I.
The Organization of Myth

1. TALES, TEXTS, AND REFERENCE

To modern man, the word 'myth,'[1] while retaining a certain fascination even outside classical circles, has quite an ambivalent appeal: to denounce some opinion or attitude as 'myth' means to reject it as irrational, false, and potentially harmful;[2] at the same time, 'myth' has a nostalgic ring, indicative of some meaningful reality hidden or lost in the depths of the past or of the psyche, which might be resuscitated as an antidote to a present that seems both rational and absurd. Scholarship, however, is bound to be rational and concerned with facts; I am afraid that I am not going to fulfill escapist hopes.

What is myth? A simple definition[3] will not do. A few years ago Geoffrey Kirk gave in this series a brilliant survey of the varying approaches of modern interpreters to myth,[4] without arriving at any simple, clear-cut answer to this question, but nevertheless clearing the ground within a wide horizon of systematic and historical perspectives. I am not going to retrace his steps or review once again the history of mythological studies.[5] But since I am going to probe into a few Greek myths and rituals in an attempt to understand them in terms of meaningful, essentially human tradition, I have to justify this approach in advance by reflecting in general terms upon the meaning of 'myth.' Thus I shall try to formulate some theses which may add up to form a tentative theory of myth, without Hellenocentric bias; though I am presupposing that whatever the exact definition of myth may be, Greek corpora such as Hesiod's *Theogony* and *Catalogues* or the Greek tragedies or the *Bibliotheke* of Apollodorus will be included in any such definition.

I gladly take my first thesis from the study of Geoffrey Kirk: *Myth belongs to the more general class of traditional tale*.[6] This seems to be trivial, and scholars usually hasten to take the next step, to separate 'true' myth

from other kinds of folktale; still it is worthwhile to reflect, first of all, on the fundamental consequences of this thesis: if myth is a traditional *tale*, it is a phenomenon of language, and not some special creation analogous to and outside of normal language, as has been maintained from Mannhardt to Susanne Langer;[7] and if myth is a *traditional* tale, this should at a stroke dispose of the question which has dominated scholarly mythology ever since Antiquity: 'How is myth created, and by whom?' It is not the 'creation,' not the 'origin' of myth which constitutes the basic fact, but the transmission and preservation, even without the use of writing in a 'primitive,' oral civilization. Whatever creative agents have been proposed to account for the origin of myths, whether inspired poets or lying poets, '*Volksgeist*,' the universal human mind, or the unconscious dynamics of the psyche,[8] they seem to belong rather to a creation myth of myth than to a rational approach. A tale becomes traditional not by virtue of being created, but by being retold and accepted; transmission means interaction, and this process is not explained by isolating just one side. A tale 'created'—that is, invented by an individual author—may somehow become 'myth' if it becomes traditional, to be used as a means of communication in subsequent generations,[9] usually with some distortions and reelaborations. At any rate, it is a fact that there are traditional tales in most primitive and even in advanced societies, handed down in a continuous chain of transmission, suffering from omissions and misinterpretations but still maintaining a certain identity and some power of regeneration.[10] The fundamental questions thus would be: How, and to what extent, can traditional tales retain their identity through many stages of telling and retelling, especially in oral transmission, and what, if any, is the role and function of such tales in the evolution of human civilization?

But what is a tale? If, dealing with language, we adopt the triple division worked out by analytical philosophy and linguistics of (1) sign, (2) sense, and (3) reference,[11] a tale belongs evidently to the category of sense, as against an individual text on the one side, and reality on the other. It is taken for granted that tales can be translated without loss or damage;[12] they are therefore not dependent on any particular language; and even within one language the same tale can be told in quite different ways, in longer or in shorter versions, with more or less of detail and of imaginative situations. Thus, within Greek literature, the same myth

may appear in such diverse forms as a book of Homer, a digression in Pindar, a whole tragedy, an allusion in a choral ode, a passage in Apollodorus, or a scholion on Aristophanes. A myth, qua tale, is not identical with any given text; the interpretation of myth therefore is to be distinguished from the interpretation of a text, though both may evolve in a hermeneutic circle and remain mutually dependent on each other. We know, after all, that we can remember a good tale, and a myth, by hearing it just once, without memorizing the words of a text. What is it, then, that we do remember?

