
Conditional Conjecture: the Relationship Between Ecology, Evolution and History

How should we behave when faced with a poorly formulated question? *A priori*, the satisfactory solution consists of refuting all inaccurate aspects, after which the conundrum will disappear or will change. However, such a procedure requires access to each of the terms that contribute to the problem raised: the broader the scope of the problem, the more difficult it is to meet it. On such occasions, research is thus overwhelmed by a latent theme of reflection whose very content raises doubts: what can we do with this growing uncertainty? To situate the current position of kinship within anthropology and understand its tendency to ignore the dimensions of the material environment and historical change, we then have the insights about an edifying case in an adjacent discipline: linguistics.

1.1. Do the sources contaminate history?

In 1866, the promulgation of its statutes by the *Société de linguistique de Paris* led to a monumental decision. After setting out the main intentions (the study of languages, traditions and documents likely to shed light on ethnography), Article 2 laid down this memorable *veto*: “*The Society shall not admit any communication concerning either the origin of language or the creation of a universal language.*” Let us not dwell on the abundance of political and scientific competition surrounding this lapidary *veto*: the *Société*

d'anthropologie, the *Société d'ethnographie* and the *Société de linguistique*¹ emerged in Paris between 1859 and 1864, at the same time as Darwinism and its immediate caricature, “Social Darwinism”. What matters here is only the methodical issue of this ostracism and its strategic significance.

1.1.1. *Consequences and extensions of a deadlock*

Observers agree that this disturbing proscription (even shocking in the light of an epistemology attached to unalterable principles) will have had positive effects by facilitating the creation of a structural method in the wake of the Swiss Semiotician, Ferdinand de Saussure. He himself denied any existence to the question of the starting point, considering it as “childish” as the quest for an ultimate source for a river [PLA 11]. Freed for a time from empty speculation on the emergence of language, the new discipline focused on the intimate organization of languages. And when, much later, the banished curiosity returned to mind, the knowledge acquired on the constitutive logic of language had changed the situation by dissociating two objectives: the historical-geographical identification of birth (the “source of the river”) and the process that leads to languages articulated from animal communication. Today, interdisciplinary discussions differ radically, depending on whether they are initiated with one or the other target in mind.

Confronted with more resistant evolutionary obsessions that assumed an ancestral matriarchy, or fantasized about a “primitive communism” reduced to presocial chaos, ethnology did not experience this early warning shot. The basis for attention to exotic cohesions of kinship, however, encouraged a shift in thinking in this area: the reduced equivalent of “article 2” then emerged in a conference given in this field by Alfred Radcliffe-Brown in 1941, opening with a methodological advocacy against *conjectural history*. The functionalist reproached the latter, not for its historical dimension but for the speculative content which, in his opinion, required a knowledge of the inaccessible laws of social evolution [RAD 52]. In fact, the British master took advantage of a temporary discomfort that the haunting of the origins was going through: the advent of Neo-Darwinism had invalidated “Social Darwinism”, and the restructuring of its ambitions, through cultural ecology

¹ The French Anthropological Society (rather more biological), the French Ethnographic Society and the French Linguistic Society.

and sociobiology, did not begin until about 15 years later. Although discreet, this milestone marked the teaching of anthropology in the second half of the 20th Century – both in England and France – where structuralism approved it without reservation, if not without ulterior motives. For the brilliant arrival, in 1949, of the theory defended by Claude Lévi-Strauss in *Les structures élémentaires de la parenté* [LÉV 67] further accentuated the comparison with the strategy adopted by linguistics by developing a field of structural analysis, both logical and achronic. From the outset, in the section devoted to the problem of incest, he wrote, as well as on the old sociological interpretations, including – and especially that of – Émile Durkheim (we will return to this later) and those who suffer from a “common and fundamental vice”:

“They try to base a universal phenomenon on a historical sequence whose course is by no means inconceivable in a particular case, but whose episodes are so contingent that it must be entirely excluded that it could have been repeated without change in all human societies” [LÉV 67, p. 26, our translation].

However, this common tactical reluctance developed in the long-term discordant effects in linguistics and anthropology, which appeared better when three frameworks were distinguished. First, from a *practical point of view*, the happy consequences, in the medium term, do not give rise to any quarrel: this resolution enabled kinship specialists and linguists alike to develop a powerful technicality at the service of fine and precise comparisons in coherent systems.

On the contrary, *epistemology* does not benefit from it. The negative injunction of linguists has the merit of frankness, since it ignores a conundrum without arguing its withdrawal: unjustifiable beyond a cyclical efficiency, the disavowal in no way tries to legitimize itself by invoking irrevocable principles. Radcliffe-Brown, on the contrary, bases his remarks on two serious confusions: he abandons history in evolution and conjecture in speculation, so that his rejection of evolutionary speculations automatically includes historical conjecture. However, the former strive to affirm general trends according to intuitions, while the latter work on questionable hypotheses within a limited temporal and geographical framework: these two modalities of reflection correspond to irreconcilable observances that cannot be subjected to a single challenge [GUI 95b]. It has

been well-known since Karl Popper that the processing of this exercise requires much more cautious attention, even if the so-called “soft” sciences fail to recognize its use, or at least disguise it under philosophical artefacts. In regard to the regeneration under control of this tricky exercise that presides over the whole of this test, we will come back to it by increasing perspective.

The theoretical scope remains. To dispense with an interpretation on the emergence of language does not prevent us from focusing on the transformation of a language, or its geographical ramifications over time. Linguistics has grasped history all the more concretely, because it has emancipated its manifestations from the care claimed by evolution. When it returned to its agenda, it had to deal with the properly ordered data of historical analysis. However, on the anthropological side, the confusions noted above – under the guise of a priority given to the analysis of structures – served two kinds of purposes. For Radcliffe-Brown, the notion of structure is associated with that of function within a “social physiology²” that explores pragmatic rationalities that continuously activate the variable dispositions of the “cultural”. Thus, the outdated causalities of the past all belong, to a greater or lesser extent, to the field of gratuitous speculation. Lévi-Strauss went even further by aspiring to recognize psychological invariants beyond history [LÉV 62]: the futility of conjecture is then multiplied tenfold in his eyes by the fact that it is limited to manipulating “contingencies”. The generation of specialists that followed was that of logicians, analyzing matrimonial prescription, the prohibition of incest and terminological systems: modelers of perfect structures as a culture conceived them, even if they were never fully applied. In the end, linguistics preserved history as a useful medium, while anthropology swept away this cumbersome contribution.

1.1.2. *The return of evolutionism: another disposal of ecology and history*

What about ecology among these transformations? The circumvention of history by ethnologists of kinship incidentally stifled its intervention because the analysis of interactions in a biocenosis requires first and foremost an examination of processes. This discipline, in fact, was born from the

2 Although these terms indicate, from far and wide, a reference to “the social organism”, the evocation no longer plays, in this context, only a simply metaphorical role.

application of the Darwinian method to natural history, in other words, it always analyses situations and transformations in solidarity [GUI 14]. As a result, functional approaches, which sought stable (and therefore rather geographical) environmental determinants, made minimal use of them. Structuralism, for its part, lost interest in it: Lévi-Strauss spoke about an alleged ecology, certainly, but from the myth, not from kinship [LÉV 83]. However, even as his school of thought triumphed on the university scene, an American wave brought anthropology back to the charades of human evolution: “Social Darwinism” had retained a strong remanence in the United States, and the aspiration for interdisciplinarity spread there earlier than in Europe.

During the 1960s, paleontology, primatology and ethnography developed intense and multiple relationships in order to reformulate the major issues of hominization and social evolution. Zoologists thus advocated the establishment of a comparative *socio-ecology*, while anthropologists for their part set up a *cultural ecology* on the recommendation of Julian Steward [STE 55], who conceived it within a problem oriented towards the interpretation of change. During this phase of diverse and intertwined exaltations, the restructuring of hypotheses on the origins of society and culture, although outrageously dominant, did not prevent closer reflection on ecological factors within defined historical periods. This is particularly evident in the eminent landmark that remained the multidisciplinary symposium *Man the hunter* [LEE 68], where we soon find confirmation rooted in kinship.

Unfortunately, this enrichment came up against the emergence of a school of thought that revived the abusive simplifications of old “Social Darwinism” with the same thirst for authority as before: *sociobiology* reduced calculations of interest in interindividual relations from the level of the animal to the level of the gene, the organism suddenly being reduced to a spokesperson used by the different genes to ensure their own lineage. Apparently far from what we were talking about, this event played a decisive role in it. It placed behavioral studies under the intractable supervision of a so-called founding “law”, thus causing a permanent split in interdisciplinary discussions, now shared between those who submitted to the dictatorship of this speculation and those who did not. Most biologists eventually joined the first camp, with a minor fraction in the social sciences. A paralysis of reflections followed because the explanation of socio-ecological interactions in historical time was subjected to the unofficial but rigid control of the “selfish

gene”. If an analysis of historical ecology agrees with this *credo*, it claims that it brilliantly confirms its validity, but if, on the contrary, the facts collected contradict it, the counterexample is immediately referred to the insignia of anecdotal circumstances [PAR 17]. History would only record removable reality, and the perception of the guidelines would only open up in the perspective of a global vision for the life sciences. Under such conditions, evolutionism never loses: in a way, it wins “by definition”.

A strange situation results from this, with a compartmentalization of approaches that evokes an incomplete puzzle where the gaps increase: the more refined the models are, the more the deserted spaces between them widen. The clashes between reality and the grid of interpretation that a discipline has been able to conceive are quickly referred to historical anomalies or risks whose examination would belong to another element of knowledge.

1.2. The recurrent pitfalls of conjecture in the face of kinship

Beyond technical communication (simple data transfer, with possible “translation” of information), the programming of an interdisciplinary ambition regularly involves the development of conjectures that lend themselves to inspections conducted from multiple points of view. However, this exercise cannot be developed sustainably under the aegis of a theory: whatever the credit it has in its field of predilection, it will have to accept to become a hypothesis again when it incorporates an expanded space of knowledge. A reasoning that ensures a fact in a reference frame X cannot *a priori* guarantee its validity when it joins a reference frame Y , even if Y includes X and even if it is included in X : a “questioning” is always necessary, because the consistency of the fact and the number of variables involved in its recognition change according to the area of reality where it is observed [GUI 18]. By virtue of proven technicality, social anthropology can then legitimately continue to appropriate the descriptive analysis and formal definition of kinship structures, but it must admit that interpretations beyond these operations, such as “the exchange of women” by men, expose themselves to primitive, historical or other doubts as soon as they leave the native cocoon. Indeed, the assessment of their consistency depends entirely on this testing.

Unfortunately, while the “official” epistemology has written at length about the production of hypotheses in mathematics and experimental science, it has scorned the case in the social sciences and humanities, apparently assuming that society is heading for failure. In the absence of support on this side, let us therefore try to identify some chains of events that trigger recurrent disturbances and that combine in subconscious philosophical do-it-yourself activities.

1.2.1. *The misleading security of the base*

The first trap lies in the comforting illusion of the base: this irreducible foundation designed in such a way that it is immediately accepted by all possible participations. Since the misadventure suffered by Euclid’s fifth postulate, mathematicians have increasingly doubted the existence of axiomatics capable of establishing foundations that are necessary because they are natural, or natural because they are necessary. Biologists and anthropologists, on the contrary, still cultivate this fantasy, as shown by the “foundations” proposed by Robin Fox and Françoise Héritier at the beginning of two classic works on kinship, both didactic and synthetic. The interest of the comparison comes from the blatant contrast between these authors: Fox is fully in line with functionalist inspiration and he early adhered to sociobiological theory³, of which he became one of the leading figures in the human sciences, while Héritier, a student of Claude Lévi-Strauss (to whom she succeeded at the Collège de France), defended a rigorous structuralism, centered on the signal and opposed to biological determinism. Let us look successively at the foundations they propose, starting with Fox:

“Principle 1: women have children.

Principle 2: men fertilize women.

Principle 3: men have authority.

Principle 4: primary kin do not copulate with each other”
[FOX 72, p. 31].

³ Fox is one of the very few reductionist anthropologists whose technical competence in this field was not contested by anyone opposite, which explains the place he will be given in the pages to come.

He insists that “procreation, fertility, the exercise of authority and the prevention of incest” would be “the basis of any social organization” [FOX 72, p. 31]. As for Hérítier, she presents three elementary data:

- “- there are only two sexes, male and female;
- procreation leads to a natural succession of generations;
- an order of succession of births within the same generation recognizes elders and youngers” [HÉR 81, pp. 16–17, our translation].

Fox therefore first invokes two physiological laws which, by replacing “women” and “men” by females and males, would apply to all mammals. Then, it is followed by two ethological rules, one of which covers all Primates (avoiding incest), while the other rightly gives rise to some perplexity, because the notion of authority concerns only the man and goes beyond the concept of dominance which applies in a variable way to other species: discreetly, principle 3 thus *contains* the potential specificity of human kinship, Fox symptomatically comments on it in a paragraph that stands out for its ideological trace. By writing further that we “see the emergence of ‘systems of inbreeding and alliance’ when groups seek to reconcile the multiple demands of the ecological environment and the environment with the limits set by our four principles” [FOX 72, p. 36], he effectively places the principle of male authority upstream of ecology, as a founding achievement of the human condition, which is not trivial.

