Three-Part Inventions

I propose to give the name armature to a combination of properties that remain invariant in two or several myths: code to the pattern of functions ascribed by each myth to these properties; and message to the subject matter of an individual myth. Referring back now to the remarks with which I concluded Part Three, I can define the relation between the Bororo myth \( (M_1) \) and the Sherente myth \( (M_{12}) \) by stating that when we move from one to the other, the armature remains constant, the code is changed, and the message is reversed.

The results of this analysis would be definitively confirmed if it were possible to arrive at the same contrasting structure by a regressive process, which would be a kind of a contrario proof. The problem thus posed can be formulated as follows:

Let us suppose two myths, which we will call \( M_x \) and \( M_y \), and which happen to be linked by a transformation relation:

\[
M_x \rightarrow M_y
\]

If we agree that \( M_y = fM_x \), does there exist a myth \( M_z = fM_y \), in connection with which we can prove that it reconstitutes \( M_x \) by means of a transformation symmetrical to the one that produced \( M_y \) from \( M_x \), but operating in the reverse direction? In other words, after establishing that a Sherente myth about the origin of fire \( (M_5) \) is a transformation of a Bororo myth about the origin of water \( (M_x) \), can we now find a Sherente myth \( (M_z) \) explaining the origin of water which takes us back to the Bororo myth which was our starting point, and at the same time confirms the following isomorphism:

\[
\left[ \frac{M_x}{M_z} \right] \sim \left[ \frac{M_z}{M_y} \right]
\]

Such a myth does in fact exist among the Sherente:

\[ M_{11}, \text{Sherente, "The story of Asare"} \]

Once there was an Indian who had a wife and many sons, all of them adult except the youngest, Asare. While the father was hunting one day, the brothers sent Asare to fetch their mother and bring her to the bachelors' house,
bidding her to cut their hair and decorate them. But when she entered, her own sons seized and ravished her.

Asare revealed what they had done, and the culprits were severely thrashed by their father. They took their revenge by setting fire to the hut where the couple were living. The parents changed into falcons of the kind that like to fly in the smoke, and thus escaped.

Then the sons went far away. On the way Asare suffered from thirst, and the water from tucum nuts (*Astrocaryum tucuma*) knocked down by his brothers was not enough to quench it. Then one of them began digging a well in a hollow, and so much water gushed forth that Asare, however much his brothers urged him to drink, could not exhaust it. The water spread more and more, finally forming the sea.

Then Asare recollected that an arrow he particularly prized had been left on the opposite bank. He swam across, found his arrow, and was swimming back when in the middle of the water he found an alligator (jacare), which had developed out of a swarm of lizards which Asare had killed while traveling, and which the spreading waters had carried away. Asare begged the alligator to let him sit on him, and when the latter refused, Asare called him names, making fun of his ugly nose. The alligator gave chase. Meanwhile the brothers saw the arrow drifting on the water, concluded that their youngest brother had perished, and marched on.

Asare reached land when his pursuer was already close behind. He ran into the woods where the woodpeckers were pecking the bark from the trees in order to eat the insects under it. At his request the birds covered him with strips of bark and sent the alligator off on a false scent. Once the danger was over, Asare went on his way and crossed another river where he met another alligator, with the same consequences. He escaped from it, thanks to partridges who happened to be digging out groundnuts (*Arachis hypogaeae*) and who hid him under the straw. The same incidents occurred again when Asare swam across a third river, but this time he hid under the rinds of the jatoba fruits which monkeys were busy eating. One of the monkeys, from inborn talkativeness, came near divulging the secret, but another struck it on the lips, so he kept silent.

Asare finally got to his uncle, the skunk, who was not afraid at all. When the alligator came, the skunk spurred his fluid at him, and the alligator died of the stench. The skunk called the little inhambus (*Tinamus speciosa*) to drag the corpse into the river. Asare, however, stayed with his uncle.1

When the sea was formed, Asare’s brothers had at once tried to bathe. Even today, toward the close of the rainy season, one hears in the west the sound of their splashing in the water. Then they appear in the heavens, new and clean, as Surturu, the Seven Stars (the Pleiades). (Nim. 7, pp. 185-6.)

There is a great deal to be said about this myth. Let me begin by establishing, in accordance with my stated intention, that, with the help of a certain number of transformations affecting either content or code, it faithfully reconstitutes the Bororo myth about the bird-nester (M2).

The initial situation is the same: a mother is raped by her son (or sons). Two differences, however, will be noted: in the Bororo myth the mother was raped in the forest where she had gone to carry out a task only performed by women. Here it is the father who is away in the forest hunting—this is engaged on a masculine occupation—and the rape is carried out, not just somewhere in the village, but in the men’s house, which women are not usually allowed to enter. Secondly, M2 laid stress on the culprit’s youth (he has not yet been initiated), whereas M124 describes the culprits as being initiated adolescents, obliged to reside in the men’s house (cf. Nim. 6, p. 49).

A third difference follows inevitably from the two I have just noted. The Bororo father is unaware of his misfortune and makes inquiries to confirm his suspicions; once they are confirmed, he tries to kill his son. The Sherente father, on the other hand, is immediately informed of what has taken place, and it is his sons who want to kill him. The Bororo father has recourse to water in order to satisfy his passion for revenge (fire was to appear later); to satisfy their passion for revenge, the Sherente sons use fire (water appears later).