It is not anything 'real.' A tale, while not bound to any given text, is not bound to pragmatic reality either. I think this holds true on quite a fundamental level. A tale has no immediate reference,[13] in contrast to a word or an atomic sentence: this is a rose, this is red, this rose is red. A tale is not, and cannot be, an accumulation of atomic sentences; it is a sequence in time, linking different stages by some internal necessity. There might be immediate evidence only for the last stage, but usually the whole tale is in the past tense, and there is no immediate way to verify things past. In fact there is no isomorphism between reality and tale; it seems increasingly as if piles of computerized information were more representative of reality than any tale; it is not by coincidence that modern writers are more and more unwilling, and unable, to tell a straightforward tale. Reality does not automatically yield a tale. Even a reporter in a live transmission of, say, a football game can only give a personal selection of what is going on simultaneously; and if anyone tries to retell what has happened, there is immediately much more selection, condensation, structuralization. The form of the tale is not produced by reality, but by language, whence its basic character is derived: linearity. Every tale has a basic element of *poíesis*, fiction.

Myth, then, within the class of traditional tales, is nonfactual story-telling. This keeps us close to the sense of the Greek word *mŷthos* as contrasted with *lógos*: *lógos*, from *légein*, 'to put together,' is assembling single bits of evidence, of verifiable facts: *lógon didónai*, to render account in front of a critical and suspicious audience; *mŷthos* is telling a tale while disclaiming responsibility: *ouk emòs ho mŷthos*,[14] this is not my tale, but I have heard it elsewhere. Just by disregarding the question of truth one may enjoy myth, or wonder, and start thinking.

Yet myth is generally held to be not a passing enjoyment, but some-

thing important, serious, even sacred. How can this go together with the alleged lack of reference to reality? Ever since antiquity, scholarly mythology has felt the problem, and has tried to evade it by a kind of short circuit, by substituting some direct reference on which the seriousness and stability of the myth is said to depend. This meant looking for a supposedly original, 'real' meaning as against the apparent absurdity or frivolousness of the tale. The favorite reference was to the events of nature,[15] and, secondly, to history: Zeus is the sky, Apollo is the sun,[16] the Chimaera is the earth-fire near Olympus in Lycia,[17] Phaethon's catastrophe is just sunset or, more spectacularly, the eruption of the volcano of Thera,[18] Oedipus is Akhnaton, and the dragon Siegfried slew is the Roman army in the *saltus Teutoburgensis* annihilated by Arminius.[19] Schliemann thought he had recovered evidence for the murder of Agamemnon from the shaft graves at Mycenae,[20] and some seem to think that if the names of Menelaus and Helen should turn up in Linear B, Homer would finally be explained. To remain serious: there is no denying that tales were associated with phenomena or events of this kind; but it is naive to assume that any tale would arise directly from facts. All interpretations on these lines must use Procrustean methods to make the tale isomorphic with the purported reality, must cut off excesses[21] attributed to uncontrolled 'fantasy,' and thus really kill the tale, and the myth.

There is a much more subtle method of interpretation which is still, I think, liable to the same error as the 'short circuit.' This is to substitute for direct reference not any empirical reality, but meta-empirical entities from the realm of metaphysics or, in a more modern vein, of psychology. This method has found favor from Plutarch down to modern theology[22] and to C. G. Jung.[23] It has the advantage of admitting neither of verification nor of refutation, since those nonempirical entities may be constructed to fit exactly the presuppositions of some set of myths. Still it has been notoriously difficult to maintain any kind of consistency in such constructs, keeping in touch at the same time with the myths as attested and not losing all contact with empirical reality. Granted that there are unconscious dynamics of the psyche, there is no reason to assume that they are isomorphic with any tale, which belongs after all not to the realm of the unconscious, but to language. Myths are multivalent: the same myth may be applied to nature or history, to metaphysics or psy-

chology, and make some sense in each field, sometimes even striking sense, according to the predilections of the interpreter;[24] but the very plurality of applications must caution us; a myth, qua tale, cannot be pinned down as referring specifically and immediately to any kind of reality, to one 'origin' outside the tale.