Hérítier, on the contrary, points out that his statements highlight *differences*, which would deliver “the basic elements of combinatorics specific to any kinship system” [HÉR 81, p. 17]. However, she and Fox did not go as far as the foundation of “social organization”. However, giving the ratio of elders to youngers the same degree of presence, or universality, as the distinctions between men and women and between parents and children is not self-evident. Doesn’t the expression of a succession that “recognizes” elders and youngers implicitly acknowledge a less inevitable and “natural” status of the distinction?

One infiltrates male authority among the predominant factors and the other inserts birthright into it. This did not deter Françoise Hérítier, following Lévi-Strauss, but unlike Maurice Godelier, from thinking of male domination as a “constitutive principle of kinship” in other contexts (“outside the base”)

[GOD 10, p. 182]⁴. It would undoubtedly be easy to envisage dozens of competing axioms, each one introducing a data declared essential that will guide the consecutive program by restricting, or on the contrary by dilating, the “foundation”. Let us mention, for example, the candidacy of another mechanism: the prohibition of incest and exogamy are perpetually associated with a universal practice of human societies, the sexual division of labor. It does not matter, in this case, whether we are looking at the long-term evolution of our species, or at a historical range surrounding exchanges in a group of people: the biological and social reproduction of groups leads to the persistence of this separation of tasks, followed by a sharing of products [GUI 95a]. Until further informed, there is no population where purely vegetarian women coexist with men because they are total carnivores. An “exchange of women” therefore requires compatibility of the provisions adopted on this subject by the different social units involved. All human societies experience both exchange and sharing, which belong to the register of the circulation of beings, for better or worse. However, these two practices have complex relationships: they are never entirely the same, nor are they ever indifferent to each other. Lévi-Strauss wrote laconically in the postface about a broad collective reflection on kinship that:

“[...] sharing is the form that exchange takes when each stakeholder could claim the whole. In the real or simulated abduction of spouses that is sometimes invoked, it is necessary to see a real or symbolic way of deceiving with the law of exchange, if not even, eventually, to reactivate the path” [LÉV 00, p. 713–714].

This is a highly debatable intuition, from different perspectives: we share the same thing, even if dissimilarities emerge secondarily (the parts of the game, for example). However the exchange implies a disparity, even if it generates a symbolic identification. The exchange of a woman with an economic resource inscribes a category within the other and, conversely, “the exchange of women” implies the deviation of their social belonging. In short, it seems strange that anthropology has devoted so little effort to question

⁴ To be precise, Godelier does not dispute in this passage the existence of the said domination, but only that, through it, the exchange of women is “the universal condition of alliance and kinship”. The reasoning changes depending on whether it is treated as a radical or a variable.

the dimension of sharing within matrimonial exchanges, while it does not sell it off in the economic field.

Let us return to Fox. Unlike Héritier, he introduced a factor to the unceremonious factor that contained a strong theoretical intention: the “principle” of male authority masks the problems of multiple interactions between societies and environments, while maintaining a regular ethological character at the expense of ecological variables. In the terms of classical Darwinism, it can be said to wager on the irrevocable precedence of sexual selection, which degrades the *rest* of natural selection into an accumulation of complementary (and, especially, secondary) parameters. A few years later, he would thus rely on a “raw material used to weave the kinship systems of Primates, including our own”, whose elements have an adaptive foundation and none are the prerogative of man [FOX 78, p. 47]. According to him, kinship groups:

“are not specific to the human species. Their existence does not depend on the equally natural ability of our species to classify and give names; without language and rules they would still exist. It is only their elaboration that depends on the classifying tendency and the evolution of the true language. And even this elaboration, due to ecological circumstances, historical contingencies and the whims of the human imagination, is only a variation on themes” [FOX 78, p. 48].

Principle 3 of male authority must also emerge in order to ensure the fusion between adaptation and a social law that would dominate “circumstances”, “contingencies” and “whims”.

The bases secretly develop more or less offensive theoretical options. Is this a necessary evil whose harms should be relativized by emphasizing its temporary effectiveness? The answer will emerge after the opening of an opposite procedure. In 1945, several years before the publication of his complete theory on kinship structures, Lévi-Strauss, in a discussion on the role of the maternal uncle presented by Radcliffe-Brown, conceived the famous image of an underlying structure with four terms: the *atom of kinship*, or *element of kinship*, which “is based on four terms (brother, sister, father, son), united by two pairs of correlative oppositions and such that, in each of the generations in question, there is always a positive and a negative relationship” [LÉV 58, p. 56]: in terms of trust or solidarity, the traditional

relationship between a woman and her brother is thus opposed to that between her and her husband, and the same applies to those of a man with his father, on the one hand, and with his mother's brother, on the other hand. This minimal representation, intended to offer a relevant object of comparison between societies, produced in short the most economical way to articulate the three constitutive relationships of kinship that coexist everywhere, in various forms: consanguinity (or rather collaterality⁵), alliance and filiation, always present, even if the terms they unite may change or multiply⁶.

It is not a "foundation" to be passively accepted, nor a master key, but a theoretical conjecture. Where exactly is the difference? First of all, no one can improve a base: if it has defects, everything must be redone. On the contrary, the conjecture is refined because it is presented as a back and forth between a justified question and a possible answer. In other words, progress will be made if the question, or the answer, is clarified, as well as when the answer is invalidated, or when a defect of form appears in the formulation of the conundrum. In the case of the atom of kinship, in the absence of external curiosities, communication was limited to a circle of insiders, accomplices on the essential. However, Lévi-Strauss' proposal – placed in the perspective of evolution – could stimulate further debates, because it perfectly condenses the singularity of the phenomenon of kinship in our case. Let us see how.

A human group, like a group of monkeys, is made up of genetically-related individuals, plus external elements that contribute to reproduction. If we stop at these considerations, there is no continuity between the avoidance of incest in Primates and its prohibition in humans, nor between animal *consanguinity* and human *kinship*. This is the position supported, explicitly or not, by biological determinism as a whole. However, including the mother's brother among the irremovable "pieces" of kinship, in the same way as a father, mother and first cousins, indicates a crucial gap with the "rest of nature": as a general rule, the maternal uncle does not live in the same place as his nephew. If the husband lives with his wife, he leaves the group where his sister lives, and if not, she leaves. This simply means that

5 According to the useful shift suggested by Bernard Juillerat [JUI 01]. From a biologist's point of view, inbreeding and filiation speak about the same thing. But with regard to the human sciences, the dissociation of fraternal relationship is more clearly required: Juillerat's reflection thus aimed to confront the atom of kinship with psychoanalysis.

6 To be brief, we paraphrase the structuralist after the quotation [LEV 58, LEV 73].

the mother's brother knows that he is related to his nephew and is recognized as such by him, despite the fact that it may take years before they meet.

Dialogues between experienced structuralists have evaded this flagrancy in the proposal: a kinship structure asserts itself as such, as long as the relative does not necessarily embody a relative and the parents are not necessarily among the relatives. The emergence of a frequent disjunction between physical proximity and the instituted link is more than enough to disqualify an ethological bias that aims to reconstitute social issues based solely on behavior. In contrast to the roles distributed by a secular reductionist conviction, it is in no way up to anthropologists to demonstrate the inability of biology to describe the development of the phenomenon of kinship: it is the life sciences that should guarantee the power of their art by explaining point by point why two individuals who have never seen each other "behave" as parents towards each other from the moment they "get to know each other". As it stands, the processes supposed to lead from psychological complicity between monkeys to social solidarity between humans are based solely on a colossal extrapolation that no one seeks to verify: a kind of capillarity, or contagion, that would diffuse, intact, ethological traits among cultural facts. Fox's speech, quoted above, gave a vivid picture of it, concealing the fact that he was leaving the register of the hypothesis for that of a pure profession of faith neglecting an old methodological objection of Lévi-Strauss:

"If it is legitimate, and in a sense inevitable, to resort to naturalistic interpretation to try to understand the emergence of symbolic thought, once given, the explanation must change as radically in nature as the newly emerged phenomenon differs from those that preceded or prepared it" [LÉV 58, p. 62].

Lévi-Strauss' position is open to discussion up to this conclusion, while Fox does everything to escape it under the protection of supposed evidence. Thus, the prerequisite of the "base" often has the effect of channeling questions, or reducing fields of investigation, by imposing *ex nihilo* a component secretly "intended" to orchestrate reality. On the contrary, a "reduced model" such as the one used here in Lévi-Strauss' work will facilitate, if necessary, the revelation of faults in presumed indisputable foundations, while remaining itself an idea to be discussed.

1.2.2. *Causes, emergences and functions*

Following in this wake, let us return to the strain between the quest for origins and the analysis of structures, beyond the exclusion phase mentioned in the introduction. In the famous contradiction between Radcliffe-Brown and Lévi-Strauss, the functionalist first imagined a relationship based on filiation, then the structuralist took possession of the object worked on by the Brit, and extended the study to a corpus of societies. The ethnographic hypothesis was then refuted by this anthropological expansion, which allowed the alliance to dethrone filiation to assume the major role in defining parenthood. However, despite the undeniable success of the reply, the discussion does not stop at this point and the criticized conviction does not evaporate. We have seen the reason for this: only the parent-child relationship can support a continuity of the phenomenon of monkey to man kinship. The alliance, on the contrary, implies hiatus, its “invention” by the genus *Homo* representing much more than a trend development of exogamy: it is no coincidence that Lévi-Strauss, following his criticism of Radcliffe-Brown, affirmed the imminent dangerous nature of the idea “that the biological family constitutes the point from which any society develops its kinship system” [LÉV 58, p. 61]. The evolutionary perspective, if it is to be maintained, must therefore foresee a courtship dance, which brings us back to Fox. It provides instructive reasoning in several respects, drawing on Central Africa:

“[...] for example, where land is scarce, uterine nephews readily recognize the authority of their mother’s brothers in order to collect her land inheritance. Under these conditions, the avuncular institution is very developed, on the other hand, where the land is abundant, this requirement no longer applies and the institution loses its rigor” [FOX 72, p. 105, our translation].

On the surface, the argument adds a parameter to the debate: environmental pressure would make filiation more or less constraining through a more or less decisive value of inheritance. Radcliffe-Brown’s problem would then be restored by this addition against the preponderance of the alliance supported by Lévi-Strauss. However, the reasoning is specious, which makes it precisely instructive, since the necessity of the rule is often deduced from the disadvantages of its absence. Refining Radcliffe-Brown’s intuition a *posteriori* gives the illusion of returning to the

starting point, i.e. upstream of the structuralist counterproposal. However, it does not suffer any repercussions and remains fully effective. Fox did not confront his perspective with the test of a broad comparison that accompanies the atom of kinship: he limited himself to picking here and there point correlations supporting his words. Except that the criterion of an available quantity of useful land literally represents a *variable*, i.e. its action varies in time and space with what has been referred to above as “circumstances” and “contingencies”. It follows that, with or without recourse to the intermediary of the atom of kinship, this assumption requires comparative work extended over a large sample of peoples beyond a few illustrations. This without neglecting to include the historical dimension: for a given population, is the rarity of earth systematic and constant? In the event of a change, can a time lag be measured between the introduction of the constraint (or its disappearance) and the subsequent anticipated inflection of the relationship with the mother’s brother? Ironically, Lévi-Strauss, for his part, had taken time to integrate the diachronic perspective into his presentation by relying on research devoted to family relations in the Middle Ages⁷: “the power of the brother over the sister decreases, that of the prospective husband increases. At the same time, the bond between father and son is weakening, that between maternal uncle and nephew is strengthening” [LÉV 58, p. 55]. In short, the opposing couples are maintaining a gradual reversal. Let us now try to identify the lessons to be learned from Fox’s intervention, compared to those of his illustrious predecessors.

The first is that a conjecture can only contradict another if it can be encompassed, surrounded or overcome. Radcliffe-Brown put forward the idea of a socio-economic function inhabiting filiation, which Lévi-Strauss refuted by indicating that the opposition between solidarity/confrontation through the relationship between wife and husband “against” brother/sister, on the one hand, and via child/father “against” uterine nephew/mother’s uncle, on the other hand, dominated the variations assumed by the Brit researcher by consistency. However, by returning to the initial level, Fox remains *below* the structuralist denial: the purpose would only change the situation if the scarcity of the earth succeeded in thwarting the coexistence of the two contrasts, which is not the case.

⁷ We quote this passage to show the existence of questioning, regardless of what contemporary historians might say on this subject: the sources cited by Lévi-Strauss date back at least to the beginning of the 20th Century.

The second is that the refuting performance of a proposal must be distinguished from its constructive competence. Lévi-Strauss invalidated a formulation of the primacy of filiation and continued with an affirmation of the precedence of the alliance, which has a radically different consistency. It proves that kinship cannot be thought of, even temporarily, without alliance, but not that alliance has an ascendancy over filiation. On this point, the discussion remains open, even if the relevance of the atom of kinship would cease to raise the slightest doubt. Fox got lost because he resolutely defended one priority against the other: the competition of the two convictions then erased the hegemony exercised by one extreme over the other as a particular subject of discussion.