The Sherente parents escape death by changing into falcons, which are food of kitchen fires: the Bororo son escapes death thanks to rescuers in the form of urubus, who are enemies of kitchen fires (since, according to the myth, they feed on carrion and raw flesh).

The vertical disjunction (low → high) affects both the Bororo son and the Sherente parents. On the other hand, whereas in the first case, the son is separated vertically—by air—from his parents, the Sherente hero is separated horizontally from his brothers by water.

The Bororo hero, far from the village, and after climbing to the top of a rocky cliff, suffers from hunger: also far from his village, and after covering a great distance, the Sherente hero suffers from thirst. Each one tries two remedies, which are contrasted by the two myths. In M1 there is, in the first place, raw animal food, which decomposes because there is too much of it; then raw vegetable food, which is never adequate because the hero is unable to retain it. In M124 there is first a vegetable drink in short supply, then non-vegetable (chthonic) water, of which there is so much that the hero is unable to consume it all. In both cases the quantitatively insufficient remedy is vegetable and beneficial (palm-nut juice, fresh fruit) and the quantitatively sufficient (and even superabundant) remedy is nonvegetable in origin and maleficent (decomposed lizards and sea water, which both threaten to bring about the hero’s death).

Both the Bororo and the Sherente myths take the form of myths explaining the origin of water; in the first case the water is rain or celestial water; in the second, it is chthonic: that is, it gushes out from the earth.

The Bororo hero has to cross water in order to bring back the ritual instru-

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1 The skunk is identified in the text with *Mephitis sulfurea*, "tangamba" (Maciel, p. 431). In reality, the South American equivalent of the North American skunk is a member of the Conepatus family (cf. above p. 154, n. 9).
ments; the Sherente hero crosses the water in order to bring back an arrow—that is, a weapon used in hunting.

On three occasions the Sherente hero meets with an alligator that has sprung from the lizards he killed before the water spread out over the earth. Lizards are also killed by the Bororo hero, in order to appease his hunger and to provide a reserve food supply. It is because this food decomposes very quickly that the vultures attack him.

If we were to keep strictly to the text of M1, the episode would remain incomprehensible. Or, to be more accurate, the absence of any syntagmatic context would, if we were bent on finding an interpretation, lead us to comb through the whole of American mythology, which would supply us with more answers than we could cope with: for the Kuenkernaken, the lizard is a precultural food (Métraux, 8, p. 14); for the Warao, the Choco, and the Cuna (cf. above, p. 138, n. 15), a master of fire; elsewhere it is a master of sleep because it has no eyelids; and among populations as far apart as the Jicarilla Apache of North America and the Amuesha of Peru it is a symbol of incest and witchcraft.

But where as research into the etymology—one might almost say the "mythology"—of the lizard would be a rash undertaking, research into its significance is not. As is indicated in no uncertain terms by the Sherente myth, the lizard is the terrestrial counterpart of the aquatic alligator. M1 and M124 therefore shed light on each other: one takes place on land and makes the hero a hunter of lizards for the same reason that the other, which takes place on water, makes the alligator a "hunter of heroes." The fact that a Bororo myth and a Ge myth present this reciprocal view of things perhaps allows us to derive confirmation for the former from an Apinaye text: "It is said that when an Apinaye male child is born, the urubus rejoice because there will be yet another hunter to leave them dead flesh in the bush. But when a female child is born, the lizards rejoice, because it is the women's duty to prepare berubur—that is, meals—and the fallen scraps provide food for lacertians" (C. E. de Oliveira, p. 67).

If it were legitimate to extrapolate, we could say we were dealing with a twofold contrast: one is an internal contrast, in M1, between lizards and urubus with the double valency: female/male, cooked/raw; the other is external, covering both M1 and M124, and opposes the lizards and the alligator, also with a double valency: land/water, cooked/raw.

Finally, we know that the Sherente believe the alligator to be the master of water and the jaguar master of fire (M12). It is therefore perfectly consistent that in their myth about the origin of terrestrial water (M124) the hero should encounter an alligator, just as in their myth about the origin of terrestrial fire (M12) he should encounter a jaguar. And since we have

established (pp. 189 ff.) that fire = water (—1), it is equally consistent that in both myths the respective behavior of the animal and the hero should be inverted. The hero in M12 behaves courteously toward the jaguar who offers to help him: the hero of M124 behaves insolently toward the alligator who refuses to help him.