2. PROPP'S HERITAGE AND ILLUYANKAS

This leads to a second thesis, which claims no more originality than the first: the identity of a traditional tale, including myth, independent as it is from any particular text or language and from direct reference to reality, is to be found in a *structure of sense* within the tale itself. Structuralism in general, and the structural study of folktales and myths in particular, has seen a luxuriant growth in recent years;[1] an exposition and critical discussion of the theories involved could easily fill more than one book. I have no intention of doing this; nor shall I produce yet another variant of structuralism, with appropriate terminology and, if possible, diagrams and mathematical formulas. What I shall try to do is describe the method I am tentatively adopting, and give reasons for not probing too deeply into other possibilities.

Structure, in the most general sense, means a system of definable relations between the parts or elements of a whole which admit predictable transformations;[2] and structuralism tends to assume that it is exactly this bundle of relations which constitutes the parts as well as the whole. In a more specific way, structuralism is termed the science of signs, to coincide with 'semiology,' while at the same time the concept of 'sign' and 'language' has been expanded to cover nearly every aspect of civilization. As to the structure of traditional tales, and myth, there are, as far as I can see, two prominent names which stand for two types of structural analysis, Vladimir Propp and Claude Lévi-Strauss; there are by now also several theories aiming at a synthesis of both approaches.

Vladimir Propp, in a book which appeared in Russian in 1928, and became known to the Western world thirty years later,[3] set out to reduce the whole corpus of Russian fairy-tales to one recurrent pattern, a linear series of thirty-one 'functions.' These 'functions' are units of plot action; Alan Dundes has preferred to call them 'motifemes.' Propp's theory can be summarized in three theorems:[4] 'functions' (or 'motifemes')—and

not the persons involved—are the constant elements in fairy-tales; their number is limited; their sequence is fixed. This does not mean that all of the 'functions' must turn up in a single narrative, but rather that all the 'functions' of a given tale are to be found in due course in the ideal series. That is to say: a folktale—including myth—is a fixed sequence of motifemes;[5] the persons are interchangeable. It is reassuring to note that this comes remarkably close to Aristotle's definition of *mŷthos* as a 'combination of actions' with a fixed sequence of beginning, *archḗ*, reversal, *peripéteia*, and ending, *lýsis* or *katastrophḗ*.[6] In fact even before Propp's book became known, other scholars had been using rather similar methods to reduce many variants of a tale to one basic pattern, at least since von Hahn's 'Freja formula' and 'Aryan expulsion and return formula';[7] Propp's contribution was to restrict the series to 'functions,' excluding characters and their qualities and all special, however striking, details. As a first step in analyzing myths, Lévi-Strauss has advocated a similar procedure.[8] Propp did not claim to have established the structure of tales in general—though some post-Proppian theorists seem to start from this assumption;[9] his claim was made only for tales of one type, represented by thirty-one 'functions,' which may be called 'the quest.' Alan Dundes, who successfully applied Propp's method to Amerindian folktale, has been working with four more general sequences: Lack–lack liquidated; Task–task accomplished; Deceit–deception; Interdiction–violation–consequence–attempted escape.[10] Prominent in Greek and other mythologies, but hardly to be found in fairy-tales, are sets of stories concerned with sex and procreation, and with the problem of how to handle the dead; this overlaps with a sacrificial pattern of killing and restoration.[11]

To give one example from Greek mythology of how a set of apparently unrelated myths can be analyzed as covering the same basic structure, I take those sentimental stories about the mothers of important heroes: Callisto, the mother of Arcas, ancestor of the Arcadians;[12] Auge, the mother of Telephus, the founder of Pergamum;[13] Danaë, the mother of Perseus, the founder of Mycenae;[14] Io, the mother of Epaphus, ancestor of the Danai;[15] Tyro, mother of Pelias and Neleus, the kings of Iolcos and Pylos;[16] Melanippe, the mother of Boeotus and Aeolus, ancestors of the Boeotians and Aeolians;[17] Antiope, mother of Zethus and Amphion, the founders of Thebes.[18] Such a catalogue of seven mothers, ten boys,