The *third* concerns the frequent confusion between the original cause and the functional cause, the first relating to the initial stimulation of an evolution, and the second relating to delineated histories. Anthropologists, following biologists, admit that universal facts contain a natural essence upstream of the subsequent variations generated by various situations⁸. A primary avoidance of incest corresponds to the formidable extent of human prohibitions towards it: the discovery of a typically human intermediate constant would provide from this point of view a much more reliable scientific basis than the axiomatic bases discussed above. Incidentally, this leads to a paradoxical image: when Radcliffe-Brown tried to identify a general function in kinship outside the temporal turmoils, he, despite his reticence, came much closer to an evolutionary perspective than Fox, drawing his clues far downstream rather than faithfully following the path of “male authority”.

The *fourth* is added to the previous one and increases the ambiguity highlighted: it is the tacit transformation of effective relationships into causalities, a compulsion that characterizes, or even defines, functionalism in general. Structures and systems are “read” from reports assembled into stable cohesions, where cause-and-effect relationships are extremely rare. Yet it is as if the latter were the only treasure to be unearthed among the interactions and that a true explanation required the discovery of a proper determination. Fox’s arguments in this respect are typical of a vision that seems to accept the interdependencies that ensure the organization of a reality,

⁸ Let us recall that this is in line with the famous discussion of the relationship between nature and culture that initiated Lévi-Strauss’ theory on kinship [LEV 67]: curiously, the author does not note that this approach to the relationship between unity and diversity has inhabited biology at least since Lamarck.

but that suffers in the background from an irresistible desire to find the cause of *all this*⁹. The mistake increases even more if we neglect that within a system, the existence of a causal relationship does not fall in equivalence with a crucial role and that it can have a specific action.

The persistence of these misunderstandings ends up casting a net over more subtle, unresolved disputes: we have seen Lévi-Strauss' severe criticism of Durkheim's approach, although some of the great ancestor's prophetic assertions have superbly anticipated his own theories. As early as 1898, the founder of French sociology had recommended a clear distinction between kinship and consanguinity, arguing also that the prohibition of incest was linked to the obligation for individuals to find a spouse outside their group, and not in a desire to prevent consanguineous couples [DUR 98]. The stiffness of the structuralist and his ingratitude emanate above all from a later essay, *The Elementary Forms of Religious Life* [DUR 08], where Durkheim, through the cult that society dedicates to its own existence, brings together in the same impulse the emergence of kinship, religion and classificatory thought: the emergence of the conscience would accompany that of its immediate opposite, the conscience of the *whole*.

What is important to us here is a twofold question: does the disapproval of this typical case of conjecture history not exaggerate his competence, and should we consider as a coincidence the fact that Durkheim uses the same initial framework on which Lévi-Strauss would work half a century later with the help of a much larger bibliography? The inadequacy of the empirical basis and modalities of demonstration raises no doubt, particularly through a misunderstanding of totemism. However, as Enric Porqueres points out at the end of a meticulous and enlightening review of this work, "this does not invalidate the process", starting with "the notion of a kinship which, in the sphere of the sacred, by mixing beings with each other, permeates what it knows" [POR 12, p. 424]. A possibility remains alive as long as it does not face a denial head-on. Despite the undeniable superiority of the analytical technique set up by Lévi-Strauss to analyze kinship, the intuitive part aimed at exchanging women does not acquire at first glance a higher status than the Durkheim problem: all the more so as the two lend themselves to various examinations and, moreover, there is no argument in favor of their incompatibility.

9 See [GUI 18].

Let us continue with Lévi-Strauss' theory, assuming that the universal expresses nature while the variable reflects culture, and that natural avoidance is transformed into a culturally-assumed prohibition: the articulation of the two, recorded by all human societies (thus, proven as a natural trait specific to our species), opens up jointly to biological, psychological, sociological, ecological and evolving estimates. The joint convictions of Radcliffe-Brown and Lévi-Strauss cause excessive inhibition by reducing the range of hypotheses to be taken into account. On the contrary, they deserve our full attention when they rebel against mixtures of knowledge, or an authority unduly attributed to one perspective over another. We would be inclined to assume that radically different conjectures do not support each other unless they are very close to the desired demonstration. Far from this finish line, the benefit to be gained from their confrontations lies essentially in their ability to torment each other: when one of them resists all attacks for a long time, it becomes a *de facto* object of privileged research, "until further informed". Considering Fox against Lévi-Strauss has led to the emergence of tricks. Durkheim's work should then be invited before Lévi-Strauss' to show that other tensions are not resolved as clearly.

Montesquieu mocked the French who "lock up a few madmen in a house, to persuade those outside that they are not". Theorists of anthropology similarly imprisoned conjectural reflection in their opponents, thus losing access to a part of their own practice, buried because it was misguided. Life sciences, on the contrary, find it so difficult to compare the respective merits of their intuitions, but at least they do not curse their presence.

1.2.3. Statistics and anomalies

A prejudice forged by habit imagines that conjecture is content to multiply analogies that leave a stain: in reality, this exercise succeeds in blossoming elsewhere than in the art of generalization. The reverse approaches of statistical analysis and the interpretation of infringements thus provide other double-edged tools: a kind of suggestive utility, in short.

In regard to the first part (the use of statistics), everything revolves around George P. Murdock's work, i.e. the HRAF (Human Relations Area Files) database at the end of the 1940s, which was the ethnographic atlas

compiled in the 1960s and 1970s, on a corpus of 1,167 societies [MUR 67]¹⁰. Many researchers are secretly consulting this documentation. And those who concede it all rightly begin by protesting against its many imperfections: erroneous information, regrettable effects of Murdock's functionalism, inappropriate classifications, etc. Often, the statistics then cover so many invisible variables that the contribution of a calculation remains subject to the possible *veto* of empirical knowledge. Nevertheless, the failures of this atlas dissolve in the observation of its isolation: terribly outdated or rudimentary, except that there is no better way. Cross-cultural studies have certainly continued with a significant emphasis on perspectives in social psychology, but little progress¹¹ has been made in the comparative treatment of a set of variables from different registers. Bringing two factors together in a series of sets is always ultimately equivalent to tracking a causality, while capturing four or five factors could reveal networks of interdependencies. More than 20 years ago, we already noted that, given the rapid progress of information technology, reopening this project by combining the efforts of several other disciplines (history, linguistics, geography, demography, ecology, etc.) would result in a constantly regenerating encyclopedia of human societies [GUI 96]. We will simply renew the wish. Strictly speaking, statistics do not demonstrate anything, because that is not their role: they stimulate, nourish and refine the elaboration of possible explanations. And they deny intuitively-attractive connections.

Let us move on to the second part: anomalies or exceptional figures. We must pay tribute to Lévi-Strauss (or, in his wake, to a specialist such as Laurent Barry) for never having wanted to “erase” them. Let us briefly mention four salient cases:

– *Brother/sister marriage in Ancient Egypt* would not raise much difficulty if the Pharaohs had kept its monopoly as a transgression at the top of the social pyramid. Nevertheless, Lévi-Strauss points out at the beginning of his work that, according to some Egyptologists, this type of union “may have represented a widespread custom among small civil servants and craftsmen” [LÉV 67, p. 11]. However, the real consanguinity is all the more difficult to guarantee since, according to some sources, it happened that the spouses sometimes referred to each other as brothers and sisters, in reference

10 The work was republished and subsequently increased.

11 In contrast to the advances in mathematical procedures of this type in an ecology “outside” human activities.

to a mythology where gods and goddesses willingly united with their first cousins (which confirms, on a certain level, a symbolic contagion likely to disturb the atom of kinship)¹². We can imitate the gods because we have the privilege of joining them, like the pharaoh, or because the deities set an example for humans.

– *The marriage of “half-first cousins” among the Athenians of the classical era*: Lévi-Strauss drew attention to a disconcerting law, allowing patrilineal Athenians to marry a sister of the same father, but not a sister of the same mother. Finally, he adds, almost to anyone that would listen, that a testimony points to a symmetrical occurrence in Sparta where marriage would be “permitted between children of the same mother and different fathers” [LÉV 83, p. 138]: this double negative peculiarity reduces the probability of a simple accident, especially since the structuralist identifies other cases, geographically distant, but similar. Barry, on the contrary, takes no punches and admits that, in this situation, “incoherence borders on the absurd” [BAR 08, p. 131], regretting in passing that this rational challenge was met only by a Hellenist and not by specialists in kinship. Curiously, no one seems to note that the Athenian’s strangeness corresponds to the Egyptian case, where registered “brother/sister” marriage cases generally concerned children of different mothers.

– *Matrilineal and uxorilocal*¹³ *societies where men are exchanged*: Chantal Collard refers to the Minangkabau of Sumatra and the Garo of Pakistan [COL 00]. The issue does not threaten the analysis grid of structuralism, but rather the suspicion of a principle of male authority infiltrated into the formula of “the exchange of women”.

– *The “fatherless and marriageless” culture of the Na in China*: Hua Cai described a society in which the role of the father and the institution of marriage are not recognized [CAI 97]. The man lives with his sister and not with a sexual partner, to whom he visits without having an exclusive right to her. However, some aspects of this unexpected image have been severely criticized [CHU 00].

How can such counterexamples be understood? First, it is necessary to seek an underlying compatibility with the model, which corresponds to

¹² On this point and the Athenian case to follow, see Fr. Héran [HER 15].

¹³ Term used to refer to companies where the couple’s place of residence is determined by the wife.

Lévi-Strauss' initial attitude towards Athenian marriage between "half-first cousin". If irreconcilability is verified, then a conjectural work begins that broadens the frame of reference for observation in search of active variables. Last but not least, Lévi-Strauss illustrates it in his postface to the volume of *L'Homme* that Laurent Barry devoted to kinship: with regard to Na, he notes that they seem less extraordinary to anyone who realizes that they offer a "reverse image" of our own societies. In both cases, he adds, "this disintegration of a basic structure is due to demographic, economic, political, political and even religious factors" [LÉV 00, p. 715]. A late admission of the aptitude of these factors, which inevitably raises an old question: does their action only express itself – and, therefore, must it be taken into account – if they succeed in destroying the structure? In other words, does the existence of the kinship structure form a rampart against environmental influences (an influence of context becoming synonymous with failure), or does permeability induce the constant object of study that structuralism has deliberately avoided in practice, if not in the implicitness of its theory? Among the four illustrations selected here, "the exchange of men" in no way calls into question the theoretical matrix (the ensuing debate confronts a non-essential theory grafted), but the other three phenomena correspond to much more "disturbing" offences, as if societies were secretly "trafficking" their structures.

Let us unearth a zoological image to place opposite each other. More than 40 years ago, a primatological article struck us by describing a young adult male who enjoyed an enviable hierarchical position in his group thanks to his mother, a highly dominant female: in this case, this status was a considerable advantage for children. He refrained from migrating to other social units and maintained a privileged situation: the zoologist noted the inevitable counterpart of several copulations with his progenitor. If we were to confirm the sporadic existence of such a scenario¹⁴, the exception imposed on the undeniable general avoidance of incest in monkeys would clearly have a meaning that should not be ignored under the pretext of a minimal episode. Transposed on a purely metaphorical basis into the complexity of the human world, this elementary contradiction encourages us to understand that alliance and filiation carry within them various practical stakes, likely to create powerful and moving competitions. Rather than following

¹⁴ It was a *cercopithecidae* living in the savannah in multi-male groups: to our great shame, we were unable to retrieve the reference. More surprisingly, we have never seen a mention of this anecdote, or similar facts, in subsequent texts addressing this theme.

functionalists in their determination to fix *a* cause on *a* social relationship, it will therefore be beneficial to identify anomalies as events that give rise to discordances, instabilities or conflicts. Thus, as sources of considerations not focusing on one type of variable, but rather on the entanglements of several parameters.

1.3. Controllable conjectures: perceiving kinship as conditional

All this leads us to a conclusion: conjectures are unlikely to guide research as long as they focus on a factor, causality or principle. Because, to the extent that they accumulate information by subjectively deciding whether or not a counterexample is “accidental”, they condemn themselves to immobility. The perspective changes if we recall that social sciences and ecology are distinguished by prioritizing *relationships* in limited spaces and time and not “things” whose essence, presumed unalterable, is transported through various worlds [GUI 18]. If kinship is the “thing” to be deciphered, then betting on an invariant such as “male authority” is equivalent to arbitrarily truncating the study in advance by blocking other paths. Let us capture a share of omnipresent oppositions in order to see the way to escape the rigidity of the base, a determination or a classification. The empirical choice to come is in response to a desire to re-establish communication between sociology and ecology: depending on the purpose, one could add or remove some. And the sequence that follows is the path we will follow, no more:

– *sociology/demography*, or social and population kinship dynamics, less vague formulation than the former inbreeding/kinship designation;

– *evolution/history*, because, to reconcile them in front of kinship (and, by the same token, to bring out the different interventions of an authentic ecology), it will be necessary to learn to distinguish them in all circumstances;

– *prohibition/prescription* in the matrimonial rules, an alternative to which Lévi-Strauss has given his letters of nobility;

– *model/praxis*¹⁵, much more energy having been expended to describe

15 In the most common sense: human activities that can change society and its environment.

the coherence of kinship systems than their gap with reality, as if this gap never left the superficial stratum of contingencies;

– *filiation/alliance*, the most classic, either that we start the reflection with it or we finish it on it;

– *procreation/adoption* in filiation, complementarity rarely invoked in theoretical debates, which seems to fall here out of nowhere, but which occupies an important position in the reproduction of many societies and its presence can catalyze various dilemmas. Adoption creates filiations without alliance.