Let us pause for a moment and consider the episode of the helpful animals, which occurs at the beginning of the Bororo myth and at the end of the Sherente myth. In descending order of effectiveness, these animals are, in the Bororo myth, the hummingbird, the pigeon, and the grasshopper. Although the Sherente myth does not mention the respective abilities of the woodpeckers and the partridges, it clearly indicates that the monkeys are the least effectual, since they almost betray their protege. We can therefore take as our starting point the following hypothetical correspondence between the two series:

<table>
<thead>
<tr>
<th>Bororo</th>
<th>Sherente</th>
</tr>
</thead>
<tbody>
<tr>
<td>hummingbird</td>
<td>woodpeckers</td>
</tr>
<tr>
<td>pigeon</td>
<td>partridges</td>
</tr>
<tr>
<td>grasshopper</td>
<td>monkeys</td>
</tr>
</tbody>
</table>

But the correspondence seems to be reversed when we try to define the species according to the categories of high and low. In the Sherente series the monkeys eat fruit (high), the woodpeckers attack the bark of trees (medium), the partridges dig up seeds (low). If we take into account the fact that in the Bororo series the grasshopper naturally occupies a lower place than the birds, and that the respective missions assigned to the three animals consist in gaining possession of the large and small rattles (which are held in the hand, therefore more or less in the "high" range, and unequal in size), then of the ankle bells (low), we should arrive at the following table:

<table>
<thead>
<tr>
<th>High : hummingbird</th>
<th>Medium : pigeon</th>
<th>Low : grasshopper</th>
</tr>
</thead>
<tbody>
<tr>
<td>monkeys</td>
<td>woodpeckers</td>
<td>partridges</td>
</tr>
</tbody>
</table>

Let us see if it is possible to overcome the difficulty. It will be remembered that the Sherente myth about the origin of fire (M12) supplied a different series of three animals who played the part of masters of water. These were in the following order:

urubus (1)
"small birds" (2)
alligator (3)

We do not know what these "small birds" were, unless we suppose they were inhambus, which in the Asare myth are also described as "small." The inhambus (like the "partridges" in the same myth) are gallinaceans which

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2 And perhaps vegetable/animal, too, if we follow another indication from the same source, where lizards are grouped with grasshoppers, rats, and rabbits as garden parasites (C. E. de Oliveira, p. 65).
live on the ground, flying only occasionally and clumsily. In respect of the high and low categories, they could perhaps be placed between the urubu and the alligator. On the other hand, the ancient Tupi along the east coast used white feathers flecked with black taken from these birds to decorate their weapons when they went to war, or when they were getting ready to execute their prisoners (Claude d’Abbeville, p. 237). This custom clearly corresponds to the role of “undertakers” assigned to the small inhumans in the Afare myth (although the inhumu-tin referred to in the old source may have belonged to a larger species).

The myths already examined refer on several occasions to gallinaceans (Tinamidae or Cracidae) and seem always (apart from Mira in a passage of no great significance) to treat them as beings of little merit, if not downright sinister. The gallinaceans destroy the scattered remnants of fire, being too weak to transport it (Mira, Mira). The inhumu is an inferior fowl which provides a bitter soup (Mira) and is not accepted in exchange for the flesh of the caínų, a nobler variety of game (Mira): it is the sole diet of a boy who is being kept in seclusion (Murphy I, p. 74; Strömer, p. 133). A certain constellation in the night sky is the mother of the Tinamidae (Mira); the reason the jaguar does not attack birds belonging to this family and has acquired nocturnal habits is that the Tinamidae made him eyes with water to replace the eyes of fire he had lost (Mira). The link between stars, night, and gallinaceans can no doubt be explained by the Sherente custom: “The hours are counted during the day by the sun and at night by the stars and by the scream of the inhumu” (J. F. de Oliveira, p. 394).8

We possess more definite information about the semantic value of the other animals. According to the Ge myths analyzed below (Mira), the wood-peckers are the masters of destructive fire, which means that they are both correlated with, and opposed to, monkeys which, according to a Bororo myth we have already studied (Mira), are masters of creative fire (fire for cooking). The dove or pigeon is a master of water, as is attested not only by the key myth but also by a Sherente myth (Mira), which shows a whole family escaping from the flood thanks to a pigeon’s carcass (Leptopilina va- faxilla) which grows miraculously bigger and bigger until it becomes another Noah’s ark (Nim. 6, p. 92). In several versions of the “opossum and his son-in-law” (Mira, Mira), Pigeon (one of the sons-in-law) catches fish from a lake by drying it up through drinking all the water it contains (Murphy I, p. 119; Wagley and Galvão, p. 199). The water the pigeon

8 Evidence of the same belief is given by theing (“inhambu” entry) in connection with Cryptiturus nigrofus, whence its popular name “inhambu relque”: the cockbird. Cf. also Cavalcanti, pp. 199-60: the cuibum bird (one of the Cracidae) announces daybreak, but the inhumu sings at night. Finally, the mutum, which is also a member of the Cracidae family “sings at night at such regular intervals that it can be heard every two hours...thus for the natives it is a kind of forest clock” (Oréico 2, p. 174).

has to conquer or nullify is defined by its negative properties, like destructive fire. We can therefore establish the principle that the pigeon and the woodpecker are isomorphic, in respect of water and fire.

The Bororo myth (Mira) describes the grasshopper (mamorri: Acridium cristatum, EB, Vol. 1, p. 780) by its slow flight (similar to that of the partridge), which causes it to run the risk of death during its mission. In the Sherente series, it therefore corresponds on the one hand to the monkeys (one of which also almost betrays its mission), on the other to the partridges which, in the form of small inhumans come into—physical, not moral—contact with death, since they play the part of grave diggers. If we postulate that Mira is based essentially on the second of these homologies, only the hummingbird, about whose semantic position we have less information, remains to be explained. The Ge myths have very little to say about the hummingbird; we have to look farther afield.