five cities, and four tribes seems to put quite a strain on the memory, and details multiply, if we add parents and further offspring, to make up the dreary pages of mythological handbooks. But the tales told adapt themselves neatly to a sequence of five 'functions,' easy to understand, which I would call 'the girl's tragedy': (1) leaving home: the girl is separated from childhood and family life; (2) the idyl of seclusion: Callisto joins Artemis, Tyro takes a lonely walk to the river, Auge and Io become priestesses, Antiope becomes a maenad, Danaë is incarcerated in a tomb-like vault; (3) rape: the girl is surprised, violated, and impregnated by a god—it is Zeus for Callisto, Danaë, Io, and Antiope, Poseidon for Tyro and Melanippe, Heracles for Auge; (4) tribulation: the girl is severely punished and threatened with death by parents or relatives—Antiope and Tyro are enslaved to a kind of stepmother, Melanippe is blinded and incarcerated, Danaë is enclosed in a coffin and thrown into the sea, Auge is sold to strangers, Io is turned into a cow and chased away, Callisto is turned into a bear, hunted, and shot; (5) rescue: the mother, having given birth to a boy, is saved from death and grief, as the boy is about to take over the power to which he is destined. The agents, places, motivations and all the details vary; but there is the fixed sequence of departure, seclusion, rape, tribulation, and rescue as a prelude to the emergence of the hero.[19] Yet there is a complication with regard to the animal metamorphosis of Callisto the bear and Io the cow: our texts are conspicuously at variance as to the occurrence of this transformation, before or after mating with the god, or much later.[20] It would be begging the question to postulate that, since animal metamorphosis is 'primitive,' it should happen as early as possible in the tale, turning the god animal too. We must rather state that metamorphosis and sexual union are not in a fixed motifeme sequence; the linearity of the tale structure is suspended at this point. In fact metamorphosis is not a 'motifeme' in this series or elsewhere, let alone an independent tale type, but a widely applicable motif to mark a change of roles, or to hint at some reference outside the tale; both bear and cattle are of special, ritual importance. This, however, will lead from folktale to myth.[21]

Another example may illustrate how far this method of analysis can succeed in establishing identity or nonidentity of parallel versions of ancient myths. I take the Hittite myth about the dragon Illuyankas[22] and the Typhon myth as transmitted by Apollodorus; the basic similarity of

the Hittite and the Greek version has struck scholars ever since the Hittite text became known.[23] But the Hittite text already puts two versions side by side, a "version which they no longer tell" and "the way in which they told it later." This poses the problem of the interrelation of both these versions, which at any rate have a common reference to the New Year festival, Purulli. It is, however, easy to set the texts in parallels:[24]

Old version	*New version*
The Storm-god and the Dragon came to grips.	
The Dragon vanquished the Storm-god.	The Dragon vanquished the Storm-god, and took his heart and eyes away from him.
The Storm-god besought all the gods . . .	The Storm-god sought to revenge himself.
Inaras (a goddess, helping the Storm-god) encountered Hupasiyas, a mortal. He slept with her.	He took the daughter of the poor man; he begat a son; when he (sc. the son) grew up, he took the daughter of the Dragon in marriage.
Inaras took Hupasiyas to the place and hid him; Inaras lured the Dragon up from his lair; the Dragon came with his children; they drank every amphora dry; they are no longer able to descend to their lair; Hupasiyas came and trussed the Dragon with a rope.	The Storm-god instructs his son; he (sc. the son) asked them (sc. his wife and the Dragon) for the heart and they gave that to him; he asked for the eyes and they gave him those, too. The Storm-god got back his heart and his eyes.
The Storm-god came and killed the Dragon.	When he had engaged the Dragon in battle, he came close to vanquishing him.
Inaras instructs Hupasiyas: "Thou shalt not look out of the window!"; that man opened the window and he saw his wife and his children; Inaras killed him.	The son of the Storm-god shouted: "Spare me not!"; the Storm-god killed the Dragon and his son too.