One thing is clear: instead of standing wisely next to each other, these dualities intersect and interfere. This would affect one of them and would be unlikely to leave the others indifferent. Although apparently uncomfortable, such a provision protects the scientificity of investigations by providing the possibility of multiple control over each assertion, which we will highlight in the following sections, it being understood that our aim is not to defend a particular problem, but to show the *raison d'être* of a certain mode of operation. *The permissible conjecture is therefore defined as a persistent question that lends itself either to the elimination of certain erroneous answers (to restrict exploration) or to a progressive correction of the question itself.*

Barry agrees, when considering the suggestion from demographics and population dynamics, “that the search for a minimum age difference between spouses for marriage is a determining factor in the form of their union” [BAR 08, p. 103]. This link is open to calculations over a long period of time, which reveals a growing incompatibility with the sustainability of kinship systems: neither spectacular outcomes nor wasted energy, this is just a “normal” and satisfactory episode in the scientific process. Having said that, it is time to move on to a more successful operation.

1.3.1. Aram Yengoyan’s edifying investigation into Australia

In 1966, the famous *Man the Hunter* symposium [LEE 68] – unfortunately an unequalled success of multidisciplinary research – reserved part of its program for marriages and models in Australia. This immense

space was once monopolized by nomadic hunter-gatherers, which evolutionism considered to be the most “remote” stage of humanity, but which quickly fascinated ethnography by the dizzying complexity of their kinship systems and preferential marriages. One of the contributions “Demographic and Ecological Influences on Aboriginal Australian Marriage Section” [YEN 68] was from Aram Yengoyan, a 30-year-old researcher at the University of Michigan¹⁶. It received little comment in subsequent discussions, and its heuristic qualities were apparently fully understood following Maurice Godelier’s praise a few years later [GOD 77].

The title clearly indicates a functionalist inspiration: to speak of the “influences” of the environment on society is to immediately subvert cause-and-effect relationships, thus to camp on a determinism that does not require a non-oriented observation of interactions. In this respect, Yengoyan’s presentation began in a conventional way with relatively rough correlations linking biogeographic variables to social provisions. Moving from Australia’s humid periphery to the arid center, he noted a predictable scarcity of resources that went hand in hand with increasing dissemination. At the same time, the tribes’ numbers were increasing, as well as the size of the territories they exploited. So far, nothing unexpected¹⁷. However, Yengoyan observed that, on this same path, the number of subdivisions of each tribe tended to increase, from two halves, to four sections, then to eight subsections: suddenly, the correlation reached a structuring of the social structure in charge of the reproduction of groups through these preferential marriages and matrimonial exchanges that make Australian cultures a terrible puzzle for ethnology. Suddenly, the consistency of the reflection took on a new dimension.

This was especially so since the author did not stop there and since this rudimentary ecology (in light of subsequent, less global surveys) logically extended to an unprecedented demographic assumption. In summary, considering that the usual marriage associates a boy around 25 years of age with a younger girl around 10 years of age, and that the proper functioning

16 Under the aegis of Leslie White (who succeeded Julian Steward), Ann Arbor (Michigan) became a foundation of knowledge of materialist anthropology in the United States, with spectacular areas that brought together the best and the worst: her epigones ranged from Marshall Sahlins to Napoleon Chagnon, Robert Carneiro and Elman Service.

17 In fact, this part faithfully follows the problem established a dozen years earlier by Joseph B. Birdsell, then a prominent reference on Australia [BIR 53].

of the system requires that a man can consider 25 potential wives, he deducted the size of the tribe that would manage the matrimonial operations without foreseeable difficulty. This number increased with subdivisions: 262 individuals for a “half” organization, 530 individuals when dealing with four sections and 1,070 individuals in the case of a division into eight subsections. If, following a serious crisis, or a series of penalizing crises, the human volume falls well below these thresholds, everything suggested that society will not ensure the reproduction of social units without violating established rules, i.e. without broadening the scope of contingencies.

Half a century later, this text attracts two types of *a priori* contradictory and yet reconcilable evaluations, with praise finding a strange reinforcement in critical reprimands. On the negative side, first of all, there is almost nothing left of Yengoyan’s accounts. Laurent Dousset informed¹⁸ us of the unreliability of the documentation used. In addition, a detailed ethnographic examination published by David McKnight undermined the environmental determinism underlying the analysis by identifying the presence of subsection tribes in less constraining environments, as well as “half” tribes on very poor biotopes. More serious, undoubtedly, the questioning goes so far as to challenge the validity of certain mathematical treatments and, consequently, the fact that the number of potential wives for a man is inversely proportional to the number of sections [MCK 81]. In short, everything would have to be redone, with more reliable information and less flawed procedures.

Besides, why not? We have already mentioned, with regard to Murdock, that there have been significant advances in the use and interpretation of statistics since the 1960s: the human sciences have learned to better protect against the arbitrary transformation of a correlation into a determination, and the use of multivariate analyses, for example, has sometimes avoided the straitjacket of simplistic explanations. As such, this answer will not reassure anyone, because, at the same time, it happens that these new analytical techniques can also easily be used to restore, under dazzling sophistication, the same old schemas.

So let us put it another way. Why did Godelier – a distinguished theorist, guided by both structuralism and Marxism (and therefore not very suspicious

18 Personal communication: our conversation about Yengoyan, in addition to Sejin Park’s thesis defense, was an important trigger for this volume.

of collusion with reductionism) – seize the framework drawn by Yengoyan, even though, in the *Man the Hunter* symposium, where supporters of ecological power abounded, no one seemed excited? More generally, why do the most stubborn opponents of functionalism, pushed to their limits, concede that, behind the screen of caricatured thoughts, this current of thought harbors highly honorable researchers who occasionally produce invigorating claims?

We know the major flaw of functionalism: wanting, at all costs, to establish links of dependence between two facts (or two phenomena) while neglecting the perspective of reciprocity of influences. The response to each attempt must then distinguish two levels: the credibility of the determination, on the one hand, and the intrinsic importance of the link it captures, on the other hand. In his hunt for the treasure of a founding condition, the persevering functionalist sometimes finds unnoticed relationships and discrete variables that a structuralist approach, obsessed with coherence, has not discerned. Yengoyan's prospecting corresponds exactly to this situation: his "ecological" explanation certainly did not last long, but Godelier retained the contribution of a new perspective on the incorporation of very complicated kinship systems by cultures classically presented as "simple" and "primitive". Although neither environmental harshness nor demographic fragility imperiously dictate their laws to Australian kinship, a sensitive relationship is required beyond any discussion: the concrete difficulty of a biological perpetuation of social groups in a nomadic way of life that spreads small groups across huge spaces. To illustrate this, consider a population density thousands of times lower than that recorded further north in some horticultural areas of New Guinea: no zoologist draws a line separating ecology from population dynamics and, despite the fact that it appears in Yengoyan's title ("demographic and ecological influences ..."), his investigation eventually dissolved it. Demography is more amply and intimately ecological than anthropologists assumed.

In other words, all "influences" are diluted and the outcomes are distanced from them: 1,070 probably does not deliver the number of individuals necessary for the matrimonial prescriptions of an eight-section tribe, nor does 530 certainly satisfy an entity divided into four sections. According to the old formula, the case now appears a little "more complicated than that". On the contrary, the project of such assessments is not obsolete, because an underlying idea safeguards an intact brilliance: among nomadic hunter-gatherers, a powerful connection concretely prevails between the persistence of a biological population and that of the cultural

structure that inhabits it or surrounds it. “Claiming” does not fall in synonymy with “determining”: it means that, deprived of this subtle articulation between life and society, a certain mode of existence inevitably disintegrates in the short term. The demography of exotic societies and paleodemography still perpetuate today a way of thinking in which the environment acts on groups without them really reacting, even over the long term [BOC 08]. In this sense, Yengoyan’s contribution must be understood as an authentic multidisciplinary conjecture: a strictly situated enigma, waiting for a deciphering by several sciences. Laurent Dousset has perfectly formulated what to remember:

“The relationship between demographic conditions and the way resources are exploited plays a central role in transforming both kinship relationships and their deployment as a means of controlling resources through marriage. But this role must be assessed by situating it itself within specific historical transformations: it is the variation of the relationship over time, and not just the relationship as such, that plays a central role” [DOU 16, p. 300].

We will return to this last sentence and to the relationship between filiation and alliance deduced by Godelier. But first, let us refer this sociology/demography relationship back to the evolution/history relationship.

1.3.2. An ecology of kinship from its initial reports

The formal defect shared by ancient speculations on the origins of human kinship (matriarchy, primitive communism, male authority, etc.) has emerged openly: they focus on a core within the social, or within the biological, independently of the relationships with the practical components activated “from time to time” by the contexts. What it amounts to, if we are to be forgiven for the expression, is continually digging inside a point, and also, to suffering a fatal immanence at the heart of the stated fact. There is no reason to condemn the search for an initial universality if it does not belong to one of those bets that explains evolution by the immutable.

In most discourses that directly or implicitly address the issue, a mysterious demarcation line separates history from evolution. An

anti-reductionist perspective imagines that the entry of the first would put an end to the reign of the second. The opposite view responds that the laws of evolution transformed into “gray eminence” exert an underground but decisive action under the historical moss. However, this reply is based on a mistake made by the opposing party that it avoids denouncing in order to find its own comfort. In short, although no one dares to endorse “societies without history” any longer, knowing that it is not enough to remain silent to escape it, the notion still haunts us through the conviction that history would emerge at a “moment” in human development: evolution would invent it, either to give it all its responsibilities or to entrust it with the management of the quotas accumulated by a decidedly overly agitated species.

It means forgetting that history exists everywhere, at all times and for all living beings without exception: events such as the isolation of vast spaces by continental drift, a massive meteor, or an extended volcanic crisis, are not evolutionary facts, they are shocks to which natural selections themselves will have had to “adapt” by changing their course. Much of evolution is stimulated by the obligation to respond to stories, with or without human beings on the ground. Depending on the reference frames entered, we will see evolutions in a story or stories in an evolution. Reductionism (including functionalism, in anthropology) thus uses a theoretical deficiency of its usual opponents to mask its own weakness, which perpetuates a false debate by obliterating the real one. Let us therefore agree that evolution consists of trends collected by “going back in time”, and that history deals with episodes, i.e. identified moments that are marked by disruptions and crises.

This introduction, which is far removed from the concerns that mobilize us here, will quickly abandon its incongruous aspect: a character reserved for certain hominids reflects a more frequent interaction than elsewhere between history and evolution, even in the absence of articulated languages. Our evolving branch has developed the association of two traits that rarely coexist elsewhere: a strong *specialization* in the biological reproduction of its members, coupled with an *opportunism* that is also pronounced in the exploitation of the environment¹⁹. The species of the genus *Homo* have a population growth limited by the meager number of offspring potentially generated in a group over a generation: a long gestation period, rather high infant mortality, the mobilization of considerable collective energy to

¹⁹ This contrast is found, more or less, in chimpanzees, which makes it all the more interesting to reveal truly cultural variations between their populations [MCG 92].

preserve young children, coupled with a long life expectancy of 35 years or even less, indicate that, even under optimal economic conditions, a Paleolithic population could not increase tenfold in a short period of time. In the animal world, this arrangement often goes hand in hand with very high environmental efficiency, with protection against accidents by focusing on a single target. However, hominization adopts the opposite approach: increasingly specialized in its reproduction and more opportunistic in biocenoses [GUI 14]. The conjectures that will revolve around this report will therefore not suffer from a radically arbitrary content, since they will work on a contrast that ecological fluctuations will make bear regular historical imbalances. Hence, the above formula of interactions between history and evolution: humans' long-standing sensitivity to the sustained repetition of historical hazards is becoming an evolutionary phenomenon within our genus. Trends perceived over 20, 30 or 100 millennia will necessarily overwhelm this intimate contradiction. As a result, conjectures will be made, no longer on the basis of intuitive inventions, but by confronting objective conditions that are open to refutation.