In the mythology of Guiana the hummingbird is presented as being in correlation with, and opposed to, the bunia bird (cf. above, p. 185): together they help a man who is trapped at the top of a tree to get down, then to find his way back to his village. But whereas the bunia bird is a foul-smelling creature whose droppings are transformed into creepers (Roth I, pp. 200, 371), the hummingbird emits a delightful perfume, although it is occasionally soiled by excrement (ibid., pp. 335, 371). We have therefore a twofold contrast: bad smell/pleasant smell, and defiling/defiled. On the other hand, the role usually assigned to the hummingbird in the myths of Guiana is to look for tobacco and bring it to men. The tobacco grows on an island in the middle of a lake which the hummingbird succeeds in crossing, as in the Bororo myth: the myths make it clear that the tobacco will serve to “call forth” spirits, provided it is used in conjunction with the ceremonial rattles (Roth I, p. 336), that it is the hummingbird’s task to bring back in the Bororo myth. Leaving aside for the time being the problem of tobacco, to which I shall return later (in Volume II), we should note the relation between the hummingbird and water, a point on which some light is shed by the myths of the southeastern United States. These myths, of which we possess several versions—Natchez, Alabama, Koasati, Hitchiti, Creek, and Cherokee—contrast the hummingbird and the crane as diurnal/nocturnal (in Guiana, according to a Warao myth, defiled/defiling, Roth I, p. 335); on the other hand, they explain how the hummingbird staked water and fish on the result of a race, and lost: for this reason the hummingbird never drinks (Swanton, pp. 202, 273, and passim).

In Brazil, the Botocudo and the Caingang tell very similar stories: the hummingbird who was formerly master of all the water in the world had it taken from him by the other creatures (Nir. 9, p. 111; Métraux 6, Vol. 1, p. 150; Baldus 1, p. 60). A Kraho myth gives the hummingbird a negative relation to water, since it is the only creature capable of flying through flames (Schultz, p. 127). According to a Surura myth, it causes disjunction
between fire and water by making the alligator laugh, so that it can seize
fire from inside the jaws of the alligator and bring it to men (Becker, p.
105). In a Toba myth it steals fire (Metraux 5, pp. 107-8, 110).

If we agree, as a working hypothesis, to generalize the above convergent
details, the hummingbird can be defined as a function of water but in nega-
tive terms, and it can be placed in correlation with, and in contrast to, the
pigeon which was a great drinker.4

We arrive, then, at the following coherent system:

**Bororo (M₁)**  **Shereente (M₁₂₄)**

1. hummingbird  (≠ water)  1. woodpecker  (= destructive fire)
2. pigeon  (≠ water)  2. monkey  (= creative fire)
3. grasshopper  (life/death)  3. "partridge"  (life/death)

in which we again have, on the one hand, the contrast between water and
fire and, on the other hand, the linking of one or the other element with
the transition from life to death, which struck us as being characteristic of
the way problems are posed in the Bororo and Shereente myths respectively.

Let us now look at the matter from a different viewpoint. In the
course of their missions the animal helpers come into contact with things: lifesaving
musical instruments in the Bororo myth, materials used as lifesaving hiding
places in the Shereente myth:

**Bororo (M₁)**  **Shereente (M₁₂₄)**

hummingbird : large rattle  woodpeckers : bark of trees
pigeon : small rattle  "partridges" : straw
grasshopper : little bells  monkeys : seeds

The things in the Bororo myth are sororous objects that "must not
be heard." The things in the Shereente myth no doubt prevent the alligator
from seeing the hero; but at the same time they have the unusual feature
of being food refuse—that is, things that are not to be eaten. They are therefor antifoods forming a series comparable, in this respect, to the series in
the Apinaye myth (M₉): rock, hardwood, and rotten wood, which are also antifoods but, like the Bororo instruments, "consumable" by the ear, if not

4 A myth belonging to the Pima of Arizona associates the hummingbird with
divinity called El Bebedor, "The Drinker," who was responsible for the flood (Robson
p. 226, note). If the negation of water is taken to its extreme limit, the hummingbird
may be confused with the woodpecker, the master of destructive fire. This in fact
occurs in a Caingang myth (M₁₂₄), in which the hummingbird and the woodpecker
jointly steal fire from the jaguar (Baudel 4, p. 123). But the remarkable thing in this
instance is the woodpecker who undergoes a transformation: first he grows
wet, then he becomes a master of cooking fire—not completely, however, since the
fire (which becomes destructive) sets the earth alight, and since creative fire (for
cooking) is reduced to a secondary factor.

by the mouth. Through the medium, in this instance, of M₉ the symmetry
between M₁ and M₁₂₄ can be confirmed once again.

In M₁ as in M₁₂₄, a person offers assistance in addition to the series of three
animals: a human grandmother in one context, an animal uncle (a skunk)
in the other. The grandmother saves the hero by lending him a magic wand;
the uncle, by releasing his foul-smelling fluid. I shall come back later to the
parallel between the two myths, which admits of different interpretations
(see pp. 279-81).