This can be brought into one sequence of motifemes, which turns out to be a characteristic variation of the combat tale: (1) the champion fights the adversary; (2) the adversary defeats the champion; (3) the champion is helpless; (4) a mortal helper is provided; (5) the helper beguiles the ad-

versary; (6) the adversary loses his advantage; (7) the champion, resuming action, defeats the adversary; (8) the mortal helper is killed too. A straightforward combat tale, leaping from (1) to (7), is not too exciting; much more thrilling is the inversion, temporary defeat and disarmament of the champion (2,3)—as is to be found in innumerable variations down to present-day movies and comics[25]—which makes it necessary to resort to tricks instead of force (5, 6).

The unique, paradoxical and disconcerting feature of the Illuyankas myth, in both its versions, is the introduction of a mortal helper who gets killed finally, though the god's victory is largely due to him. It is here that the two texts diverge conspicuously as to the identity and motivation of this 'actant,' though the basic sequence, the tragic paradox, is unaltered. Hupasiyas' grim fate seems to be a kind of novella of its own, loosely attached, following the Interdiction–violation–consequence pattern; in the 'new' version, the death of the helper is integrated into the main action, though the text does not make it very clear why this was unavoidable; it is indicated, instead, that he accepts his death out of his own free will. This is suspiciously reminiscent of sacrificial ideology;[26] some form of real or symbolic human sacrifice in the context of the New Year festival, helping the gods to overcome chaos, may well be in the background.

The Apollodorus version of the Typhon myth almost automatically falls into place: (1) Zeus and Typhon come to grips; (2) Typhon defeats Zeus; (3) he takes away Zeus' weapon and his sinews, which are guarded by a dragoness in a cave; (5) Hermes and Aegipan steal the sinews and (6) fit them again to Zeus; (7) Zeus, resuming action, defeats Typhon. There is a close resemblance to the 'new' version of Illuyankas in the motif that the adversary disables the champion by taking parts of his body away from him—'heart and eyes' in Hittite, 'sinews' in Greek—which are to be recovered through a dragoness. As the Greek tale is explicitly located in Cilicia, a 'late Hittite' intermediary between the Boğazköy text and Apollodorus' source is to be assumed. What gets lost in the process of transmission is the human character of the helper and his paradoxical death; this strengthens the supposition that this was rooted in ritual and therefore not easily transferable.

Recently, Volker Haas has drawn attention to quite another Greek myth which bears a surprising resemblance to the Illuyankas myth as

told in the 'older' version: Jason and Medea.[27] Here, as there, a goddess —there can be no doubt about Medea's divine status—takes a mortal man as her lover, and the two cooperate to overcome the dragon; but then the mortal man turns away from his superior spouse, and he is destroyed in consequence. Add that 'fleeces of the sun' are prominent in the Purulli festival, while Jason's task is to bring the Golden Fleece from Aia, the country of the sun;[28] Aia is the name of the Sun-god's wife in Mesopotamian and Hittite religion.[29]

I do not think this can be coincidence. But in spite of these suggestive parallels, it turns out to be impossible to integrate the Hittite and the Greek tales into one 'Proppian' sequence: on the Greek side there is nothing like the characteristic duality of champion and helper; thus the whole frame of the Hittite combat myth will not fit; on the other side, the fleeces, though well attested in Hittite ritual, do not enter into the tale, whereas the Golden Fleece is the very goal of Jason's expedition. In fact the Argonaut tale, as established by Karl Meuli long ago,[30] belongs to the type of 'Helfermaerchen,' and it would finally fall into Propp's sequence of the fairy-tale but for the abnormal continuation, the Medea tragedy. Let us not try to analyze the complex Argonaut tradition any further,[31] but get back to the more general, basic problems. There has been some migration of motifs from Hittites to Argonauts, but the tales in which they appear are different.

3. THE IMPACT OF LÉVI-STRAUSS AND ITS LIMITATIONS

Propp's method has proved workable in the hands of different scholars. His theorems seem to hold true: a tale is a sequence of motifemes; in linguistic terms: a syntagmatic chain with 'paradigmatic' variants; in more human terms: a program of actions—taking 'action' in a large sense, including plans, reactions, and passive experience in the sequence of the plot. Critics may point to the problem of segmentation:[1] Which are the joints that separate two 'functions' or 'motifemes'? Is it not possible to make arbitrary subdivisions ad infinitum? In fact 'action theory'[2] has provided a certain formalism to describe how comprehensive actions are represented by series of minor actions, by single steps; conversely, the whole series of 'functions' could be engulfed in one major

