densities which would involve recourse to forms comparable to solos and *tutti* in music; there would be the axis of expressive tensions and the axis of modulation codes, and during the process of composition these would bring about contrasts

similar to the alternation between melody and recitative or between instrumental ensembles and arias.

It followed, from the liberty I was thus taking in developing my themes in several dimensions, that the division into isometric chapters must give way to a pattern involving parts of unequal length, fewer in number but also more voluminous and complex, and each one of which would constitute a whole by virtue of its internal organization according to a certain unity of inspiration. For the same reasons the various parts could not all be cast in the same mold; rather, in respect to tone, genre, and style, each would have to obey the rules dictated by the nature of the material being used and of the technical devices employed in each particular case. Consequently here, too, musical form offered the possibility of diversity already standardized by experience, since comparison with models such as the sonata, the symphony, the cantata, the prelude, the fugue, etc., allowed easy verification of the fact that constructional problems, analogous to those posed by the analysis of myths, had already arisen in music, where solutions had been found for them.

But at the same time I could not avoid another problem—that of the fundamental causes of the initially surprising affinity between music and myths (structural analysis of the latter does no more than emphasize their properties, while taking them over and transposing them onto another plane). And undoubtedly a great step forward had been made in the direction of finding a reply when I realized a constant of my own personal history which had remained unaffected through all vicissitudes, even withstanding during adolescence those two shattering revelations *Pelléas et Mélisande* and Stravinsky's *Les Noces* ("The Wedding"): I mean my reverence, from childhood on, for "that God, Richard Wagner." If Wagner is accepted as the undeniable originator of the structural analysis of myths (and even of folk tales, as in *Die Meistersinger*), it is a profoundly significant fact that the analysis was made, in the first instance, *in music*.<sup>5</sup> Therefore, when I suggested that the analysis of myths was comparable with that of a major musical score (L.-S. 5, p. 234), I was only drawing the logical conclusion from Wagner's discovery that the structure of myths can be revealed through a musical score.

However, this preliminary tribute confirms the existence of the problem more than it solves it. The true answer is to be found, I think, in the characteristic that myth and music share of both being languages which, in their different ways, transcend articulate expression, while at the same time—like articulate speech, but unlike painting—requiring a temporal dimension in which to unfold. But this relation to time is of a rather special nature: it is

<sup>5</sup> In recognizing this influence, I should be guilty of ingratitude if I did not at the same time admit other debts: in the first place, to the work of Marcel Granet, so rich in insights of genius and then, last but not least, to M. Georges Dumézil; and to M. Henri Grégoire's *Asklèpios, Appollon Smintheus et Ruda* (Mémoires de l'Académie Royale de Belgique, classe des Lettres . . . tome XLV, fasc. 1, 1949).

as if music and mythology needed time only in order to deny it. Both, indeed, are instruments for the obliteration of time. Below the level of sounds and rhythms, music acts upon a primitive terrain, which is the physiological time of the listener; this time is irreversible and therefore irredeemably diachronic, yet music transmutes the segment devoted to listening to it into a synchronic totality, enclosed within itself. Because of the internal organization of the musical work, the act of listening to it immobilizes passing time; it catches and enfolds it as one catches and enfolds a cloth flapping in the wind. It follows that by listening to music, and while we are listening to it, we enter into a kind of immortality.

It can now be seen how music resembles myth, since the latter too overcomes the contradiction between historical, enacted time and a permanent constant. But to justify the comparison fully, it must be carried much further than I took it in a previous study (L-S. 5, pp. 230-33). Like a musical work, myth operates on the basis of a twofold continuum: one part of it is external and is composed in the one instance of historical, or supposedly historical, events forming a theoretically infinite series from which each society extracts a limited number of relevant incidents with which to create its myths; and in the other instance, the equally infinite series of physically producible sounds, from which each musical system selects its scale. The second aspect of the continuum is internal and is situated in the psychophysiological time of the listener, the elements of which are very complex: they involve the periodicity of cerebral waves and organic rhythms, the strength of the memory, and the power of the attention. Mythology makes demands primarily on the neuromental aspects because of the length of the narration, the recurrence of certain themes, and the other forms of back references and parallels which can only be correctly grasped if the listener's mind surveys, as it were, the whole range of the story as it is unfolded. All this applies, too, in the case of music. But the latter appeals not only to psychological time but also to physiological and even visceral time; this appeal is not absent in the case of mythology, since the telling of a story may be of "breathhtaking" interest, but it is not as essential as in music: any piece of counterpoint includes a silent part for the rhythmic movements of heart and lungs.

To simplify the argument, let us restrict ourselves for the moment to visceral time. We can say that music operates according to two grids. One is physiological—that is, natural: its existence arises from the fact that music exploits organic rhythms and thus gives relevance to phenomena of discontinuity that would otherwise remain latent and submerged, as it were, in time. The other grid is cultural: it consists of a scale of musical sounds, of which the number and the intervals vary from one culture to another. The system of intervals provides music with an initial level of articulation, which is a function not of the relative heights of the notes (which result from the perceptible properties of each sound) but of the hierarchical relations among them on the scale; the division into fundamental, tonic, dominant, and lead-

ing notes expresses relations that the polytonal and atonal systems complicate but do not destroy.