Lastly, and to complete the comparison, M₁ refers to the start of the
rains—that is, to the end of the dry season; whereas the last few lines of
M₁₂₄ refer to its beginning.

The existence of a correlation between M₁ and M₁₂₄ has thus been con-
ferred down to the smallest details. It has in fact been proved that if M₉ =
M₉, there exists a myth M₉ = fM₉ which has the same relation to M₉ as
M₉ has to M₉.

The demonstration can be carried still further. The demonstration I have
just given started from a Bororo myth with a dual theme: the appearance
of celestial water and the disappearance of cooking fire. I have shown that
this myth stands in a transformational relation to a Shereente myth, the
theme of which—also a double one—formed a contrast with the other through
double inversion, since this time the subject was the appearance of
fire and the disappearance of water, and the water was terrestrial, not
celestial.

Going one step further, we asked whether there existed a Shereente myth
dealing with the appearance of terrestrial water, and whether such a myth
would not reproduce the framework of the initial Bororo myth about the
appearance of celestial water. After giving an affirmative reply to both these
questions, we moved on automatically to a third: was there a Shereente myth
about the introduction of celestial water of which a Bororo myth, in return,
could be a transformation?

We know of no such myth, perhaps simply because Nimuendaju did not
come across it. Perhaps also because its existence among the Shereente would
be inconceivable, since in their view the sky is inhabited by cannibalistic
divinities (M₉) and controlled by a sun that is anxious to dry up rain and
destroy the earth (cf. pp. 192 and 236). On the other hand, the myth exists
among the other Go tribes, whose mythology, as we have shown, occupies
an intermediary position between the mythologies of the Bororo and the
Shereente.

In actual fact the Go have not one, but two myths relating to celestial
water. It would seem that they distinguish between two types of rain—one
beneficent, the other maleficent. The Kubenkranken (Metraux 8, p. 17) and
the Gorririte (Lakesch 1, p. 985) attribute good rain to the celestial daughter
of a mortal, who introduced cultivated plants (M91) and whose father is
directly responsible for tempests and storms. Since the key myth is also
connected with the origin of tempests, it is the father, rather than the daughter,
with whom we shall be concerned:


Some hunters once killed a tapir. One of them, who was called Bepkororoti,
was given the task of gutting and cutting up the animal. While he was busy
washing the intestines in the river, the others divided the flesh among them-
selves, leaving him only two paws (the intestines, Lukesch 1, 2). Bepkororoti’s
protests were in vain. When he got back to the village, he asked his wife to
shave his head and to paint him red and black with urucu paste and genipa
juice. Then he told her what had happened and warned her that he intended
to withdraw to a mountain top. Finally he told her to take shelter when she
saw a black cloud.

Bepkororoti made a bow and arrows and a large, heavy club the end of which
he smeared with the blood of a tapir. He took his son with him to the top of
the mountain. When he reached the summit, he started to shout like a herd of
wild pigs (like men, when they are out hunting pigs; Lukesch 2). When they
heard the noise, the Indians came running to hunt the pigs. At that moment,
lightning flashed across the sky, there was a rumble of thunder, and
Bepkororoti caused a thunderbolt to fall, which killed many people. He and
his son went up into the sky. (Kuhlenkranz version from Métraux 8, pp.
16-17; Gorotire versions: Banner 1; Lukesch 1, 2.)

Some Gorotire versions (M128a, M128b) link the injustice done the hero
with the fact that either previously (through carelessness) or afterward
(through anger) he had appeared in the presence of his companions with
blood-stained hands. Before withdrawing to the mountain top (or to some
other high ground) he invented and introduced among the Indians the practice
of shaving the head and painting the body, as well as the use of
genipa juice and the custom of anointing clubs with blood before setting off
for war. From his retreat the hero hurled insults and defiance at his former
companions, whom he struck down with lightning as soon as they attacked
him. Then he rose into the sky and disappeared. Shortly afterward there
occurred the first storm accompanied by thunder and lightning. Ever since
then, each time a storm threatens, the Indians arm themselves and put on
their warpaint, and try to ward it off by threats and shouts (Lukesch 1, p.
983; Banner 1, pp. 45-9).²

² Here again (cf. above p. 149, n. 2) a myth, which exists as a complete whole in
central Brazil, survives in Guiana merely as an episode devoid of any structural
function among the exploits performed by Makunaima (Arecura: M126). The young hero
kills a tapir. But his elder brother assumes the right to cut it up and share out the
pieces, leaving the hero only the intestines. Makunaima, mad with anger, transports
the family hut by magic onto a mountain top, then brings it down again (K.G. 1, p. 43).

I shall have no difficulty in identifying the Bororo myth, of which the
Kayapo myth is a transformation; it is obviously the Baitogogo myth (M2);
in other words, a myth about the origin of water, but terrestrial not celestrial
water, and beneficent, not maleficent.