'action' which, in the case of Propp's series, would be the 'quest.' Practical analysis, however, has to take advantage precisely of the alternatives and variants presented in a set of parallel tales, which make clear the turning points and 'joints.'[3]

What is more generally troubling about structuralism in the wake of Propp is the apparent lack of system: thirty-one 'functions'; this seems quite a random series. Every Platonic mind will try to reduce this multitude to some neat, preferably binary, scheme from which they can be generated: "from chain to system"![4] Dundes has introduced some binary motifemes, such as 'Lack–lack liquidated,' while retaining an open group of various sequences. Much more systematic models have been worked out by Greimas and Bremond,[5] still on the basis of Propp's achievement but aiming at a general, formalized 'narrative grammar.' One may wonder, though, how one can ever get back from such neat and barren systems to describing any identifiable tale in its dynamics, as Propp's quest series did.

Less systematic, but much more radical, is the other variant of structuralism, headed by Lévi-Strauss.[6] His impact has been compared to the advent of abstract painting.[7] I do not think Lévi-Strauss has proved anything, but he has shown in an unprecedented way what scholars can do with myths. For him, a folktale, taken as a 'syntagmatic chain,' makes no sense at all.[8] Thus the sequence of the tale is broken up, and all its elements—persons, objects, properties, and actions—become free to serve just as terms in abstract relations: oppositions, proportions, reversals, logical quadrangles, 'functions' in the mathematical sense. As Nathorst put it: "He has perhaps found the harmony, but he has certainly lost the melody."[9] We are told there are multiple levels of coexisting 'codes' which must be decoded by setting out the fundamental, binary relations. Lévi-Strauss usually arrives at two columns of concepts representing the basic opposition and an intermediary between the two, and he seems to show that this '*médiation*' is the real achievement of myth.

The method, carried out with an intelligence that keeps surprising the reader, may work an irresistible spell on the humanities' craving to become, after all, scientific. And the bewildered objection that this structuralism produces structures which nobody had seen or understood before[10] is countered from the start: these are unconscious; a native speaker does not usually know the grammar of his own language in any

explicit way but still keeps to it, and with other cultural phenomena it may be the same.[11] I gladly confess that structural interpretations have taught me to notice certain phenomena which had escaped the more naive, impressionistic view before. Still there are, I think, limits to the impact of structuralism beyond which it is not reasonable to expect verifiable results. I know, however, that structuralism seems to be so delicate that every criticism of Lévi-Strauss has hitherto been countered by the assertion that the critic has misunderstood Lévi-Strauss;[12] I shall have to face the same accusations of simple-mindedness. These are my objections:

1. There is a limit to the use of mathematical formulas, however apt they are to impress the noninitiate. Mathematical formulas make sense only if they contain true variables, that is, if they are applicable to more than one case, and if they are specific enough to get beyond banalities. If we should tell a physicist that the basic formula of electricity is $-1+1=0$, with the notable inversion that $+1-1=0$ too, he would not be too enthusiastic about that; but is the thesis that every myth is a mediation between a binary opposition[13] really above this level? Besides, it is not true of every myth. Lévi-Strauss's formula of mediation, $F_x(a):F_y(b)=F_x(b):F_{a^{-1}}(y)$ is complicated enough to suffer from misprint continually,[14] but if applied correctly—as it was by Köngäs and Maranda[15]—it can equally pertain to songs, lyrics, riddles, and jokes, and to these especially, but not to every tale. Thus it is a structure, but not the structure of myth.

2. Science claims to deal with facts outside itself. But to what extent are structures 'factual'? Besides objective structures, there are projective structures, structures in the mind of the observer or interpreter which sometimes are difficult to separate from the objective. We all know those deceptive drawings of, say, a cube in perspective, which we clearly see from above, or from below; with some practice, we can even switch—the spatial structure is not in the drawing, but is brought out by the processing of information in an experienced brain. Furthermore, there are 'structures' which are objective but absolutely irrelevant, such as the relations of *i*- dots to commas in any given text. Has structuralism ever tried to distinguish the essential from the accidental, the objective from projections?[16] Personal confessions—"the pattern is there; I did not invent it"[17]—cannot replace critical method. But in fact structuralism is