The composer's mission is to modify the discontinuity without challenging its principle: his melodic inventiveness either creates temporary lacunae in the grid or temporarily stops up or reduces the intervals. Sometimes it increases the perforation; at other times it closes the gaps. And what is true of the melody is also true of the rhythm since, by means of the latter, the theoretically constant intervals of the physiological grid are missed out or extended, anticipated or caught up with after some delay.

The musical emotion springs precisely from the fact that at each moment the composer withholds or adds more or less than the listener anticipates on the basis of a pattern that he thinks he can guess, but that he is incapable of wholly divining because of his subjection to a dual periodicity: that of his respiratory system, which is determined by his individual nature, and that of the scale, which is determined by his training. If the composer withholds more than we anticipate, we experience a delicious falling sensation; we feel we have been torn from a stable point on the musical ladder and thrust into the void, but only because the support that is waiting for us was not in the expected place. When the composer withholds less, the opposite occurs: he forces us to perform gymnastic exercises more skillful than our own. Sometimes he moves us, sometimes he forces us to make the movement ourselves, but it always exceeds what we would have thought ourselves capable of achieving alone. Aesthetic enjoyment is made up of this multiplicity of excitements and moments of respite, of expectations disappointed or fulfilled beyond anticipation—a multiplicity resulting from the challenges made by the work and from the contradictory feeling it arouses that the tests it is subjecting us to are impossible, at the same time as it prepares to provide us with the marvelously unpredictable means of coping with them. The intention of the composer, ambiguous while still in the score, which offers:

. . . irradiant un sacré  
Mal tu par l'encre même en sanglots sibyllins,<sup>6</sup>

becomes actual, like that of myth, through and by the listener. In both instances the same reversal of the relation between transmitter and receiver can be observed, since in the last resort the latter discovers its own meaning through the message from the former: music has its being in me, and I listen to myself through it. Thus the myth and the musical work are like conductors of an orchestra, whose audience becomes the silent performers.

If it is now asked where the real center of the work is to be found, the answer is that this is impossible to determine. Music and mythology bring

<sup>6</sup> TRANSLATORS' NOTE: The conclusion of Mallarmé's sonnet in honor of Wagner. Literally: "[The god Richard Wagner] radiating a coronation, inadequately kept silent by the ink itself in sibylline sobs." The meaning may be that the aesthetic triumph of Wagner's work belies the mysterious sadness of the music as it is actually written.



man face to face with potential objects of which only the shadows are actualized, with conscious approximations (a musical score and a myth cannot be more) of inevitably unconscious truths, which follow from them. In the case of myth we can guess the reason for this paradoxical situation: it is a consequence of the irrational relation between the circumstances of the creation of the myth, which are collective, and the particular manner in which it is experienced by the individual. Myths are anonymous: from the moment they are seen as myths, and whatever their real origins, they exist only as elements embodied in a tradition. When the myth is repeated, the individual listeners are receiving a message that, properly speaking, is coming from nowhere; this is why it is credited with a supernatural origin. It is therefore comprehensible that the unity of the myth should be projected onto a postulated center, beyond the conscious perception of the listener through whom for the time being it is merely passing, up to the point at which the energy it radiates is consumed in the effort of unconscious reorganization that it has itself previously prompted. Music raises a much more difficult problem, because we know nothing of the mental conditions in which musical creation takes place. In other words, we do not understand the difference between the very few minds that secrete music and the vast numbers in which the phenomenon does not take place, although they are usually sensitive to music. However, the difference is so obvious, and is noticeable at so early an age, that we cannot but suspect that it implies the existence of very special and deep-seated properties. But since music is a language with some meaning at least for the immense majority of mankind, although only a tiny minority of people are capable of formulating a meaning in it, and since it is the only language with the contradictory attributes of being at once intelligible and untranslatable, the musical creator is a being comparable to the gods, and music itself the supreme mystery of the science of man, a mystery that all the various disciplines come up against and which holds the key to their progress.

It cannot be argued that poetry raises a problem of the same order. Not everyone is a poet, but the vehicle of poetry is articulate speech, which is common property. Poetry merely decrees that its particular use of language will be subject to certain restrictions. Music, on the contrary, has its own peculiar vehicle which does not admit of any general, extramusical use. Theoretically, if not in fact, any adequately educated man could write poems, good or bad; whereas musical invention depends on special gifts, which can be developed only where they are innate.

Devotees of painting will no doubt protest against the privileged position I have accorded to music, or at least will claim the same position for the graphic and plastic arts. However, I believe that from the formal point of view the materials used—that is, sounds and colors—are not on the same

level. To justify the difference, it is sometimes said that music is not normally imitative or, more accurately, that it never imitates anything but itself; whereas the first question that springs to the mind of someone looking at a picture is: what does it represent? But if the problem is formulated in this way at the present time, we are faced with the anomaly of nonfigurative painting. In defense of his efforts, would not the abstract painter be justified in appealing to the precedent of music and in claiming the right to organize forms and colors, if not with absolute freedom, at least in accordance with a code independent of sense experience, as is the case in music with its sounds and rhythms?

