

Research Article

The Limits of Archaeology and Cultural Anthropology: Archaeological Witnesses and Ethnographical Data Among the Bakola-Bagyeli “Pygmies” (South Cameroon)

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Abstract

The reading of the transformations recorded in the material equipment of disappeared societies still remains largely inspired by the dogma of materialism. This inclines inferences, in archaeology, to systematically deduce evolutionary stages on a double level, chronological and economic, from the material remains of technological changes only. However, the unpredictable experience of human societies can often reveal situations that contradict the established inferential model. Such a reality therefore poses the problem of searching for an approach capable of achieving balance in the possible equation between the experience of human societies and the methodological means implemented to account for it. The question therefore remains to know whether data collected and explained in a methodological approach specific to a discipline always reproduce the improbable nature of the reality of human societies, both living and extinct? Thus, ethnographic, qualitative data and archaeological facts are they still agree regarding the current experience of life of the Bakola-Bayéli “Pygmies” of South Cameroon, since the 1990s? The hypothesis supports: data collected according to the orthodoxy of techniques specific to dissociated disciplinary fields, in a conventional manner, can contradict each other on the same fact. The complexity of the reality of human societies escapes the specific filter of conceptual and methodological practices characteristic of the disciplines that separate techniques specific to each method. The archaeological witnesses, taken from surveys carried out on the sites where the Bakola-Bagyéli “Pygmies” live, contradict the oral testimonies, given by these same populations through interviews, directive and semi-directive, guided by a questionnaire. A comparative study of qualitative and quantitative data makes it possible to verify the hypotheses put forward. The theoretical approach acquired to the cause of disorganization and opposed to the terminism of ends makes it possible to discuss the a priori organization of cultural facts and the accomplishment of reserved goals.

Keywords

Cultural Anthropology, Archaeology, Bakola-Bagyéli, Methodological Limits, Interdisciplinarity, Disorganization

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1. Introduction

There are several theoretical approaches in the field of the problem of technical changes, concerning societies of ancient times [1, 2]. This enrichment of the theoretical framework was not enough to definitively abolish the perspective of reading technical changes among prehistorians for almost two centuries, from 1859 when the book “On the Origin of Species” by Charles Darwin was published [39, 3]. Technological transformations are considered the necessary and sufficient condition for separating chrono-cultural stages. Such a conception manifests the determinism underlying the interpretation of cultural processes. Lamarckism, a biological model of linear evolution, continues to serve as a paradigm for a number of interpretations of material transformations to the detriment of Darwinism attached to the thesis of random selective evolution. Thus, we generally consider the appearance of new material as proof of a stage, in all respects evolutionary, compared to the previous state. Such a method, because it proceeds from a progressive conception of history, envisages the direction of change in the sense of a gradual “improvement” in all respects. This article questions the materialist conceptual and methodological approach operating in the study of the cultural processes of extinct societies. The model in question systematically approaches, in a linear, uniform and continuous perspective, the archaeological witnesses of the technical changes of disappeared societies. Also, selective taphonomic activity often removes from archaeological deposits some of the evidence present at the time of deposit. The absence, in the sediments, of the necessary proportion of witnesses to validate the pre-established order of the socio-economic stages, is often attributed, without verification, to the natural action of differential conservation. However, ethnographic situations can sometimes present a reality where the truncations generally attributed to taphonomy would act to the detriment of the fraction of archaeological witnesses necessary to discuss a pre-established explanatory model concerning cultural processes [38].

The problem therefore consists of the search for an approach capable of achieving balance in the possible equation between the experience of human societies and the methodological means implemented to achieve the balance of such a relationship. The question then remains to know whether data collected and explained in a methodological approach, specific to a discipline, always reproduce the improbable nature of the reality of human societies, both living and extinct? In other words, how do the conceptually and methodologically dissociated approaches respectively achieve the distance of archeology and cultural anthropology from the reality of their common quest? Do ethnographic, qualitative data and archaeological witnesses necessarily match the facts concerning the life of the Bakola-Bagyéli “Pygmies” of South Cameroon, in the interval [1990-2024]? The hypothesis underlying this work states that data collected according to the orthodoxy of

techniques specific to dissociated disciplinary fields, in a conventional manner, can contradict each other on the same fact. The complexity of the reality of human societies thus escapes the specific filter of conceptual and methodological practices characteristic of the disciplines that separate techniques from their method. The archaeological witnesses, taken from surveys carried out on the sites where the Bakola-Bagyéli “Pygmies” live, contradict the oral testimonies, given by these same populations through directive and semi-directive interviews guided by a questionnaire. These populations affirm the abandonment of an ancestral way of life, based on a hunting and gathering economy associated with the seasonal mobility of residences. However, in archaeological deposits, the remains present a predominance of macro remains, faunal and plant, of wild origin accompanied by an overabundance of material productions often linked to a sedentary life characteristic of agricultural groups.

2. Material and Method

The data from this study relate to a chronological framework and a geographically delimited area.

2.1. Material

Ethnographic observations supplemented with archaeological surveys among the Bakola-Bagyéli “Pygmies” will serve as a basis, for a comparative approach, to question the objectivity of the reading of the changes recorded in the archaeological witnesses of disappeared societies. These witnesses are often reworked by the natural and random phenomenon of the selective conservation of remains.