hunting for the unconscious, and seems to set store on infinite adaptability to ever increasing materials, as in Lévi-Strauss's famous statement that a myth consists of all its versions, so that the Oedipus myth should include even Freud's interpretation,[18] and in consequence Lévi-Strauss's own. The controversy about 'God's truth' versus a 'hocus-pocus position' is old, and cannot easily be settled.[19] Structuralism, it has been said, is just the consequence of the thesis that 'God is dead.'[20] But how, then, could it cling to the claim of being a 'science,' which had been a starting point of the structuralist approach? Uninhibited structuralism will discover absolutely arbitrary superstructures, replacing objectivity by ingenuity. In fact Lévi-Strauss's concept of mediation is distinctively Hegelian. The nature-culture antithesis appeals to contemporary anxiety about culture crisis. And if Lévi-Strauss reduces the Oedipus myth to the opposition of 'overrating' and 'underrating' of blood relations,[21] as if killing and mating were dealing with exchange rates, we cannot but remember that he wrote his first important book on 'les structures élémentaires de la parenté.'

3. Structuralism does not lead to understanding, to decipherment. It would be a 'structural' statement that, in Latin capitals, $I:L=F:E$, since the second letter can be generated from the first by the addition of one horizontal stroke; but this tells us nothing about the use of the alphabet. The sequence OEOI heading Greek inscriptions allows of perfect structural analysis: from right to left, it contains the very elements of Greek writing, straight line and perfect circle, and a repetition of both with their essential properties marked out, beginning, middle, and end of the line, and for the circle, the center. But of course we know the letters mean 'gods,' invoked to witness the record. This is joking—and still a little bit more than that. Significantly enough, Lévi-Strauss has taken modern phonology as his model of a structural system successfully established;[22] but phonology, important as its achievements may be, will not lead by itself to understanding a single word of any given language. We have to know what language is about. There may be a philosophy which does not recognize any reality, but only 'structures,' signs pointing to signs, merging the objective with the subjective in some esoteric *'esprit'*; structuralism, in this sense, seems to become the last resort of idealism, as methodological caution is transformed into ontological assertion.[23] Maybe I am too clumsy to join the absolutism of semiology and get rid

of objective reality. A sign system cannot be self-contained: there are no signs without signification, and signification is void without reference. And I would still find that, contrary to Lévi-Strauss's thesis that a tale, taken by itself, makes no sense, there is much interesting and subtle sense in each of the myths treated in *Mythologiques.* Myth number 1,[24] for instance, explicitly refers to initiation: a boy rapes his mother, and therefore he is abandoned by his father; after he has learned hunting, and has been wounded and healed, he kills his father and lays him to rest in the sea, but is capable at the same time of providing fire for the whole community. This is full of meaning, not just in Freudian terms. And the more abstract antithesis of nature and culture, so dear to Lévi-Strauss and his followers, is still within the realm of meaningful content, to be understood not by formal logic, but by human experience. Structuralism, it is true, can go far beyond that; it is the one method for dealing with even the unintelligible, the absurd. This might be the final game of nihilism.

4. PROGRAMS OF ACTION

Now we seem to be caught in the trap of a contradiction: it was said that a tale, including myth, has no direct reference, and yet that there is no meaningful sign system without a reference. Is not structuralism the only way out of this dilemma, sacrificing naive meaningfulness to its own logic which emerges even in the absurd? Definitely not. The concept of a 'structure of sense without direct reference' is not self-contradictory.[1] Meaning, though linked with reference, is not identical with it. It is impossible to treat in any detail here the controversies of referential, operational, and structural semantics.[2] But there might be agreement that meaningful speech, while dependent upon life experience, presupposes at the same time rules of how to use the variables of language.[3] In a theoretical language, meaning as designated by the sign would consist of concepts and propositions as constructs;[4] the attempts at a 'narrative grammar' introduce similar constructs, abstractions apt for convenient formalization, such as the 'transfer of objects' between subjects in the system of Greimas.[5] This is neat and cvilized, but cannot account for actions such as 'killing': although this may be expressed by 'taking somebody's life' in certain languages, it is definitely not a 'trans-

fer' of an object.[6] The meaning of a tale, even at the level of a 'Proppian' sequence, is much richer, and more complicated. The very sequence, however, represents one major semantic 'rule,' which determines the meaning of the elements.