It is enough, to begin with, to apply a logical rule so trivial that one would think it was a joke, although it triggers many demonstrations by the absurd: if an hypothesis of evolution placed in the distant past (say, during the Paleolithic) implies the disappearance of our species in a few thousand years, even in a few centuries, then the observation of humanity's current survival is enough to refute it. We have previously used this motive concerning regular cannibal violence, some of which prehistorians revive and themselves disseminate the image [GUI 10]: by estimating that a population growth of 2% over more than half a millennium would have corresponded to an almost miraculous peak, groups of Mousterian hunters of 15–30 people who would have, on average, killed and eaten a fellow human every three years would have caused extinction long before the dawn of the Upper Paleolithic. In this case, however, the food dimension of the scenario is decorative. The disaster results from the only deadly violence that can be envisaged in temporary historical crises, but, in the long run, intolerable in a socio-ecological and logical context that mercilessly represses such losses: above a certain threshold, the degradation increases by itself.

We are entitled to assume that no historical crisis has prevented human evolution and the proof is that we are here today. There have been regional tremors, no doubt, moments of fragility with more deaths than births, but none that have been continuously occurring throughout the species for

centuries, otherwise our ancestors would not have left any descendants. Certainly, geneticists have suggested that, about 150,000 and 70,000 years ago, our forefathers almost disappeared as a result of profound climatic disorders. However, we must think back to millennia when the behavior of the groups in sporadic phases of depression never ruined the survival of our branch, except that of other species or subspecies. The case of the Neanderthals nowadays fascinates a crowd that zealously reflects each discovery to feed all kinds of hypotheses, many of which do not realize that they carry forward over tens of thousands of years, fanciful hypotheses of exacerbated competitions and antagonisms, literally unthinkable over such long periods. We will come back to this after observing that all this brings us back to a transfer of the Yengoyan conjecture in a perspective that reconciles evolution with its stories. Nature will no longer deliver “pressures” to it that direct people independently of their singularities. Kinship is, in a way, the result of an ecological “constraint”, with the important clarification that the existence of this force depends in return on the singular requirements of the human condition, which incorporate a minimum of social cohesion and migration from one gender to another.

There is therefore no danger in affirming that, in hominization, the alliance has generally prevailed over violence. In practice, ascendancy is by no means self-evident; the social assimilation of blunt, piercing or cutting tools makes murder easier to improvise in the face of the unchanged slowness of reproduction. Aggressiveness, even assisted by an increasing specialization of techniques that defeat game and the enemy, leans towards the opportunistic side of behavior. Hobbes’ *Leviathan*, one of the beacons of modern thought, opened with the observation of a physical fragility of men that led them to an “artificial” concord (mirroring the natural concord of animals), the famous “war of all against all” being untenable: once again, posterity cut out clichés from the reflection, without regard for the author’s theoretical intention.

Yet, prehistorians estimate from their empirical knowledge that Paleolithic hunter-gatherer groups occupied the area with a density of about one person per hundred square kilometers, with many and wide variations, depending on the more or less prosperous periods, or the more or less hospitable areas. In modern times, estimates are approximately one to three people per 10 square kilometers [BLE 99]²⁰. Based on this approximate

²⁰ Estimates of the number of aborigines in Australia at the time of the historical “contact” with Europeans concern around one individual for every ten square kilometers.

benchmark, Europe would be home to about 100,000 bipeds. One can well imagine the double, triple or quintuple, the consecutive image will always give the sensation of a small population scattered over an immense area. *Neighbors*, whether the primatologist's²¹ (or anthropologist's) ethological point of view fixed to "male authority", appears above all as rivals and competitors, are at least as much a worrying rarity in terms of the physical reproduction of social units.

Incidentally, this remark, at first glance innocuous, invalidates a stream of scattered evidence involving what Darwin called sexual selection: male competition for access to females and offspring. Such a struggle is clearly prevalent among many monkeys, as well as in Neolithic societies developed war and polygamy. On the contrary, it stumbles "between the two" over the hundreds of thousands of years in which men have lived in small groups requiring constant solidarity among its members, knowing that their dissemination highlighted a priority difficulty: the comparison of a man and a woman. The regularity of exacerbated competition between males would have shaken the "full employment" of both sexes, and then, over time, devastated the population. The remanence of the grudge cannot have been separated from that of alliance and, in the problem of evolution, finding a brother-in-law prevails over hostility towards the stranger. Last but not least, our contemporaries testify by their presence that this limit was, on the whole, respected.

A reluctance will arise at this point, aiming at the uncertain equivalence between neighbors and strangers: certainly admissible in the stories to which we have access, does the protest apply to a segment of evolution that is going through the emergence of language without knowing where? A sensitive relationship emerges: the "others" are only classified as relatives, similar people, close, and exotic if words distinguish them for this purpose. When they do, it is likely that an idea of society, even if only the "tribe", will crystallize orally²². Many people tacitly, even unconsciously, postulate that language is a necessary ingredient of kinship, and that it has immediately covered all the reality apprehended by speakers, even if it means obscuring

21 In the absence of a general study of the relationship between population density and lethal aggression in monkeys, it should be noted that spectacular carnage involves overabundant species in smaller environments, see [PAR 17, Chapter 3].

22 This is similar to the Durkheim/Lévi-Strauss dissension: the latter supported the sudden [LEV 50] and very old [LEV 98] emergence of language.

two hypotheses in principle: kinship as the predominant stimulus of language, and the complementary possibility of a word oriented primarily towards relations between men, and later on towards the exploitation of nature. Although the articulation of verbal expression and technical gestures are part of progressive specializations, there is no reason to believe that they used only one thing: the domination of manual learning by imitation would be consistent with the slow progress of the lithic industry up to the Upper Paleolithic [GUI 17]. Wasn't the first urgency of language to establish social relationships in order to "program" biological reproduction that was difficult to guarantee?

No digression: how could the premeditation of the alliance to counter the ruinous effects of a "left behind" abundance not provide an essential parameter for the expansion of primitive populations? How can the memory of the other and the prediction of the spouse not be mutually beneficial? The economic negligence of hunter-gatherers (often proclaimed, nowadays, by the surrounding farmers) would maintain an open and constant contradiction with a thoughtful anticipation of matrimonial unions, whose pre-colonial Australian material offers, in a way, the ultimate isolated manifestation. If this is not proven, the staggering complexity of kinship systems, combined with a careful prescription from the husband or wife, abounds in this respect.

Let us add for peace of mind another type of variable to come out of silence: omnivores with a supposed predominance (but under discussion) of the meat diet, the groups traveling through large spaces where there were landmarks on various routes. It is important that they meet differently than at the whim of hunting, but where, when and how? The emerging anthropology had decided to work in two fields: "social morphology" and "social physiology". The second one quickly monopolized the minds. Marcel Mauss, however, very early on defended the issues of the first one concerning seasonal variations among the Eskimos, with an alternation of dispersion and grouping accompanied by various religious and legal "effects" [MAU 50]²³. Too few contributions are made to this sector, although the social encounter sporadically requires the support of a few physical materials.

The question would take us too far with an accumulation of punctual possibilities suspended in the void. We have learned something in the

23 Original text dated 1904–1905.

beginning of section 1.3: the justification for these evolutionary conjectures, however enormous they may seem, lies in the fact that some of them undermine us while others stagnate in limbo. Pretending to refuse the exercise is ultimately equivalent to tacitly selecting certain intuitions and burying those that disrupt common sense. However, science is advancing against “common sense”. Elementary caution would require that intuitions and rejections be regularly detailed in front of each other, instead of veiling the approved in order to keep the critiqued buried.

The mysterious coexistence of Neanderthals and our “official” ancestors attests enough, today, under the guise of a childish imperialism of molecular biology, that these games of fools are not innocent, if only in the stiffness with which geneticists resist conceding *doubt* about the peremptory proclamation (issued 20 years ago against the conjecture of prehistory and classical paleoanthropology) that the compartmentalization of the species dissociated the two strains. Crossbreeding was established in the Middle East 80,000 years ago and, at the time of writing, the press is reporting the discovery of a Siberian (Neanderthal/Denisovian) half-breed dating back 90,000 years. At the same time, a case of high inbreeding occurred among Neanderthals in the Denisova Cave (an individual presumably from two parents who were both maternal and paternal cousins), while the DNA analyzed on 13 contemporary individuals discovered in a Spanish cave (El Sidron) indicates, at the same time, a virilocal residence (men of a single lineage, women from other lineages). And that is not all: geneticists have subdivided that hybridizations cause pathologies, or that a genetic barrier has been created between Neanderthal men and *Sapiens* women, which would explain the absence of offspring of the Y chromosome in the second population. All this – and more²⁴ – over the past decade: it is dizzying.

The fact that DNA analyses enrich our paleoanthropological knowledge with unexpected finds yesterday is hardly controversial. Frustration then arises from the attitude of geneticists when they refuse to consider that they do not have all the necessary skills to interpret their findings. This is an evolutionary science that exhumes facts from localized *histories* and immediately converts them into clues to general *evolution*. How many

24 We avoid side fantasies: “Red-headed” Neanderthals, allergic to Brussels sprouts, etc. But above all, we are leaving aside the earthquake that is looming with the discovery of several unprecedented human forms that have survived far beyond the demographic bottleneck of 70,000 years ago, in Indonesia (Florès) and China (Yunnan).

promising questions are becoming premature decrees? As if victory should be attributed to the announcement of the truth and not to its demonstration. Let us return to the virilocal union in El Sidron 50,000 years ago: in the hypothesis of an uncompromising resolution of the Neanderthals on this point, would it be absurd to attribute the absence of their Y chromosome in the *sapiens* to the fact that they only gave to women rather than to conclude from the outset that there was a genetic incompatibility? As for the low proportion of Neanderthal genes in our contemporaries, it does not prove the rarity of exchanges in the distant past, if we consider that we come mainly from those who came from Africa *after* the demographic crisis of 70,000 years ago, deduced by other specialists. Obsessed with the disappearance of a neighboring species, speculation forgets that throughout the world, entire populations of *sapiens* have become extinct. Let us not go any further: geneticists produce adventurous speculations in isolation, not only without consulting other disciplines, but also without communicating with each other. Hence, we wrote above that the euphoria of this early technoscience was a “childish” trait. It would be enough to abandon these hasty judgments, which are confronted with cascading denials, and to open a less hasty dialogue between molecular biology, classical paleoanthropology, prehistory *and also* ethnology in order to develop progressively more refined problems. By promising the same caution in the face of the inflexibility of a Y chromosome, to which the male protection of specific identity applies, on the one hand, and in the face of the evidence of an articulated language from the early Paleolithic period, on the other hand. The ridiculous deduction of evolution from a few historical facts in no way gives way to the enormity of the operation in the opposite way.

Social anthropology, prehistory and genetics have all officially banned the floating conjecture on their domain, with provisional deliverance producing a pitiful result in the long run: each time, the bias returns clandestinely to analysis through philosophical beliefs that transform conditional ideas into peremptory but silent arbitrations. In zoology, the concept of species is an essential *theoretical* issue. By sliding towards a human “end result”, it becomes immersed in an *ideological*²⁵ issue. Kinship is definitely too serious a matter to be left to geneticists. The only way to protect against harmful conjecture is to restore their status in the discussion

25 A long time ago, in a symposium, we heard a renowned paleontologist begin his presentation by defending the unalterable definition of the species, before explaining, a few minutes later, about hominization, that this notion required special treatment.

by displaying them all together to confront them, which will facilitate the regulation of their use.

1.3.3. Prescription and prohibition: “to marry the closest”?

A conjecture that assumes a concrete dilemma is more resistant to repression or interference, and the absence of an ideologically more attractive response than another gives it a stable persistence. Lévi-Strauss distinguished three major categories among kinship structures. First, *elementary structures*, where matrimonial unions are oriented by preferences, even governed by prescriptions: they are then subdivided according to the modalities of exchange, restricted or generalized, then, in the latter case, symmetrical or asymmetrical. Second, *semi-complex structures*, where no rule stipulates a particularly “desirable” spouse, but where, on the contrary, the prohibition of incest extends to such a large number of individuals that it greatly reduces the number of acceptable “candidates”. Finally, *complex structures*, where, outside the prohibition weighing on a certain number of inbreeding identified as such, alliances are constructed according to criteria completely outside kinship, which is perfectly summarized by the sentence of a Languedoc winegrower remembering the endless debates starting between adults when two young people danced several times together at the village ball: “Here, the vines were married.”

For decades, anthropologists have retained that Lévi-Strauss did not suggest any historical or evolutionary threshold in his general classification. However, assimilating the growing mistrust of the structuralist in the face of diachronic perspectives, exegetes have somewhat “overstated the point”. Admittedly, this denial can be read in the concluding part:

“We must, therefore, reject to the end any historical-geographical interpretation that would make the limited or generalized exchange the discovery of a particular culture or stage of human development. Wherever restricted exchange exists, it is accompanied by generalized exchange, and the generalized exchange itself is never free of allogeneic forms” [LÉV 67, p. 532, our translation].

These two forms of exchange would be exposed to different types of “contamination”. The exclusion of the “historical-geographical” vision is

therefore only part of the elementary structures. However, the problem is changing in the face of complex structures:

“For us, who limit ourselves to a structural analysis the proposal will be sufficient according to which complex kinship structures – i.e. not including the positive determination of the type of preferred spouse – are explained as the result of the development, or combination, of elementary structures, even if it means devoting a special and more developed study to the former later” [LÉV 67, p. 534].