Anyone proposing this analogy has fallen victim to a serious illusion. Whereas colors are present “naturally” in nature, there are no musical sounds in nature, except in a purely accidental and unstable way; there are only noises.<sup>7</sup> Sounds and colors are not entities of the same standing, and the only legitimate comparison is between colors and noises—that is, between visual and acoustic modes of nature. And it happens that man adopts the same attitude to both, since he is unwilling to allow either to remain in a random state. There are confused noises just as there are medleys of color; but as soon as it is possible to perceive them as patterns, man at once tries to identify them by relating them to a cause. Patches of color are seen as flowers nestling in the grass, crackling noises must be caused by stealthy movement or by the wind in the trees, and so on.

There is no true equality, then, between painting and music. The former finds its materials in nature: colors are given before they are used, and language bears witness to their derivative character through the terms that describe the most subtle shades—midnight blue, peacock blue, petrol blue; sea green, jade green; straw color, lemon yellow; cherry red, etc. In other words, colors exist in painting only because of the prior existence of colored objects and beings; and only through a process of abstraction can they be separated from their natural substrata and treated as elements in an independent system.

It may be objected that what applies to colors is not true of forms. Geo-

<sup>7</sup> If, through lack of verisimilitude, we dismiss the whistling of the wind through the reeds of the Nile, which is referred to by Diodorus, we are left with little but bird songs—Lucretius’ *liquidas avium voces*—that can serve as a natural model for music. Although ornithologists and acousticians agree about the musicality of the sounds uttered by birds, the gratuitous and unverifiable hypothesis of the existence of a genetic relation between bird song and music is hardly worth discussing. Doubtless man is not the only producer of musical sounds, if he shares this privilege with the birds, but the fact has no bearing on my argument since, unlike color which is a natural phenomenon, musical tone, in the case of both birds and men, is a social phenomenon. The so-called songs of birds are on the frontiers of language; their purpose is to express and communicate. Therefore it is still true that musical sounds are part of culture. However, the dividing line between culture and nature is not identical, as used to be thought, with any of the lines of demarcation between human and animal nature.

metrical forms and all others derived from them have already been created by culture when the artist becomes aware of them; they are no more the product of experience than musical sounds are. But an art limited to the exploitation of such forms would inevitably take on a decorative character. Without ever fully existing in its own right, it would become anemic, unless it attached itself to objects as adornment, while drawing its substance from them. It is, then, as if painting had no choice but to signify beings and things by incorporating them in its operations or to share in the significance of beings and things by becoming incorporated with them.

It seems to me that this congenital subjection of the plastic arts to objects results from the fact that the organization of forms and colors within sense experience (which, of course, is itself a function of the unconscious activity of the mind) acts, in the case of these arts, as an initial level of articulation of reality. Only thanks to it are they able to introduce a secondary articulation which consists of the choice and arrangement of the units, and in their interpretation according to the imperatives of a given technique, style, or manner—that is, by their transposition in terms of a code characteristic of a given artist or society. If painting deserves to be called a language, it is one in that, like any language, it consists of a special code whose terms have been produced by combinations of less numerous units and are themselves dependent on a more general code. Nevertheless, there is a difference between it and articulate speech, with the result that the message of painting is grasped in the first place through aesthetic perception and secondly through intellectual perception, whereas with speech the opposite is the case. As far as articulate speech is concerned, the coming into operation of the second code wipes out the originality of the first. Hence the admittedly “arbitrary character” of linguistic signs. Linguists emphasize these aspects when they say that “morphemes, which are significant elements, break down into phonemes, which are articulatory elements without significance” (Benveniste, p. 7). Consequently, in articulate speech the primary nonsignifying code is a means and condition of significance in the secondary code: in this way, significance itself is restricted to one level. The dualism is re-established in poetry, which incorporates in the second code the potential, signifying value of the first. Poetry exploits simultaneously the intellectual significance of words and syntactical constructions and aesthetic properties, which are the potential terms of another system which reinforces, modifies, or contradicts this significance. It is the same thing in painting, where contrasts of form and color are perceived as distinctive features simultaneously dependent on two systems: first, a system of intellectual significances, the heritage of common experience and the result of the subdivision and organization of sense experience into objects; second, a system of plastic values which only becomes significant through modulating the other and becoming incorporated with it. Two articulated mechanisms mesh to form a third, which combines the properties of both.

It can thus be understood why abstract painting and more generally all schools of painters claiming to be nonfigurative lose the power to signify: they abandon the primary level of articulation and assert their intention of surviving on the secondary one alone. The attempt to establish a parallel between certain contemporary experiments and Chinese calligraphic painting is particularly instructive. In these experiments, the forms used by the artist have no prior existence on a different level with their own systematic organization. It is therefore impossible to identify them as elementary forms: they can be more accurately described as creations of whim, fictitious units, which are put together in parodic combinations. Calligraphic art, on the contrary, rests wholly on the fact that the units it selects, puts into position, and translates by means of the conventions of a particular kind of writing or of a personal sensibility, rhythm, or style, have an independent existence as signs and fulfill other functions within a certain graphic system. Only in these circumstances can a pictorial work be part of a language, because it then results from the contrapuntal relation between two levels of articulation.