But such a rule has its very special dynamics. The 'sequence of motifemes' could as well be described as a 'program of actions'; the linguistic representative of 'action' is the verb. In fact if we look more closely at Propp's sequence, the major part of his 'functions' can be conveniently summarized in one verb, 'to get,' corresponding to the substantive 'the quest.' And this three-letter word does imply quite a complicated program of actions. To 'get' something means: to realize some deficiency, or receive some order to start; to have, or to attain, some knowledge or information about the thing wanted; to decide to begin a search; to go out, to meet partners, in a changing environment, who may prove to be helpful or antagonistic; to discover the object, and to appropriate it by force or guile, or, in more civilized circumstances, by negotiation; then, to bring back the object, while it still may be taken away by force, stolen, or lost. Only after all that, with success established, has the action of 'getting' come to its end. Now these are in fact Propp's functions 8–31, leaving out the role of the helpful partner, and this well-structured sense is more specific, and more complicated, than any zero-formula such as $-1+1=0$, or even 'Lack–lack liquidated.' This structure is not directly derivable from formal logic; note the asymmetry: the search is quite different from the return or flight; neither Odysseus nor the Argonauts can get back on the route whereby they came to Circe or Aia. Even this, though, has a ring of reality.

In fact if we ask where such a structure of sense, such a program of actions, is derived from, the answer must evidently be: from the reality of life, nay, from biology.[7] Every rat in search of food will incessantly run through all these 'functions,' including the peak of agitation at the moment of success: then the rat has to run fastest to find a safe place before its fellow rats take its prey away. In the Propp series there is the motifeme sequence called the 'magical flight,'[8] which often constitutes the most thrilling part of a fairy-tale, when the magical object, or the bride, has been gained and the previous owner starts a pursuit. This probably is just a transformation of the action pattern described.

Protest will arise that now we have committed the worst *metabasis eis*

allo genos, plunging headlong from the sublime heights of structuralism into the depths of zoology. But the transition can be justified. Natural language, after all, is language of living beings; if sequences of motifemes correspond to action programs, we are right in the field of biocybernetics. Of course, even if action programs are not a privilege of the human race, only man can speak about them. Actions are represented by the verb; and the verbal root, the 'zero form' of the verbs, in most languages—including English, German, French, Latin, Greek, and Turkish—is the imperative; and communication by imperatives is more primitive, and more basic, than communication by statements.[9] The deepest deep structure of a tale would, then, be a series of imperatives: 'get,' that is: 'go out, ask, find out, fight for it, take and run.' And the reaction of an audience to a tale is in perfect accordance with this: under the spell of a thrilling tale, we will ourselves perform one by one the actions described—in idle motion, of course. Thus communication in the form of action sequences, in the form of a tale, is so basic and elementary that it cannot be traced to 'deeper' levels; we may note, in passing, the parallel with dreaming, which also involves action patterns in idle motion. At the same time, we are still in a field which is anything but simplistic; even a rat's brain is quite a marvelous computer, more complicated, in any case, than any structuralist formula. And can we expect at any level of life phenomena which are simpler than the simplest DNA molecule?

The biological perspective is confirmed, if we look at the other tale structures we have been dealing with. We need hardly mention the combat tale. It is part of the Propp series, but may become independent, since there are societies which make the heroic-aggressive values prevail over economic interest. Remarkably often there are males fighting for the female. Lack–lack liquidated is indeed the most basic mechanism of biocybernetics.[10] The girl's tragedy can be seen to reflect initiation rituals; but these in turn are determined by the natural sequence of puberty, defloration, pregnancy, and delivery. If, as observed in certain tribes, the girl has to leave her father's house at first menstruation and only acquires full adult status with the birth of a son,[11] the correspondence to the tale structure is almost perfect. The other motifeme sequences of Dundes, Task–task accomplished, Interdiction–violation–consequence, are situated at a distinctly human level, but still represent some of the most basic functions of society: authority and morality. Deceit–