The following table shows the various operations:

<table>
<thead>
<tr>
<th>M2</th>
<th>gathering</th>
<th>women +</th>
<th>“tapir” man</th>
<th>the hero bleeds his (“tapir”) victim too slowly</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>male occupation</td>
<td>“tapir” man</td>
<td>rapes a woman</td>
<td></td>
</tr>
<tr>
<td>M129</td>
<td>hunting</td>
<td>men +</td>
<td>male hunters</td>
<td>the hero bleeds his (tapir) victim too quickly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“tapir” (animal)</td>
<td>kill a tapir</td>
<td></td>
</tr>
</tbody>
</table>

M2 | son deprived of mother | dissociated from father | who is crushed beneath a tree | shame-ridden hero |
M128 | son deprived of food | associated with father | who goes up onto a mountain | angry hero |

M2 | creation of terrestrial water | tree disappears under water | ritual music | origin of adornments and funeral rites |
M128 | creation of celestial water | mountain exalted (to the sky) | cries like those uttered by wild animals | origin of adornments and warlike rites |

M2 | Indians kill | scattered population |
M128 | Indians killed |                            |

It will be seen that, keeping faithfully to my method, I accept the fact
that even the tiniest detail may be relevant. When the informants to whom
we owe M128 compared the cries of Bepkororoti to those uttered by wild
pigs (or pig hunters), they were not letting their imaginations run away
with them. For the Tenetehara, too, associate the wild pig with thunder,
whose favorite animal it is: “When the Tapirape have made kills of wild
pigs, which are pets of Thunder, he will be angry and send a sudden rain or clouding of the sky" (Wagley, p. 299, n. 23). The fact that the man who raped the woman in the Bororo myth belonged to the tapir clan is no accident either, since the animal is also present in the Kayapo myth. I shall return to this point later (p. 272). Finally, one detail in the Bororo myth that remained incomprehensible when viewed from the angle of syntagmatic relations, becomes clear when compared to a corresponding detail in the Kayapo myth. The careful and elaborate killing of his rival by the hero in M_2, who inflicts a series of wounds of which only the last proves fatal, preserves in an inverted form (since the messages in both myths are inverted) the careless and hurried behavior of the hero in M_{120} who sits down to eat with his hands still blood-stained from his work of butchery (cf. M_1).

The only difference between the two myths consists in the progression of the Bororo myth, which divides the hero's misconduct into three successive stages, each one of which corresponds to a single aspect of the one offense committed by the Kayapo hero:

<table>
<thead>
<tr>
<th>M_2</th>
<th>M_{120}</th>
</tr>
</thead>
<tbody>
<tr>
<td>the hero disposes too slowly of the &quot;tapir&quot; man</td>
<td>the hero disposes too quickly of the tapir (animal)</td>
</tr>
<tr>
<td>he strangles his wife (without bloodshed)</td>
<td>he dismembers the animal and spills its blood</td>
</tr>
<tr>
<td>he is defiled by excrement</td>
<td>he remains stained with the animal's blood</td>
</tr>
</tbody>
</table>

We note, then, in M_2 a kind of dialectical pattern of defilement:

1. [blood (+)] → 2. [blood (−)] → 3. [dejecta]

which seems to be absent from the Kayapo myth; unless, remembering that the conditions of the murder of the Bororo wife implied the denial of an aquatic burial, we replace the second term of the formula above—avoidance of bloodshed—by a different one—the avoidance of water—which has its equivalent (in the avoidance of ablutions) in the Kayapo myth, thus allowing us to construct the following parallel series:

<table>
<thead>
<tr>
<th>M_2</th>
<th>M_{120}</th>
</tr>
</thead>
<tbody>
<tr>
<td>blood (+)</td>
<td>blood (+)</td>
</tr>
<tr>
<td>water (−)</td>
<td>water (−)</td>
</tr>
<tr>
<td>bird droppings (animal excrement)</td>
<td>genipa dye (vegetable remains)</td>
</tr>
</tbody>
</table>

It is therefore clear that the four myths about the origin of water that have been compared are linked by transformational relations which, by a chiasmus, establish a contrast between the Bororo versions and the Ge versions:

Bororo

- celestial water (M_1) ↔ (M_{120}) celestial water
- terrestrial water (M_2) ↔ (M_{124}) terrestrial water

On the other hand, if we remember that while M_1 is simultaneously concerned with water and fire, there also exists M_{12} which is simultaneously concerned with fire and water,⁶ we can complete the table above by adding the aforementioned myth to it. We then obtain a group of transformations with a double twist.

In all cases it is a matter of either the addition or the subtraction of an element, which may be water or fire. Each element can be analyzed according to two modalities, one celestial, the other terrestrial: cooking fire, the only kind of fire dealt with in this particular group, is terrestrial, as opposed to celestial fire which is destructive. This point will be established later (cf. p. 291). Lastly, the significant event is the result of a disjunction, which can be either vertical or horizontal:

<table>
<thead>
<tr>
<th></th>
<th>M_1</th>
<th>M_{12}</th>
<th>M_{120}</th>
<th>M_2</th>
<th>M_{124}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addition/subtraction</td>
<td>+/−</td>
<td>+/−</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Fire/water</td>
<td>−/+(−)</td>
<td>+/+(−)</td>
<td>−</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Terrestrial/celestial</td>
<td>−</td>
<td>−</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Horizontal/vertical</td>
<td>−</td>
<td>−</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

It is worthy of note that if we confine ourselves to the four contrasting sets of elements listed in the table, M_2 and M_{124} appear identical. Yet these two

⁶ As is M_{125}, too, if we remember the information provided by Lukesch (1, p. 983; 2, p. 70) that it was from Bepkororotí that the Indians learned the technique of producing fire by twirling sticks.
myths are so different in content that any comparison between them would seem unthinkable, except through the medium of M₁₂₉, which itself differs from both of them through two transformations: terrestrial → celestial, horizontal → vertical.