It can also be seen why the comparison between painting and music would be acceptable, at a pinch, only if limited to calligraphic painting. Like the latter—but because it is a sort of secondary form of painting—music refers back to a primary level of articulation created by culture: in the one instance, there is a system of ideograms; in the other, a system of musical sounds. But by the mere fact of its creation, the pattern makes explicit certain natural properties: for instance, graphic symbols, particularly those of Chinese writing, display aesthetic properties independent of the intellectual meanings they are intended to convey; and it is these properties that calligraphic art exploits.

This is an essential point, because contemporary musical thought, either formally or tacitly, rejects the hypothesis of the existence of some natural foundation that would objectively justify the stipulated system of relations among the notes of the scale. According to Schönberg's significant formula, these notes are to be defined solely by “the total system of relations of the sounds with one another.” However, the lessons of structural linguistics should make it possible to overcome the false opposition between Rameau's objectivism and the conventionalism of modern theorists. As a result of the selection made in the sound continuum by each type of scale, hierarchical relations are established among the notes. These relations are not dictated by nature, since the physical properties of any musical scale considerably exceed in number and complexity those selected by each system for the establishment of its distinctive features. It is nevertheless true that, like any phonological system, all modal or tonal (or even polytonal or atonal) systems depend on physical and physiological properties, selecting some from among the infinite number no doubt available, and exploiting the contrasts and combinations of which they are capable in order to evolve a code that



serves to distinguish different meanings. Music, then, just as much as painting, supposes a natural organization of sense experience; but it does not necessarily accept this organization passively.

We must not forget, however, that painting and music stand in opposite relations to nature, although nature speaks to them both. Nature spontaneously offers man models of all colors and sometimes even their substance in a pure state. In order to paint he has only to make use of them. But, as I have already emphasized, nature produces noises not musical sounds; the latter are solely a consequence of culture, which has invented musical instruments and singing. The difference is reflected in language: we do not describe shades of color and sound in the same way. In the case of the former, we almost always proceed by means of implicit metonymies, as if a given yellow were inseparable from the visual perception of straw or lemon, or a given black from the burnt ivory used in its making, or a given brown from pounded earth. On the other hand, metaphors are widely used in the world of sounds: for instance, *les sanglots longs des violons/de l'automne* "the long sobbing of the violins of autumn," *la clarinette, c'est la femme aimée* "the clarinet is like the beloved," etc. No doubt culture sometimes discovers colors that are thought not to come from nature; it would be more accurate to say that it rediscovers them, since nature in this respect is literally inexhaustible. But apart from the instance of bird song already referred to, man would be unacquainted with musical sounds if he had not invented them.

Therefore, it is only at a later stage, and retroactively as it were, that music recognizes physical properties in sounds and selects certain of these properties with which to build its hierarchical structures. Can it be said that, in so doing, music proceeds like painting which also recognized, at a later stage, that there is a physical science of color, on which it is now, more or less openly, based? But, in doing this, painting, through the instrumentality of culture, gives intellectual organization to a form of nature which it was already aware of as a sense pattern. Music follows exactly the opposite course: culture is already present in it, but in the form of sense experience, even before it organizes it intellectually by means of nature. It is because the field of operation of music is cultural that music comes into being, free from those representational links that keep painting in a state of subjection to the world of sense experience and its organization in the form of objects.

It is precisely in the hierarchical structure of the scale that the first level of articulation of music is to be found. It follows that there is a striking parallel between the ambitions of that variety of music which has been paradoxically dubbed concrete and those of what is more properly called abstract painting. By rejecting musical sounds and restricting itself exclusively to noises, *musique concrète* puts itself into a situation that is comparable, from the formal point of view, to that of painting of whatever kind: it is in immediate communion with the given phenomena of nature. And,

like abstract painting, its first concern is to disrupt the system of actual or potential meanings of which these phenomena are the elements. Before using the noises it has collected, *musique concrète* takes care to make them unrecognizable, so that the listener cannot yield to the natural tendency to relate them to sense images: the breaking of china, a train whistle, a fit of coughing, or the snapping off of a tree branch. It thus wipes out a first level of articulation, whose usefulness would in any case be very limited, since man is poor at perceiving and distinguishing noises, perhaps because of the overriding importance for him of a privileged category of noises: those of articulate speech.

The existence of *musique concrète* therefore involves a curious paradox. If such music used noises while retaining their representative value, it would have at its disposal a first articulation which would allow it to set up a system of signs through the bringing into operation of a second articulation. But this system would allow almost nothing to be said. To be convinced of this, one has only to imagine what kind of stories could be told by means of noises, with reasonable assurance that such stories would be both intelligible and moving. Hence the solution that has been adopted—the alteration of noises to turn them into pseudo-sounds; but it is then impossible to define simple relations among the latter, such as would form an already significant system on another level and would be capable of providing the basis for a second articulation. *Musique concrète* may be intoxicated with the illusion that it is saying something; in fact, it is floundering in non-significance.