Ethnology has no evidence that would give it access to an internal genealogy of the various forms of elementary structures, even if the possibility of such phylogenesis were to emerge from the improbable. But complex structures, which are the result of a transformation of elementary structures, necessarily represent a derived phenomenon, “not primitive” in the literal sense, which is clearly indicated by the title of the chapter: “transition to complex structures”. Are we dealing with a conjecture that is open to doubt?

Let us argue for a moment in favor of the devil. From a sociobiological point of view, nothing thwarts to a *certain extent* an opposite scenario, inspired by chimpanzee “cousins”: the departure of young adults, of one sex or the other, would be “prolonged” without any hindrance in our ancestors on the occasion of intermittent comparisons. The groups of the ancient Paleolithic would have benefited from seasonal encounters, by increasing their effectiveness through a ritualization of these reunions conducive to unions, and exogamy would thus move without difficulty towards a kinship prohibiting incest without more, the real complication resulting then from the epiphenomenon of the so-called elementary structures, with their exchanges. Yet this coherent image stumbles on a solution of continuity: no autonomous culture appears in modern times whose complex kinship structure does not depend in any way on powerful political (nobility) or economic (wealth) inequalities, while at the same time, all societies, without exception, have learned to think of the gift and counter-gift, parity, the exchange of the living and the dead. Ethologists have glossed over relentless revenge in primitive societies, rightly emphasizing the generality of the law of retaliation, but none of them realized that such a fierce desire to equalize a murder suffered by an equivalent loss “opposite” necessarily welded to an equivalent resolution in the distribution of spouses: in the context of a

demography whose precariousness is constantly distressing, which makes the unbearable disadvantage impossible to separate from what makes the advantage formidable.

We return again to the point that evolutionism desperately tries to bypass in order to replace filiation (and genetics) before the discussion: kinship acquires the consistency of a phenomenon in its own right only if we renounce defining its advent within a group in order to study it at the level of an endogamous set of social units. Its emergence implies a system (tribe, *nexus*, group, etc.²⁶) that works to organize and contain all matrimonial exchanges, even if, in practice, the said system allows itself, by demographic obligation or political choice, the possibility of opening up to new participants. The dialogue between ecology (including population dynamics) and the sociology of kinship necessarily develops on this level: if it begins elsewhere, it will be in order to trap the audience in a pre-established theoretical position.

Exclusion follows from the complex structures of an initial period of kinship, since the interdependence between groups in their positioning towards each other fades rather than asserts itself: each group discerns its identity by confronting itself directly with the established society (which includes a *nexus*, or several), while the collective memory of alliances loses its pressing character as soon as it no longer ensures the prohibition of incest. However, the situation is quite different for semi-complex structures, which in recent decades, some anthropologists have discreetly put in the “complex” drawer, as a subcategory. However, this arrangement in the name of relative formal proximity disdains the ethnographic aspect of a curiously homogeneous system: semi-complex systems fall *de facto* in synonymy with “Crow–Omaha systems”, with the same logic served by the Crows on the matrilineal side and by the Omahas on the patrilineal side.

We have so far carefully avoided investing in the field of kinship terminologies, although they are at the root of the theory developed by Lévi-Strauss: they tend, in fact, to imprison reflection in an internal understanding, incompatible with an external interdisciplinary approach²⁷.

26 There is still some confusion in the literature about the right word: Yengoyan used to say “tribe”, demographers talk about “groups”, but *nexus* is surely the most appropriate term, since it is the least ambiguous.

27 Dominant trend, not fatality: see Chapter 3.

However, it is worth pointing out, or recalling, a salient feature closely linked to matrimonial strategies: their character, known as “oblique”, which reiterates a qualifier over several generations. In an Omaha schema, the term that applies to the uterine uncle also applies to his son and his son’s son. The word that refers to the mother also applies to the mother’s sister and the uterine uncle’s daughter. The father’s brother also becomes a father. And all the children of a person called “mother” or “father” are brothers and sisters, even if they were born by the daughter of the son of the maternal uncle: with the consequential prohibition on marriage. In the wake of Lévi-Strauss, Héritier saw in these structures the “point of articulation” between elementary and complex structures, and renames this intermediary into “semi-complex structures of *the alliance*” [HER 81, p. 77]²⁸. Undoubtedly, the impression is justified, if it is a question of considering, internally, the mode of constitution of the framework, but, at first glance, the affirmation does not engage an external historical-ecological problem, or a sociology of practices: did the prescriptive and semi-complex systems develop separately, or was there a derivation from the one that led to the other? Again, the formulation of the enigma does not derive its legitimacy from the hope of an accessible answer, but from the need to complete the meticulous curiosities of structuralism: unless it is claimed that human societies have invented kinship under the irrepressible impulse of a desire for formal logic, the question of living conditions must be restored from time to time. The result obtained by Héritier on the Samo of Burkina Faso by means of meticulous computer processing (reinforced by another quantified study by Elisabeth Copet-Rougier on the Kakö of Cameroon) offers us a benchmark: marriages significantly tend to be performed just beyond the limits set by prohibitions [HER 81].

Moreover, the distribution of facts has changed: perceived, at first, as a North American originality, the occurrences of Crow–Omaha systems have multiplied in Africa (we will see this in the forest massif where the Omaha model underlies a large number of neighboring ethnic groups) and in the Amazon. More unexpected: on the occasion of a recent collective re-evaluation of the theme [TRA 12], two authors, Patrick McConwell [MCC 12] and Laurent Dousset [DOU 12], separately highlighted partial convergences, more or less lasting, between part of Australian societies and certain distinctive characteristics – not all – of Crow–Omaha systems.

28 Our use of italics.

Dousset examines the terminology within the cultural “block” associated with the Western desert, inserting it into a historical perspective that it “washes away” from multiple errors and misconceptions. This work thus reveals an underestimated intimacy between the concerns expressed by elementary structures and those attributed to semi-complex structures.

Sometimes, a simple overview of the cases gives rise to serious suspicions. By adding Yengoyan’s socio-demographic tension to the conclusions of Hérítier and Copet-Rougier, two dominant and intimately linked recurrences are required: on the one hand, very agitated stories, underlined by hasty displacements, and, on the other hand, an often flagrant difficulty in maintaining the system of alliances in an endogamous *nexus*. Starting with the Crow and Omaha themselves, Sioux-speaking peoples, whose recapitulation of migrations, conflicts, epidemics and social transgressions was a challenge between the 17th and 19th Centuries (and almost a fantasy before). Their population, estimated at 2,500 individuals around 1750, was cut by two-thirds in 1855 [OSH 92, p. 271], long before ethnography began to describe their culture. However, the renewal of their matrimonial system within their people, precisely because it was not based on prescription, probably requires a much higher human volume. Therefore, when Hérítier commented among this people on a rather disconcerting sororal polygyny at the beginning of the 20th Century, would it not be appropriate to ask whether it should not be seen as the least shocking expedition with regard to the Omaha themselves to avoid a “normally” unmanageable situation?

If it is confirmed (as various authors suggest) that a semi-complex system “in isolation” requires a substrate of several thousand people, its realization, before the Neolithic period, in a world of rare and dispersed nomads becomes highly improbable. And, by stopping the reflection at this point, the premeditation of a preferred type of spouse (thus, the use of elementary structures) corresponds in these remote times to a socio-ecological solution that is surely more rational. This is done *in an evolutionary perception* that implies a classical contemplation of things, above a history considered negligible. Nevertheless, we are talking about a species that is constantly torn between the specialization of its reproduction (minimal tolerance of oscillations) and a way of life that also favors opportunism (factor of large oscillations). In this respect, ecology certainly does not wait for the export of smallpox by Europeans to generate fearsome historical crises that matrimonial strategies receive with full force.

The elementary structures organize exchanges more or less deferred between groups in order to guarantee their sustainability with a satisfactory distribution. A requirement follows: network stability. The accidental defection of one or more links threatens to collapse the building like a house of cards. But then, when a social disruption leads a certain number of social units on this fatal slope, apart from the ultimate and catastrophic abandonment of exogamy (illustrated above by the Neanderthals of the Denisova Cave), what recourse will remain, if not a restriction of kinship to a listing of all those with whom the members of a group maintain a connection, whether by consanguinity or by alliance?

A hypothesis is emerging: do the “oblique” terminologies that extend brothers and sisters, fathers and mothers, maternal uncles and uterine nephews, not also coincide with a strategy in this direction? Ethnology has become accustomed to thinking of them in a comparison with complex structures, because of their ability to maintain an endogamy covering a series of subdivided clans. However, the link is no less convincing in the opposite direction, namely the defense of a minimum organization of the circulation of one sex between groups. The “semi-complex” systems would also carry a “semi-elementary” physiognomy, confirming themselves as a “point of articulation” likely, depending on historical circumstances, to lean towards one or the other orientation.

In this respect, our attention will benefit from focusing jointly on the rules posted and the derogations assumed. The reaction to the chronic failure of functionalism when it pinpoints an economic or political rationality on a custom too often consists of denying the quest for any rationality. Instead of a scientific denial of the erroneous problem, with its incongruous frames of reference behind the fiasco, a philosophical revocation takes as its target any search for the practical efficiency of culture. This results in a very unfortunate lack of interest in the damage suffered by the tradition. However, even if a set of traditional practices escapes accreditation by causes, its more or less temporary (and more or less local) corruption sheds light on discrete interdependencies. The confrontations between posted rules and assumed derogations therefore open up access to relationships that existed before but which suddenly become identifiable because the standard can no longer make them indisputable.

Albert Camus wrote: “There are always reasons for killing a man, but it is impossible to justify his living”²⁹. The point lends itself to another analogy: it is impossible to guarantee the validity of a culture, but there are always reasons for its disintegration. One of the two ambitions opens with a metaphysics of the organized being, the other with a history of disorders that summons circumstances. The multiple constraints inherent in semi-complex systems provide, on this level, a framework conducive to a comparative analysis delivered from this confusion of expected knowledge.

1.3.4. *Contraventions, restrictions and extensions: adaptable kinship?*

During the second half of the 19th Century, a multitude of groups belonging to people speaking Ubangian (Isongo, Ngbaka) or Bantu (Ngando and Aka Pygmies) languages converged in disarray from the south towards the Lobaye region (a tributary of the Ubangi, in the southwest of the current Central African Republic). Although all these migrations came from the desire to escape a stirring catastrophe (resulting from the European trafficking at the time), the area absorbed and contained a sudden demographic growth which in turn led to a new upsurge in violence. This northern edge of the forest massif led quite abruptly to the middle of the savannah, an ecological border that dissuaded semi-nomadic slash-and-burn horticulturists used to enjoying the benefits provided by the hunter-gatherer gang society.

Like most people living in the surrounding forest, all named ethnic groups, including the Aka, used Omaha kinship terminology, with the accompanying matrimonial regulations: “every time a lineage is chosen to obtain a spouse from it, all its members are automatically excluded from the number of spouses available for the reference line for several generations” [LÉV 67, p. XXVI]. The “lineage” refers to *the* unilinear group entered as an eminent reference, which immediately raises the problem of the potential socio-political concurrence between the two stages of lineage and sub-lineage. Because the classic prohibition of alliance repetition in semi-complex systems applies to “a finite number of generations but which cannot be said to be rudimentary” [HER 81, p. 78].

²⁹ *La Chute*, Gallimard, Paris, 1956, our translation.

Among the Ngbaka (who represent our center of gravity), the “blunder” of one interlocutor led to the separation a few days after our arrival: this man’s village declared three lineages, but when asked about his home group, he inadvertently gave another name. The incident provoked sighs and gestures of resignation from two witnesses to the conversation who willingly agreed to teach us the subdivisions. A symptomatic reticence broke through under the “confession”: if the lineage proudly proclaims unity, the sub-lineages in these villages confirm deplorable internal rivalries. The neighboring Ngando firmly respect the authority of the whole over the parties, which significantly reduces the manifestations of these internal divisions. As a result, even if the number of generations covered by the incest prohibition remains fixed, the range of individuals actually affected is subject to variations that are difficult to assess without a comprehensive study. Thus, the ancient Ngbaka had a rudimentary method for “counting kinship” from an ancestor: births of a generation were listed by drawing a line on the ground for each one, with one line per generation. However, tensions between age groups meant that, in the 1980s, young people had lost this use³⁰. As a result, the monitoring has lost some of its acuity. In any case, the danger never disappears of discovering after the fact that a marriage has broken the law: the use of a ritual known to all is usually enough to correct the disorder.

We would now like to present some final general information. According to most Crow–Omaha systems (all, perhaps), two obstacles are added to the prohibition of incest in the African forest. If a man of lineage X proposed a woman of Y marriage despite a similar contract being recently concluded, the Ngbaka of Y would be offended by this formula: “Did you take us to war?”. Conversely, if a man of X considered a union with a person of Y after a woman of his own lineage married a member of Y , an equally conventional reply would await him: “Do we get married, or do we exchange?”. In both situations, as long as children are not born from the initial union to seal a kinship relationship (with a maternal uncle in the atom of kinship), no threat of incest *stricto sensu* represses love between X and Y ³¹. The conciseness of

30 Several cadets took advantage of our investigation to retrieve this non-transmitted knowledge and “retrieve” their genealogies.