The anomaly can be accounted for, if it is made clear that the contrasting elements listed in the table relate only to the messages, which are transmitted with the help of codes. The latter, in their turn, comprise both a grammatical and lexical material. I have been able to prove by analysis that the grammatical armature of these codes remains invariable in the case of all the myths we have studied. But the same is not true of either the messages or the lexical material. Compared with those of other myths, the message of any one myth may seem to have been either more or less transformed or to be identical. But these differences affect the lexical material, too. In two myths belonging to one set, the lexical material may remain all the more similar because the corresponding messages have undergone a profound transformation; and if the transformational area is reduced in respect of the message, it will tend to increase in respect of the lexical material. It is therefore possible—as I have done—to combine two partially inverted messages and arrive at the initial lexical material in accordance with the rule that two semitransformations at the message level are equal to one complete transformation at the lexical level; although each semitransformation considered separately, must affect the composition of the lexical material more than a total transformation would have done. The more partial the transformation of the message, the more blurred the initial lexical material tends to become, so that it is made unrecognizable when the transformation process brings the messages back to a state of identity.

The diagram given on page 211 can therefore be completed by noting that the myths occupying the upper angles of the quadrilateral use the same lexical material to code inverted messages, whereas those in the lower angles transmit the same message by means of different lexical resources.

I have already pointed out that all the tribes under consideration subdivide fire into two categories: celestial and destructive fire, terrestrial (or cooking) and creative fire. The point will become much clearer later; but, on the basis of information already mentioned, we know that the contrast between the two kinds of fire is given very little emphasis in Bororo mythology (cf. M₁₂₉). Conversely, water seems to be analyzed less thoroughly in the Sherente mythology we have at our disposal than in the mythology of other Ge tribes. In Sherente mythology only one kind of water is recognized—the sea, which is extended by the inland network of lakes and rivers, rather than by a tree trunk puts out branches and twigs (the Choco myth explaining the origin of cultivated plants refers explicitly to this image; cf. Wasen 1, p. 109). The myths of the other Ge tribes do not allocate any special place to the lake and river systems; but, on the other hand, they differentiate between two kinds of celestial water: stormy rain and gentle rain, associated respectively with the “father” and “daughter” of rain (M₁₂₉, M₃). As for the Bororo, they subdivide water into three distinct categories: terrestrial water, formed by the lake and river system (M₃), and two kinds of celestial water—thunder rain on the one hand, and calm, gentle rain on the other:

M₁₁₁. Bororo. "The origin of gentle rain"

Because they were ill-treated by their mothers and sisters, men of the Bokodeí Cera clan changed into xinatajau birds (galinha do bugre) and disappeared into the air. The women only just managed to keep back one child. The birds told their little brother that if ever he were thirsty or too hot, he had only to imitate their call: "toká, toká, toká, ká, ká," and they would know that he needed water, and would cause a cloud to appear, which would bring a calm and gentle rain. This kind of rain is associated with the Butadugabe spirits, whereas violent rainstorms accompanied by wind and thunder are associated with the Badogebe spirits. (Colb. 3, pp. 229–30.)

In interpreting this myth, we encounter two difficulties. First of all, what were these birds which were called xinatajau in Bororo and galinha do bugre in the Portuguese vernacular? Ihering, who is familiar with the Portuguese term, admits that he is unable to identify the species. He thinks that the bird in question might possibly be the jacarini or the trumpeter bird, Prophila creptans. But the cry of this bird, as he transcribes it: "hu-hu-hu-hu," with the final syllable prolonged as if emitted by a ventriloquist" ("Jacarini" entry), offers no resemblance to the cry described in M₁₁₁. Under the heading Ñinatajau, the Enciclopédia Bororo (Vol. I, p. 542) gives the following information: "an onomatopoetic word (a bird whose song seems to say Ñinatajau): Cancur (Nomonyx dominicus)." In spite of its brevity, this definition raises several difficulties. First of all, as I have just pointed out, the Bororo myth describes the bird's song very exactly, and the phonetic transcription it gives is quite different from the native word, which cannot therefore be an onomatopoetic term. Secondly, in the Portuguese vernacular cancur refers also to one of the Falconidae (Ihering, "Cancur" entry); M. Jacques Berlioz, a professor at the Natural History Museum, has been kind enough to explain that Nomonyx dominicus is a diving duck of the Erismature group (Anatidae-Oxyuriinae). It therefore seems quite impossible that popular taxonomy should be guilty of the solecism of applying the term galinha "hen" to a duck. Actually, the vernacular term galinha do bugre "the Indians' hen" would seem to apply—by antiphon—only to the cancur, a carrion-eating bird which does not take fright at the approach of human beings, or perhaps to a bird that is directly associated with a gallinaceous in the native mind. In both cases the bird would be the opposite term within the wild-pig/bird couple, either for the reasons previously indicated (p. 203), or because the contrast between them would be reducible to that between a technophilic and a technophobic animal.
Secondly, we do not know what the “gentle rain” referred to in the myth is exactly. We have seen that Colbacchini attributes it to the Butaudoque spirits, but this seems to be contradicted a little earlier by the statement that these same spirits “harassed the Indians with cold, wind, and rain” (Colb. 3, p. 229). In Magalhães’ Vocabulario (p. 26) the word butau is given the meaning of “winter, the rainy season.” According to the Enciclopédia Boróro (Vol. I, pp. 205-6), the Butaodo presides over the rainy season, which lasts from the beginning of October to the end of April. The rest of the year is taken up by the dry season: boe ki “time of dryness,” or erubutu “the burning” (of the brush or savannah). Yet in the sacred language these same spirits seem to be associated with gentle rain (EB, Vol. I, p. 975).