Far be it from me to make the inexcusable mistake of confusing this phenomenon with the case of serial music. Serial music, which keeps firmly to sounds and has a subtle grammar and syntax at its disposal, remains of course within the bounds of music proper and may even be helping to prolong its life. But although the problems it faces are of another kind and arise on a different level, they nevertheless offer some resemblance to those discussed in the previous paragraph.

The serial approach, by taking to its logical conclusion that whittling down of the individual particularities of tones, which begins with the adoption of the tempered scale, seems to tolerate only a very slight degree of organization of the tones. It is as if one were trying to find the lowest level of organization compatible with the retention of a series of sounds handed down by tradition, or, more accurately, to destroy a simple organization, partly imposed from without (since it results from a choice among pre-existing possibilities), to leave the field open for a much more supple and complex, yet declared code:

The composer's thought, operating in accordance with a particular methodology, creates the objects it needs and the form necessary for their organization, each time it has occasion to express itself. Classical tonal thought is based on a world defined by gravitation and attraction, serial thought on a world which is perpetually expanding." (Boulez.)

In serial music, according to the same writer, "there is no longer any preconceived scale or preconceived forms—that is, general structures into which a particular variety of musical thought can be inserted." It should be noted that the adjective "preconceived" is used ambiguously here. It does not follow from the fact that the structures and forms imagined by the theoreticians have been proved to be most often artificial and sometimes mistaken that no general structure exists; a more effective analysis of music, which would take into account all its geographic and temporal manifestations, might some day reveal such a structure. Where would linguistics now be if it had concluded, from its criticism of the grammars of any given language formulated by philologists at different periods, that the particular language had no inherent grammar? Or if the differences in grammatical structure among individual languages had discouraged it from pursuing the difficult, but essential task of evolving a general grammar? Above all, one must ask oneself in dealing with this conception, what has happened to the first level of articulation, which is as indispensable in musical language as in any other, and which consists precisely of general structures whose universality allows the encoding and decoding of individual messages. Whatever the gulf between *musique concrète* and serial music in respect of intelligence, the question arises whether both are not deceived by the utopian ideal of the day: one concentrates on matter; the other on form; but both are trying to construct a system of signs on a single level of articulation.

The exponents of the serial doctrine will no doubt reply that they have abandoned the first level to replace it by the second, but they make up for the loss by the invention of a third level, which they count on to perform the function previously fulfilled by the second. Thus, they maintain, they still have two levels. We have had in the past the ages of monody and polyphony; serial music is to be understood as the beginning of a "polyphony of polyphonies"; through it the previous horizontal and vertical readings are integrated in an "oblique" reading. But in spite of its logical coherence, this argument misses the essential point: the fact is that, in the case of any language, the first articulation is immovable, except within very narrow limits. And it is certainly not interchangeable. The respective functions of the two forms of articulation cannot be defined in the abstract and in relation to each other. The elements raised to the level of a meaningful function of a new order by the second articulation must arrive at this point already endowed with the required properties: that is, they must be already stamped with, and for, meaning. This is only possible because the elements, in addition to being drawn from nature, have already been systematized at the first level of articulation: the hypothesis is faulty, unless it is accepted that the system takes into account certain properties of a natural system which creates *a priori* conditions of communication among beings similar in nature. In other words, the first level consists of real but unconscious relations which, because of these two attributes, are able to function without being known or correctly interpreted.

In the case of serial music, however, such rootedness in nature is uncertain and perhaps nonexistent. Only ideologically can the system be compared to a language, since unlike articulate speech, which is inseparable from its physiological or even physical foundation, it is a system adrift, after cutting the cables by which it was attached. It is like a sailless ship, driven out to sea by its captain, who has grown tired of its being used only as a pontoon, and who is privately convinced that by subjecting life aboard to the rules of an elaborate protocol, he will prevent the crew from thinking nostalgically either of their home port or of their ultimate destination. . . .

I do not deny that the choice may have been dictated by the hardness of the times. It may even happen that the hazardous journey undertaken by painting and music will lead them to new lands, preferable to those where they have lived throughout the centuries, and where the harvests were thinning out. But if such is the outcome, it will be without the knowledge or agreement of the navigators because, as we have seen, the possibility is indignantly denied by the exponents of serial music at least. It is not a question of sailing to other lands, the whereabouts of which may be unknown and their very existence hypothetical. The proposed revolution is much more radical: the journey alone is real, not the landfall, and sea routes are replaced by the rules of navigation.