31 Logically, this double supplement would rather be an *oblique* extension of “incest of the second type” [HER 94], but we will not pursue this line of thought here. Sororal polygyny among Omaha who have just suffered heavy demographic losses now illustrates the fragility of the system in the face of some erosion, as reported above.

the maxims motivating the refusal implicitly concedes this exteriority: in the first, the rejection of domination underlines in a classical tone that the political dimension of union fully permeates the consciences, but the second fascinates by its structuralist “style” and by the brilliance it gives to the alternative marriage/exchange which signals semi-complex systems³².

The analysis will now benefit from distinguishing two phases where the contrast of successive atmospheres instructs us on the receptivity and reactivity of the structure: the slow journey to the sites currently inhabited led to a sudden process of sedentarization required by the settlers from the beginning of the 20th Century.

Let us summarize the initial part. Most Ngbaka groups went back up the Oubangui in a dispersed order, making steps of a few years in places considered suitable. The image of a few abandoned oil palm trees indicated a former human occupation of the area, revealing a site probably suitable for a stopover. Arriving at the mouth of the Lobaye, the collective memory of a present-day village, called Mèttè, tells us that men saw banana peels floating on the tributary: the presence of this plant, culturally cherished among all by their people, encouraged them to believe that other Ngbaka were staying upstream. Several lineages were then split, some “families” continuing their journey along the river, while others turned off on the West Arm. They followed it only for several tens of kilometers, before reaching, with two or three episodes, the territory that nowadays coincides with the municipality of Loko. There, they were suddenly stopped by a heterogeneous human multitude: more than 10,000 Ngando to the west, and a much larger amount of Ngbaka and Isongo north of the river. The economic accumulation undoubtedly facilitated the takeover by the French settlers who settled at the dawn of the 20th Century (i.e. at most, some 20 years later).

Although fleeing from distant violence that had reached intolerable proportions, all these groups remained engaged in less devastating but chronic fighting against each other. Sometimes, two or three of them were united by sustainable coalitions for attacks in the distance. Two lineages running parallel to each other up the Lobaye on the opposite banks clashed so regularly that they decided to end the hostilities by using a transgressive pact: *they exchanged wives in such a way as to transform the men in each*

32 It should be noted that the expression “we exchange” (translation by the Ngbaka themselves) fixes the question on groups and not on individuals.

*group into maternal uncles for the other*³³. Thereafter, the agreement was secretly maintained when these clans incorporated rival groups (Bosia and Loko), respectively north and south of the river. The memory of the founding exchange, almost a century later, underlines the longevity of the dissimulation within the circle of inbreeding: neighboring lineages, official allies, are completely unaware of such pacts. This kind of clandestine collusion occasionally brought social units of different ethnic groups closer together, but we do not know whether double marriage was a commonly used mechanism.

When they arrived at the Loko site, the Ngbaka formed, this time with their faces uncovered, a sufficient number of matrimonial alliances with the Ngando to inherit the “servants” they had lost by going up the Ubangi following a catastrophe. The Ngando, in fact, had crossed the forest in much better order, guided by the Pygmies. Incidentally, they had thus preserved the structure of interlinearities, with the historical depth of alliances. Thus, the Ngbaka of Mèttè unexpectedly discovered (a chance encounter aboard a boat sailing on the Oubangui) that fractions resulting from the split of the former had all survived under the same name in the Democratic Republic of Congo, while many young Ngando crossed the forest at least once to have acquaintances with their parents who stayed in the People’s Republic of Congo, about six days’ rapid march south.

Finally, the time has come to mention a report discussed at the beginning of the section: procreation/adoption. Without it, the description loses a regular stimulus of warfare activity in a population that is ingenious at the same time to reduce its harmfulness: each lineage tries to strengthen its population by acquiring captives young enough to be fully assimilated³⁴. A poverty of the offspring in male elements directs on this level a powerful incentive: a man who does not receive any sons from his wife, from his wives, suffers a drama. On the contrary, a captive represents an uncompromising marriage. So the women of Mèttè addressed the warriors about to go on an expedition with a song that stipulated the priority of bringing back children over killing enemies. Victory lied essentially in that gain. Except that the crisis induced by the influx of groups and the overcrowding in the region significantly changed the situation: the Ngbaka

³³ It is in these precise terms that the operation was told to us.

³⁴ Outside of catastrophic fevers, some men could be recovered with a ransom negotiated by a third party.

and Isongo living in the north, established for a longer period of time, had developed a regular exocannibalism that increased the terms of the revenge to be wrested, hence the contagion of the phenomenon. A new dilemma then greeted each prisoner: to be eaten or adopted [GUI 10].

Before commenting on these data, let us look at how sedentarization changes the picture. The settlers' thirst for control led them to designate a chief per settlement, who would be accountable to them. However, the Ngbaka admired not only the recognition of a chief, but also the formalization of the village as a socially significant unit. Let us consider three localities of Loko: Mèttè then, a few hundred meters away, Bosindo and, about 50 steps further, Bomolé. The proximity between these sites, prolonged by several others, responded to a tightening of defensive solidarity demanded by the above-mentioned rise in fever. Each dug its own fortifications (deep ditches lined with stakes), but benefited from the surveillance and alarms provided by the neighbors³⁵.

Mèttè initially had four long allied lineages, but one of them declined and was absorbed by another as a sub-lineage. Bosindo had two, with no known family relationship (if not, perhaps, a matrimonial alliance). And Bomolé had three brotherly groups, but they were raised to the rank of lineages: unlike the other Ngbaka, they had crossed the forest instead of going up the river. For the latter, there was therefore no real novelty. Bosindo, on the contrary, imposed a prohibition on permanent marriage between its partners, as if living in the same place and mixing implied bonding. Most villages reacted in the same way, with the exception of Mèttè, where marriages that did not violate the usual prohibitions remained authorized. From there, a song, considered shocking from the outside and entitled "*Between us*", was sung by provocation in festivals.

After a closer examination, however, it appeared that Bosindo was also taking some freedom with tradition. The chief's son claimed that he had never heard of the double rule that jointly rejected repetition and exchange between two lineages. The civil status records of the municipality of Loko confirmed a blatant presence of both illegal practices in this locality, as well as a significant gap on this point with neighboring communities, and, therefore, we reproached our informant for his duplicity. His village had, on

35 However, the tracks sinking into the forest were quickly diverging from each other.

its own initiative, abandoned these obligations. He immediately laughed at it, arguing that it was becoming increasingly impossible to obey all the traditional imperatives: socially authorized wives were becoming increasingly inaccessible geographically, and negotiating demands more than 40 kilometers away became unbearable. Especially since in-laws, for their part, preferred to have sons-in-law nearby, if only to enjoy their respect more frequently. The system seemed to oscillate between, on the one hand, a tendency to marry just after the line of demarcation drawn by the prohibition of incest and, on the other hand, a temptation to reduce the pressure exerted, either by referring to sub-lineage or by reducing the number of generations covered by the ban.

The Ngbaka thus illustrate a paradoxical composition: “hard to hold” in a prolonged period calm, as well as beneficial in an era of unpredictable disruptions. The sedentary phase verifies the matrimonial strategy indicated by Héritier: the strengthening of alliances. The aspiration would undoubtedly be confirmed in the old semi-nomadic lifestyle of these slash-and-burn horticulturists, in an atmosphere felt to be “normal”. However, in the face of the *unusual* and a flood of imponderables, the Omaha kinship deploys an ability to reverse dispositions by helping to establish original coordinations with the unknown.

It is well-known that contemporary ethnography observes societies marked from far and wide by colonialist hegemony (economic, certainly, as well as legal-political): the discipline has become aware of the serious deteriorations suffered by the cultures studied under the weight of this domination. The fantasy of “people without history” nevertheless took advantage of this haunting evidence to obliterate a reality of another kind: namely that these people did not wait for contact with Europeans to endure intense disorders that appeared in waves, with intermittences varying greatly from one area to another. Seen from this angle, the plasticity of Crow–Omaha systems deserves attention in contrast to a certain rigidity of the constraints that restrict elementary structures at the level of an autonomous set of social units, especially in the context of generalized exchanges. However, it is important to agree on the way forward after this remark. Let us wager that from this point on, a functionalist approach could easily leapfrog on to a summary evolutionary scenario: prehistoric hunter-gatherers would have ensured the physical reproduction of dispersed social units with premeditated kinship structures creating a network of matrimonial alliances. “Then”, in areas overwhelmed by multiple historical

shocks, these prescriptions would have lost their practical effectiveness and semi-complex systems would have replaced them. Overall, the idea may not be wrong, but what to do with it? As it stands, the extrapolation contracts into an intuitively plausible assertion, camping out of reach of criticism: a *closed conjecture*, which hastened to sniff out an outcome over the treatment of variables, according to the configuration that Radcliffe-Brown rightly detested.

With the exception that closure here does not depend on a penchant for speculation. An objective obstacle arises, resulting from a persistent gap among kinship studies: the contrary inspirations of functionalism and structuralism have agreed to grant a constant and excessive privilege to the representation of coherence at the expense of complementary analysis of disruption, i.e. internal factors that make some structures more socially manipulable than others. If a caricatured materialism quickly removes, as an accessory and conjuncture, any phenomenon that deviates from an adequacy between the kinship system and the economic or socio-ecological order, structuralism, for its part, acts in the same way by relegating the abnormal to the hotchpotch of contingency. The dumping ground changes, not the content: always, the moving story. Lovers of practical functions and servants of psychic universals then evade all the more their common resolve to ignore it because there is no perplexity to justify this circumvention. Thus, despite its desire to place the questioning in a diachronic perspective, a collective work such as *Transformations of Kinship* [GOD 98b] is essentially far from imbalances³⁶. A question stagnates behind the scenes: can a society move from one coherence to another without going through transitional states covering a certain incoherence?

Marriage alliance specialists are happy to report that *all* social organizations do not fully implement their own recommendations and proscriptions in this area. And they compare, here and there, the percentages of unions in conformity with a global number of marriages, without further reflection. However, if this gap exists everywhere, it itself becomes a universal fact that should lead to the comparison between the resistances, or degrees of tolerance, that develop between the forms in front of different types of “cheating” or irregular accommodations. The Omaha system that we have just glossed over in the Ngbaka reveals a remarkable plasticity, which

36 See Jean-Luc Jarnard’s epistemological analysis of this book [JAM 00], of which we cross-reference here some perplexities.

is difficult to imagine in the context of marriages between cross cousins. In addition, it shows an image that significantly opposes the search for the closest spouse among the Mosi or Kakö: there is no identifiable *nexus* Ngbaka, neither in the north of Lobaye nor in the south.

In conclusion, what today sterilizes the questioning of a “passage” from elementary to semi-complex (or vice versa) structures is in no way inaccessible to the necessary information. The problem arises from the lack of interest in a category of comparisons about the realization of the alliance in a wide range of historical situations: troubled or stable, crumbly or “elastic”, etc. In the ultimate psychological aim of structuralism, only the ideal harmony, which the kinship strives to think about, counts. On the contrary, a sociology, which understands the heterogeneity of interactions between people, and between people and their environments, must consider that derogations, additions and omissions are part of the system, or at least attach to it. In this respect, a large part of the anthropology of kinship has been sacrificed: the least conducive to a philosophical lesson, but the most useful for interdisciplinary research, including applied research³⁷.

In short, when Radcliffe-Brown vilified “conjectural history” because of the misdeeds of conjecture and not because of history, he reversed the meaning of error: the defect of the method lies in conjectures that silence history and remove its scientific dimension. Banned on the principle of comparative ambition, it would then only inform anthropology about specific elements, far from any access to theoretical elaborations. In the confrontation between elementary and semi-complex structures, however, it would be possible to expect a little more than a collection of flat statistical correlations “à la Murdock”.

And what about the elementary/complex articulation? Wouldn't the perfect practical similarity between the borderline case of Egypt and that of Athens (spouses from the same father and different mothers) benefit from being rethought, as an *extreme attempt* at endogamous preferential marriage within an area where, in multiple instances, social and economic inequality give the transmission of status and material wealth an obsessive preponderance? Pierre Bonte has stripped the general theme in the title we have borrowed above from a collective work “*Épouser au plus proche: Inceste, prohibition*

37 For example, in cases where a relationship is *locked*: disparate interactions that immobilize each other in a society, and block techno-economic innovation [GUI 18].

et stratégies matrimoniales autour de la Méditerranée” [BON 94]. The vow applies, in short, to all peoples and all systems, but on many occasions, it reaches a paroxysm that defies exogamy. Despite the scope of the reference framework encompassing these drifts, they correspond to a series of social movements oriented towards the management of new hierarchies that aspire to sustainability: a volcanic eruption of cultures concerned with incorporating foundations and destinies into their definition. Only one experience has survived at a lower level, which, from this angle, suddenly appears less unusual: the famous “Arab marriage”, more or less encouraging the union of a man with the daughter of his father’s brother, and felt by various specialists as a formidable challenge to the “theory of the alliance”.