Lastly, the Enciclopédia Boróro contains no reference to the Badogebague spirits, and the term Baudo Jebage occurs there only in sociopolitical contexts (pp. 190-93).

In spite of these uncertainties, the myth establishes clearly that the Bororo conceived of two kinds of celestial water, which are in correlation with, and in opposition to, each other. One is calm and gentle, the other violent; one is beneficent since it is refreshing and thirst-quenching, the other is maleficent. I have shown that there exists a direct transformational relation between the Kayapo and Bororo myths about the origin of water, whether terrestrial (Bororo, Mi) or celestial (Kayapo, Mi126). We can now see that there is also a direct transformational relation between the Kayapo myth (Mi126) about the origin of maleficent celestial water and the Bororo myth (Mi127) about the origin of (beneficent) celestial water. In each case we have vertical disjunction, which is the result of illtreatment inflicted either within a functional monosexual group (male hunters) or within a familial, bisexual group. The victim who has undergone disjunction is transformed either into an enemy (Kayapo) or into a friend (Bororo), according to whether his young doublet (son or brother) goes with him to the sky or remains on earth. The avenging hero lures his former companions by imitating the cries of the wild pigs, which are a superior kind of game; the faithful companions will be drawn toward the hero if he imitates the call of birds, an inferior kind of game. In one instance thunder-rain occurs, bringing death in its wake; in the other instance there is a gentle rainfall, ensuring material well-being and life.

At the same time we know that the Bororo deal with the rainy season in another myth (Mi), which I have shown to be symmetrical with the Sherebute myth (Mi124) dealing with the beginning of the dry season. In Mi127, therefore, it cannot be the rainy season that is referred to, but possibly one of those rare showers of rain, very good for gardens, which sometimes occur in the middle of the dry season and are called, according to the region, either chuva de preguça, because only this kind of rain is fine enough to penetrate the sloth’s coat; chuva de cigarr, because they occur just when the cicadas are hatching out (Barbosa Rodrigues, p. 161); or, further south, chuvas de caju, because they make the cashew nut swell. If this hypothesis is correct, the Bororo water system can be expressed as follows:

- gentle rain which occurs during the dry season (intermittent water)
- rainstorms which occur during the rainy season (daily water)
- rivers and lakes (permanent water)

The Mundurucu also seem to have a triple classification of water: (1) rain and wind; (2) thunder rain; (3) fine rain (Murphy 1, p. 21; cf. also Kruse 3, Vol. 47, pp. 1002-5). We must at this point go back to a detail in Mi. This myth about the origin of wind and rain (and therefore corresponding to the rainy season, as I have shown by a comparison with Mi124, and as I shall prove directly) ended with the murder of the father, who was drowned in the waters of a lake, or rather a swamp (overgrown with aquatic plants). Anyone who has traveled in the Pantanal knows that it is impassable during the rainy season (the hero of the myth is responsible for the rainy season), but that part of it dry up during the tropical winter (April to September). Consequently the lake and river system and the swamp form a twofold contrast: running water/stagnant water; nonperiodic (the whole year through)/periodic (for half the year). The same myth adds that the swamp is the abode of cannibal spirits, the buigoe fish (“piranhas”); whereas another Bororo myth (Mi128) explains that the creation of lake and river system by the hero Baitogogo was incomplete, because the water contained no fish. So a certain Baiporto (“opening of the hut”) of the Paiwé clan took it upon himself to finish the work begun by his predecessor, and created the different species of fish (the myth is careful to exclude the piranhas) by throwing the branches of various floral species into the river (Colb. 3, p. 211).

The three categories of water therefore correspond to three types of diet: cannibalism is associated with the swamp, which itself is a relative function of the rainy season; fishing, which is congruous with hunting in relation to water, is associated with the permanent lake and river system; vegetable foodstuffs with the intermittent rains that occur during the dry season. The triple division of water corresponds to that of the three calls emitted by certain antifoods (Mi)—rock (the reverse of cannibalism), hardwood (the reverse of meat), and rotten wood (the reverse of cultivated plants)—as I showed on page 153 and following. I have also proved that the three kinds of antifood correspond to the triple patterns in the Sherebute myth (Mi124) about the origin of terrestrial water, which is itself homologous with the initial triad of three musical instruments in the key myth (Mi).