Be this as it may, what I want to emphasize is a different point. Even when they seem to be moving along side by side, painting and music are separated by an obvious disparity. Without realizing it, abstract painting is taking over, more and more, the functions that were formerly fulfilled in society by decorative painting. It is therefore being divorced from language conceived as a system of meaning; whereas serial music clings to speech, continuing and exaggerating the lieder tradition—that is, a genre in which music, forgetting that it is itself a sovereign, irreducible language, puts itself at the service of words. Does not this dependence on a different idiom betray a feeling of anxiety that, in the absence of a fairly apportioned code, complex messages may be inadequately received by those people to whom they have, after all, to be addressed? Once a language has been unhinged, it inevitably tends to fall apart, and the fragments that hitherto were a means of reciprocal articulation between nature and culture drift to one side or the other. The listener notices this in his own way, since the composer's use of an extraordinarily subtle syntax (which allows combinations all the more numerous, since the twelve halftones can arrange their patterns at will in a four-dimensional space defined by height, duration, intensity, and timbre) affects him either on the natural or the cultural level, but rarely on both at once. Sometimes all he derives from the instrumental parts is the flavor of the timbres, acting as a natural stimulant of sensual feeling; sometimes the use of wide intervals, which kills any budding desire for melody, gives the vocal part the doubtless false appearance of a mere expressive reinforcement of articulate speech.

In the light of the foregoing remarks, the reference to an expanding uni-



verse that I quoted from the writings of one of the most eminent thinkers of the serial school takes on a remarkable significance. It shows that this particular school has chosen to risk its fate, and the fate of music, on a gamble. Either it will succeed in bridging the traditional gap between listener and composer and—by depriving the former of the possibility of referring unconsciously to a general system—will at the same time oblige him, if he is to understand the music he hears, to reproduce the individual act of creation on his own account. Through the power of an ever new, internal logic, each work will rouse the listener from his state of passivity and make him share in its impulse, so that there will no longer be a difference of kind, but only of degree, between inventing music and listening to it. Or something quite different will happen, since we have no guarantee, alas, that bodies in an expanding universe are all moving at the same rate or in the same direction. The astronomical analogy to which I am appealing suggests rather the opposite. It may therefore turn out that serial music belongs to a universe in which the listener could not be carried along by its impetus but would be left behind. In vain would he try to catch up; with every passing day it would appear more distant and unattainable. Soon it would be too far away to affect his feelings; only the idea of it would remain accessible, before eventually fading away into the dark vault of silence, where men would recognize it only in the form of brief and fugitive scintillations.

The reader is in danger of being put off by this discussion of serial music, which is hardly appropriate, it would seem, at the beginning of a work devoted to the myths of the South American Indians. Its justification lies in my intention to treat the sequences of each myth, and the myths themselves in respect of their reciprocal interrelations, like the instrumental parts of a musical work and to study them as one studies a symphony. The legitimacy of this procedure depends on the demonstration of the existence of an isomorphism between the mythic system, which is of a linguistic order, and the system of music which, as we know, constitutes a language, since we understand it, but whose absolute originality and distinguishing feature with regard to articulate speech is its untranslatability. Baudelaire (p. 1213) made the profound remark that while each listener reacts to a given work in his own particular way, it is nevertheless noticeable that "music arouses similar ideas in different brains." In other words, music and mythology appeal to mental structures that the different listeners have in common. The point of view I have adopted involves, therefore, reference to general structures that serialist doctrine rejects and whose existence it even denies. On the other hand, these structures can only be termed general if one is prepared to grant them an objective foundation on the hither side of consciousness and thought, whereas serial music sets itself up as a conscious

product of the mind and an assertion of its liberty. The argument is complicated by problems of a philosophical nature. Because of its vigorous theoretical ambitions, its very strict methodology, and its brilliant technical achievements, the serialist school provides a much better illustration than do the various forms of nonfigurative painting of a current in contemporary thought, which has to be distinguished from structuralism with special care, since they have so many features in common: a resolutely intellectual approach, a bias in favor of systematic arrangements, and a mistrust of mechanistic or empirical solutions. However, by virtue of its theoretical presuppositions, the serialist school is at the opposite pole from structuralism and stands in a relation to it comparable to that which used to exist between free thought and religion—with the difference, however, that structural thought now defends the cause of materialism.

Consequently, far from being a digression, my comparison with serialist thought takes up again and develops themes that were broached in the first part of this introduction. I have thus completed my demonstration of the fact that, whereas in the public mind there is frequently confusion between structuralism, idealism, and formalism, structuralism has only to be confronted with true manifestations of idealism and formalism for its own deterministic and realistic inspiration to become clearly manifest.

What I state about any language seems to me to be still truer when the language under consideration is music. If, of all human products, music strikes me as being the best suited to throw light on the essence of mythology, the reason is to be found in its perfection. Mythology occupies an intermediary position between two diametrically opposed types of sign systems—musical language on the one hand and articulate speech on the other; to be understood it has to be studied from both angles. However, when one decides, as I have done in this book, to look from myth to music rather than from myth to language—as I tried to do in previous works (L-S. 5, 6, 8, 9)—the exceptional position occupied by music is brought out still more clearly. In making the comparison, I referred at the outset to an attribute that the myth and the musical work have in common: they operate through the adjustment of two grids, one internal, the other external. But, in the case of music these grids, which are never simple, become complex to the point of reduplication. The external, or cultural, grid formed by the scale of intervals or the hierarchical relations among the notes, refers back to an inherent discontinuity: the discontinuity of musical sounds that are already wholly cultural objects in themselves, since they stand in contrast to noises, which are the only elements given *sub specie naturae*. The inner, or natural, grid, which is a function of the brain, is reinforced symmetrically by a second and, one might say, still more wholly natural grid: that constituted by the visceral rhythms. Consequently, in music the mediation between nature and culture that occurs within every language becomes a hypermediation; the connections are strengthened on either side. Since music

is established at the point where two different spheres overlap, its writ runs well beyond boundaries that the other arts are careful not to overstep. In the two opposite directions of nature and culture, it is able to go much farther than they can. This explains the principle (though not the genesis and functioning, both of which, as I have already said, remain the great mysteries of the science of man) of music's extraordinary power to act simultaneously on the mind and the senses, stimulating both ideas and emotions and blending them in a common flow, so that they cease to exist side by side, except insofar as they correspond to, and bear witness to, each other.