Barry, once again, boldly faces the difficulty and formulates two symptomatic criticisms against the reasoning (associated with functionalism) that draws from the political and economic registers the inclination to endogamy distilled by this particular form of alliance. First, these arguments:

“[...] suppose that all involve motivations and/or ‘strategies’, which are in no way specific to societies practicing ‘Arab marriage’, and that one cannot therefore logically – I will be forgiven for this truism – assume a causal link between the presence of the latter and the appearance of such a practice” [BAR 98, p. 19, our translation].

Then:

“[...] from an epistemological point of view, it seems unsatisfactory to consider (at least for a short time, to admit that we can generally account for alliance systems on the basis of an internal theory, in other words if we accept that kinship facts have their own coherence) that we ignore this principle – in favor of an external explanation – if we are confronted with a somewhat unusual case” [BAR 98, p. 19, our translation].

In fact, the first criticism avoids the specificity of history by confusing determinations without common measure: the fact that external parameters may have invigorated the initial formation of the Arab kinship in no way implies their durability as “causality” afterwards. Authentic functionalism certainly inhabits this fusion, but it is enough to detach the analysis from the *event* and the *cause* to open up a considerable space for investigation

between functionalism and structuralism. Just as the circumstances surrounding the birth of Islam dissipated or altered in its subsequent travels, so too did the union with the patrilineal parallel cousin permeate various social organizations. Barry therefore does not disqualify the conundrum of the emergence of a kinship system that gives the alliance an original form. However, in light of this elementary objection, the epistemological mistrust that comes second immediately melts into the first: considering the external explanation at the beginning of the phenomenon being questioned in no way denies a “proper coherence” to it when it comes to maintaining its structure by itself. Once again, the problem of the emergence of the structure is confirmed as a blind spot of structuralism³⁸.

From a small number of Neolithic “foci”, the domestication of nature has evolved into multiple directions, ensuring that each of them has a particular, ideal and material coherence. It is not a *priori* more absurd to look for the homes of semi-complex systems, or to wonder whether Arab kinship would not come from the same home as the complex kinship that has spread in Europe. No one can promise success in this type of investigation, but neither can there be any justification for a methodological ban on the company, since it will no longer mix the features perpetuated by the evolution and initiatives produced by history. In addition, it must be seen as the *sine qua non* condition for the entry into competition of an ecology, a science of variations and interactions constantly plagued by pre-theoretical illusions: on the one hand, undermined by permanencies, but, on the other hand, repressed by impermeabilities.

1.4. The relationship between filiation and alliance reconsidered as a variable

This discreet narrowing of the object that a theoretical dyad involuntarily arranges on the basis of common shortages contained in contrary discourses, it is now important to confront it with the crucial relationship of kinship: filiation *versus* alliance. We have seen that functionalism pleaded for a global domination of the former over the latter, before structuralism reversed the priority: the debate has belonged for more than half a century to the

³⁸ This is illustrated by the unusual idea, defended by Lévi-Strauss, that language emerged “all of a sudden” [LEV 50, p. XLVII]: the structure could be filled, or modulated, but would not be suitable for education [GUI 18].

common basis of the discipline, students having to assimilate this “closed case” from the beginning of their studies, even if it means converting it immediately into an imperturbable asset, thus renouncing any questioning.

However, the preceding section reveals an unexplored eventuality: what exactly is the reason for thinking of this relationship as a constant duality rather than a variable? The search for universal benchmarks has made us forget that the dominant factor in the theoretical exercise does not necessarily dominate the reality of social practices. More abruptly, anthropology has made us forget an ethnology that monopolizes the ability to engage in constructive interdisciplinarity. With or without “disintegration” of the structure, the Na at least have the merit of breaking an evidence forged by habit. And does “Arab marriage” not suggest a violation of the laws of the alliance through a kind of exaggeration of filiation?

Based on these examples, we would immediately lock ourselves into a hazardous assessment of their potential representativeness. Rather, let us return to the elementary structures seen by Yengoyan and the subsequent discussion. Godelier took hold of the problem without unduly detailing the fragments of the documentation in order to highlight kinship relationships that “function³⁹ both as infrastructure and superstructure” [GOD 77, p. 153], which McKnight, after a careful refutation of much of the data used, denied by declaring that matrimonial classes “are not part of the infrastructure”. With this conclusion in mind: “the best we can do is to take each case as it comes” [MCK 81, p. 87]. In other words, comparative sociology is limited to a fantasy. What makes the contradiction between the two texts shocking, to the point of becoming, methodologically speaking, a nice case study, is due to this horrifying observation: despite the debacle ravaging the treatment of facts, the position of the pure theorist resists very well, while the author of a relevant disqualification of measurements and calculations calmly converts his subject by recommending scuttling to his own science.

Fortunately, we know the reason for this: Yengoyan’s conjecture, although initiated by rudimentary knowledge and “basic” inferences, retains a demonstrative value independent of the misuse it precedes. An excellent approach that has not been properly implemented, its analytical grid survives a disappointing start to the project insofar as it does not overshadow the

³⁹ As a precaution, it should be remembered that talking about the functioning of a phenomenon does not mean that it is assumed to have a function in a system.

impossible indifference of the alliance to the physical reproduction of groups, and therefore of productive forces, thus guaranteeing regular interactions with the infrastructure. Godelier perceived the stakes⁴⁰. As a result, equivocations arise about the relationship between filiation and alliance during his effort to absorb the research examined using a theory reconciling the contributions of Marxism and those of structuralism. Thus, he deduced from his reading of Yengoyan that “the effect of the transformations of the material base is not uniform or general on the functioning of kinship relationships” and continued with this remark:

“In the functioning of kinship relationships, consanguinity relationships change less quickly than alliance relationships and, since through marriage the family immediately records changes in the alliance system, the result is that new family types emerge as new alliance rules emerge” [GOD 77, p. 145, our translation].

The allegation is not insignificant: if it does not trouble Marxism, it has, on the other hand, enough influence to disconcert structuralism. However, its consequences have not had any significant impact, despite the difficulty for ethnology to grant the following three proposals: *first*, the alliance plays the predominant role in relation to filiation in kinship structures; *second*, the rules of the alliance are formed more quickly than those of filiation; *third*, kinship structures preserve a reliable logic. In short, the relationship between filiation and alliance periodically suffers from distortions, with the responsibility for the structure to “best” reduce their effects.

In the epilogue of *Transformations of Kinship*, Godelier added a piece through a bold conjecture: kinship could have been organized before the emergence of articulated language. After the prohibition of incest, “the regular exchange of human beings between groups became the basic rule of kinship systems” [GOD 98a, p. 412]. Let us assume the hypothesis of origin, i.e. the presence of this changing motive: it will not simplify anything for stories that grow considerably when languages, and therefore terminologies, enter the arena. It should be concluded that, during episodes when kinship is shaken, filiation tends to defend its positions *via* terminology, unless

⁴⁰ Incidentally, it should be noted that he did not commit the mistake of declaring that kinship *incorporates* or *is housed* in the infrastructure: his theoretical metaphors are more consistent and less unsophisticated than those of his opponent.

terminology protects filiation. On the surface, this “sounds right”, but without illuminating anything. If we perceive that the opposition of functionalism and structuralism freezes in anthropology a relationship between filiation and alliance which, in ethnology (or comparative sociology), clearly manifests itself as a variable, the way out of this trap is missing.

The solution may lie in an interpretation of Marxism that Godelier never admitted⁴¹. While itself considered infrastructure in the face of *the* superstructure, the Althusserian school of thought insisted on the heterogeneity of superstructures, distinguishing, on the one hand, ideological and, on the other hand, legal-political ones [BAL 68]. In classless societies, the notion of cosmogony will be substituted here for the concept of ideology, which historically implies the chronic antagonism of several representations of the world. On this path, our object is no longer content to oscillate between ideal and material: kinship, *thought of* in cosmogony, is *instituted* by the legal system with *efficiency* in the techno-economic infrastructure. When the dynamism of the alliance becomes a reality, the vision of the universe does not “follow” obediently: each instance resists change in its own way and then uses certain mechanisms rather than others. The relative immobility of the filiation is then understood through a closer link maintained with one or the other of the superstructures.

In a very vast context, America offers a striking illustration: behind the diversity of systems, various specialists converge towards the conviction of a pan-American mental depth that places the relationship with others in a predator–prey logic [SUR 00, DES 01]. The fact is that in the Amazon and the West Indies, at the time of “contact” with Europe, patri- or matrilineal unification often took such a strict form that it prohibited the adoption of captives, irrevocable enemies “by nature” [GUI 13]. Many important changes have altered the ways in which Amerindians have allied themselves over the past five centuries, if only because of the demographic disaster caused by European diseases. Confirmation of the persistence of a common core would therefore provide the best indication that the relative malleability of the institutions regulating the alliance must take into account possible

41 And that he even ferociously denigrated, including at the end of the text about Yengoyan. At that time, the intellectual chapels of Marxism were arguing with theatrical effects that in no way galvanized the discussion.

stubbornness around beliefs that mix the definition of the other with that of the universe.

As for more restricted contexts, the accumulation of phase shifts, occasional or not, between the cosmogonic and the legal has long been part of the ethnographer's daily life. The exchange of wives, outlined above, in order to close a chronic antagonism, is seen as a deliberate legal exception against the social order, after which things spontaneously become "normal" again. Sedentary life emboldens other, more insistent deformations. In addition, the Ngbaka refer to Omaha-type kinship terminology in their language, but when they speak to individuals from other ethnic groups, they use French to express another. Finally, let us recall the Ngando horticulturalists and the Aka hunter-gatherers, who use two very close Bantu languages and a common kinship terminology [BAH 92], while they do not think of the world in the same way.

Everything suggests that the heterogeneity of superstructures, with the diversity of their modes of intervention in social life and their firmness in the face of change, constitutes a key to essential analysis that ethnology has failed to exploit after the sudden evaporation of Marxism into its ranks. However, it is through it that the relationship between filiation and alliance is displayed as a variable that must be compared in itself because the two terms never have the same relationship with infrastructures or superstructures. Wouldn't the category of complex kinship structures be established in a set of histories where, after various untenable attempts, kinship found a way to control the alliance from the infrastructure? The opacity with which structuralism has covered them would depend only on the theoretical rejection of history among its working tools. And the inability of kinship studies to enter into interdisciplinary research would simply follow, if you will. Fused in kinship, filiation and alliance meet differently with economics and ecology. Evolution remains the obsession of those who claim to be abstracted from it (Lévi-Strauss as Radcliffe-Brown) when they refuse to discern, in contrast, the specificity of history.

Godelier, himself, does not escape the trap entirely: when he declared that "inbreeding relationships change less quickly than alliance relationships", he expressed a *potential* character of the alliance. However, Dousset was careful to add that circumstances decide whether or not this "peak speed" will be used. "The alliance can also function as a brake on historical

transformations or as an attempt at materialistic conservatism when existing access and control logics are disrupted” [DOU 16, p. 300].

1.5. The challenge: correlating and speculating without conclusion

To conclude, let us recall Dousset’s assertion on the relationship between demographic structures and the way resources are used: “*It is the variation of the relationship over time, and not only the relationship as such, that plays a central role.*” The statement applies to the relationship between filiation and alliance that we have just discussed. More generally, it applies to all the reports identified in the previous sections, for a simple reason: like ecology, the social sciences were born from the methodological conviction that, in order to properly understand their target (biocenosis here, society there), they had to give priority to the recognition of relationships rather than to the characterization of objects, or individuals, insofar as, precisely, the reports transform their characteristics [GUI 18].

The invocation of evolution, the defense of causality or the modeling of a structure “as it should be” indicates various desires to transcend facts in order to place oneself above history. Inherently respectable ambitions, undoubtedly, subject to two imperative conditions: not to denigrate the reality that this aspiration attempts to overcome (by lowering it, for example, to the rank of “contingency” that cannot be theorized), and, even more, not to claim that the study of the said reality will be completely replaced by elaborations of a “higher” power. Otherwise, a psychological or biological determinism will develop, leaving a huge gap to be filled in terms of the content of sociology and, consequently, the progressive work of interdisciplinarity.

The enemy of the human sciences has never been conjecture, but rather the freedom of maneuver granted to the analogy under its cover: some of those who cursed the exercise with the most virulence have used it stealthily in order to insinuate in their remarks a generalization bearing radical conviction. We will then remember that a major classic of epistemology, *Conjectures et réfutations* [POP 85], applauded both sides jointly, but immediately dismissed the human sciences (and, in a more respectful tone, Darwinism). According to the *unspoken* and *unsubstantiated* theory that supports this elimination, the comparison, historical, sociological, or

ecological, would not have, unlike experimentation, the availability required to produce suitable conjectures and convincing refutations [GUI 15]. Let us agree on a single point: meeting the challenge of scientificity, for these ousted fields of knowledge, is effectively equivalent to shamelessly assuming these two practices, carefully controlling their “manufacture”, and then making them transferable between sciences.