No doubt mythology offers only a weaker imitation of this force. Yet it is the language that has most in common with that of music, not only because their very high degree of internal organization creates a bond between them, but for deeper reasons also. Just as music makes the individual conscious of his physiological rootedness, mythology makes him aware of his roots in society. The former hits us in the guts; the latter, we might say, appeals to our group instinct.<sup>8</sup> And to do this, they make use of those extraordinarily subtle cultural mechanisms: musical instruments and mythic patterns. In music, the duplication of the mechanisms, which can be both instrumental and vocal, reproduces, through their union, the union of nature and culture, since it is a fact that singing differs from the spoken language in demanding the participation of the whole body, but according to the strict rules of a particular vocal style. As a result, here again music asserts its claims in a more coherent, systematic, and total fashion. However, myths are often sung or chanted; and even when they are recited, the process is usually marked by certain physical rules: the reciter or the listener is forbidden to fall asleep, to remain seated, etc.

In the course of this book (Part One, I, *d*) I shall establish the existence of an isomorphism between two oppositions; that of nature and culture and that of continuous and discrete quantities. My thesis can therefore be supported by the fact that innumerable societies, both past and present, have conceived of the relation between the spoken language and singing or chanting as analogous to that between the continuous and the intermittent. This is tantamount to saying that, within culture, singing or chanting differs from the spoken language as culture differs from nature; whether sung or not, the sacred discourse of myth stands in the same contrast to profane discourse. Again, singing and musical instruments are often compared to masks; they are the acoustic equivalents of what actual masks represent on the plastic level (and for this reason, in South America especially, they are associated, mentally and physically, with masks). Through this particularity, too, music and the mythology illustrated by masks are brought into symbolic proximity.

<sup>8</sup> TRANSLATORS' NOTE: The original reads: *L'une nous prend aux tripes, l'autre, si l'on ose dire, "au groupe."*

All these comparisons result from the closeness of music and mythology to each other on the same axis. But since along this axis music stands in opposition to articulate speech, it follows that music, which is a complete language, not reducible to speech, must be able to fulfill the same functions on its own account. Looked at in the round and in its relation to other sign systems, music is close to mythology. But, so far as the mythic function is itself an aspect of speech, it must be possible to discover in musical discourse some special function that has a particular affinity with myth—an affinity that, we might say, serves to illustrate the general affinity I have already noted between the two categories, myth and music, when they are considered in their entirety.

It is immediately obvious that there is a correspondence between music and language in respect of the variety of their functions. In both cases it is necessary to make a preliminary distinction according to whether the function relates principally to the sender or to the receiver. The term "phatic function," that Malinowski introduced, is not strictly applicable to music. Yet it is clear that almost all folk music, such as choral singing or singing as an accompaniment to dancing, as well as a considerable part of chamber music, gives pleasure in the first place to the performers—that is, the senders. It is, we may say, a subjectivized phatic function. Amateur musicians who get together to play quartets are not much concerned whether they have an audience; and it is probably the case that they prefer not to have one. The explanation must be that even in this instance the phatic function is accompanied by a conative one, the group performance creating a harmony of gesture and expression which is one of its aims. This conative function takes precedence over the other in the case of military marches and dance music, the main object of which is to regulate the behavior of other people. In music, even more than in linguistics, the phatic and conative functions are inseparable. They are on the same side, at the opposite pole from the cognitive function. The latter is predominant in theater or concert music, which aims primarily—though again not exclusively—at transmitting information-loaded messages to an audience which acts as a receiver.

The cognitive function, in its turn, can be broken down by analysis into several forms, each of which corresponds to a particular kind of message. These forms are approximately the same as those distinguished by the linguist under the headings of "metalinguistic," "referential," and "poetic" functions (Jakobson 2, chap. 11 and p. 220). Only by recognizing that there are several kinds of music can we explain the apparently self-contradictory fact that we like very different composers. Everything becomes clear, once we realize that there is no point in trying to put them in an order of preference (by seeking, for instance, to establish their relative degrees of "greatness"); in reality they fall into separate categories according to the nature of the information they convey. In this respect composers can be divided up, roughly speaking, into three groups, which are combined and interrelated in all manner of ways.



In this classification, Bach and Stravinsky appear as musicians concerned with a "code," Beethoven—but, Ravel too—as concerned with a "message," and Wagner and Debussy as concerned with "myth." The first use their messages to expound and to comment on the rules of a particular musical discourse; the second group tell a tale; the third group code their messages by means of elements that already partake of the nature of narrative. Of course, no piece of music by these composers can be entirely reduced to one or the other of these formulas, which are not intended as a complete definition of the musician's work but rather serve to emphasize the relative importance attributed to each function. It is also for the sake of simplicity that I have quoted only three pairs, each including an older and a more modern musician.<sup>9</sup> But even in the case of dodecaphonic music, the distinction remains enlightening, since it allows us to see the relative positions of Webern, Schönberg, and Berg: the first belongs to the category of the code, the second to that of the message, and the third to that of myth.

As for the emotive function, it too exists in music; and where it exists as a constituent element, musicians refer to it in their professional jargon by the German term *Schmalz*. However, for the reasons already indicated, it is clear that its role would be even more difficult to determine precisely than in the case of articulate speech, since we have seen that, theoretically if not always in practice, emotive function and musical language are coextensive.

I shall deal much more rapidly with another feature of my book: the occasional use of apparently logico-mathematical symbols, which should not be taken too seriously. There is only a superficial resemblance between my formulas and the equations of the mathematician, because the former are not applications of rigorously employed algorisms, allowing the demonstrations of the various points to be interlinked or condensed. Their purpose is quite different. Certain analyses of myths are so long and detailed that it would be impossible to carry them through to the end, if one did not have at one's disposal some abbreviated form of writing—a kind of shorthand which allows one to indicate rapidly the intellectual course to be pursued; it can be grasped intuitively in broad outline, but one cannot follow it with the certainty of not going astray, unless it has first been reconnoitered piecemeal. The formulas that I have written with the help of symbols borrowed

<sup>9</sup> Needless to say, I took the first six names that came to mind. But this was perhaps not entirely an effect of chance, since it turns out that when one lists these composers in chronological order, the special functions to which they relate form a closed cycle, as if to demonstrate that in the space of two centuries tonal music has exhausted its internal possibilities of renewal. The older composers give the sequence: code → message → myth; and the more modern ones, the opposite sequence: myth → message → code; always supposing, however, that one is prepared to see some significance in the relatively slight intervals between the dates when the latter were born (Debussy 1862, Ravel 1875, Stravinsky 1882).

from mathematics (chiefly because these symbols are already available in typography) are not intended to prove anything; they are meant rather to suggest in advance the pattern of some discursive account, or to sum up such an account, by bringing within a single purview complex groups of relations and transformations, the detailed description of which may have sorely tried the reader's patience. Far from replacing such a description, their function is merely to illustrate it in a simplified form, which I think is helpful but which some people will no doubt consider superfluous and perhaps even likely to obscure the main argument by adding one form of indefiniteness to another.

I am as conscious as anyone of the very loose senses in which I have employed terms such as "symmetry," "inversion," "equivalence," "homology," "isomorphism," etc. I have used them to refer to large bundles of relations which we vaguely perceive to have something in common. But if the structural analysis of myths has any future, the way in which it chooses and uses its concepts in the initial stages must be subjected to severe criticism. Each term must be defined afresh and limited to a particular use. Above all, the rough classifications that I have used because they were the instruments that came to hand must be refined by analysis into more subtle categories and applied methodically. Only then will it be possible to subject myth to a genuine logico-mathematical analysis; and in the light of this profession of humility, I may perhaps be excused for having thus naïvely attempted to sketch the outlines of such an analysis. After all, the scientific study of myth must involve some very formidable difficulties, since people have hesitated so long to undertake it. However ponderous a volume this may be, it does not claim to have done more than raise a corner of the veil.

My overture therefore comes to a close on a few melancholy chords, after the, by now, ritual thanks that I must offer to collaborators of long standing: M. Jacques Bertin, in whose laboratory the maps and diagrams were drawn; M. Jean Pouillon for his lecture notes, since part of the book formed the subject of a lecture course; Mlle. Nicole Belmart who helped me with documentation and the index; Mme. Edna H. Lemay who did the typing; and my wife and M. Isac Chiva, who read the proofs. But it is time to conclude as I said I would. When I look back over these confused and indigestible pages, I begin to doubt whether the public will have the sensation of listening to a musical work, as the plan and chapter headings try to suggest. What the reader is about to embark on is more likely to remind him of those commentaries on music that are written with an abundance of tedious paraphrase and misguided abstractions—as if music could be the object of linguistic discourse, when its peculiar quality is to express what can be said in no other way. In neither case, therefore, is music present. After making this disillusioned statement, I may at least be allowed the consolation of hoping that when the reader has crossed the bounds of irritation and boredom and is moving away from the book, he will find himself

carried toward that music which is to be found in myth and which, in the complete versions, is preserved not only with its harmony and rhythm but also with that hidden significance that I have sought so laboriously to bring to light, at the risk of depriving it of the power and majesty that cause such a violent emotional response when it is experienced in its original state, hidden away in the depths of a forest of images and signs and still fresh with a bewitching enchantment, since in that form at least nobody can claim to understand it.

## PART ONE

## THEME AND VARIATIONS