The basic material in this study corresponds to a chronological period spanning approximately a century.

2.2. Method

We subdivide the chronological period of the study into two eras, on the basis of the changes that occurred in the history of the Bakola-Bagyéli “Pygmies”. Thus the interval [1910-1990] corresponds to the first epoch.

The choice of the lower chronological limit is justified by the fact that the 1910s are approximately one hundred years from 2024. The 1990s coincide with an event of a historical nature. It is the meeting of the Bakola-Bagyéli with the NGOs (Non-Governmental Organizations) [Figure 1]. This is a category of external institutional actor; vector of novelty among populations through a “development” assistance policy underlying the action of these institutions among populations [4].



Figure 1. Marks of the presence of intervention organizations among the Bakola-Bagy ði. © Medjo (Ngoyang 2015).

It was from the first half of the 1990s that NGOs began to penetrate massively into the environment of the populations concerned. This sudden entry therefore inaugurating a new era in their history continues into the present (2024).

The data used to support this reflection are drawn from written literature, data from oral sources collected through interviews with informants encountered in the field. Direct observation of the lives of the populations studied as well as archaeological surveys complete the method.

The Bakola-Bagy ði are located in the middle of the equatorial forest, precisely in the vicinity of the towns of Kribi, Bipindi, and Lolodorf, Administrative Region of South

Cameroon [Figure 2]. Members of the group self-identify, separately, by two distinct ethnonyms. Some give themselves the name Bakola while others identify themselves as Bagy ði. The groups living in the vicinity of the localities of Kribi and Bipindi, downstream of the course of the Lokoundjé, call themselves Bagyeli. While those of Lolodorf, upstream of the same river, recognize themselves under the ethnonym Bakola. This differentiation is also expressed through the geographical position of one or the other entity, according to the description given by neighboring farmers: Thus, in the Kwassion Bogyeli bo mbier language it means the Pygmies of the downstream. While Bogyeli bo ntsi è means Pygmies from upstream.

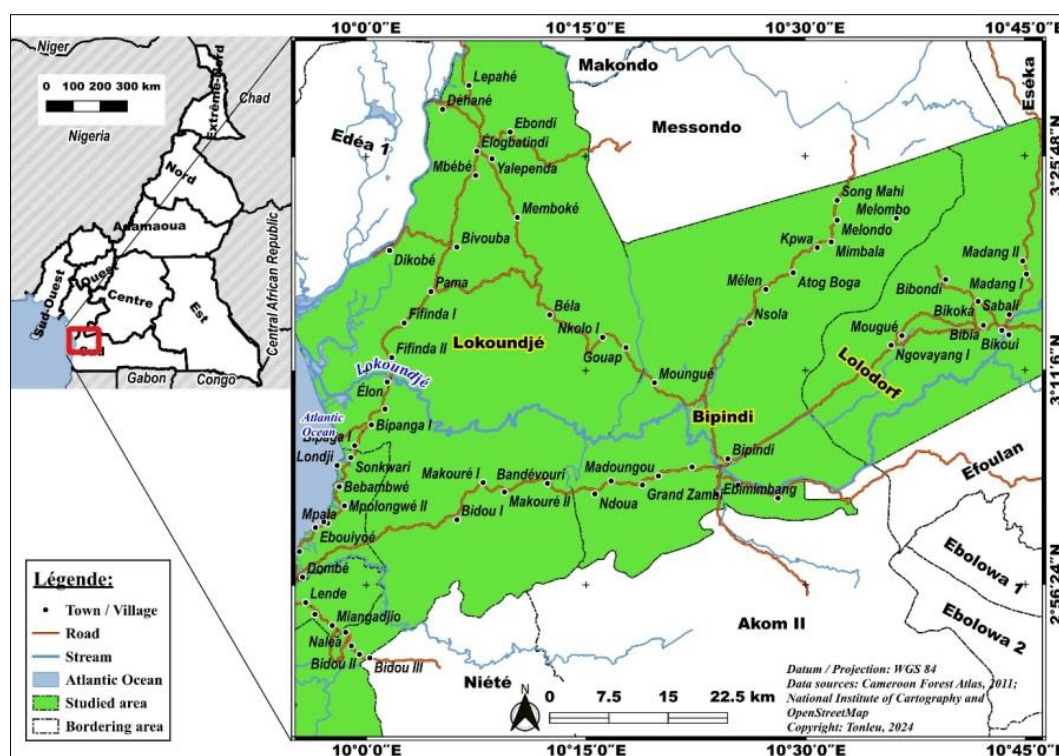


Figure 2. Geographical location of the upstream and downstream of the course of the Lokoundjé

3. Results

The investigations carried out respectively according to ethnographic and archaeological methods led to results. They highlight the state of dynamics in the relationships between the Bakola-Bagy ɗi and their neighbors, on the one hand, as well as the situation of transformations of the material culture of the former on the other hand. The specificity of these dynamics will serve as support for the discussion to affirm truncations in the knowledge concerning disappeared societies which knowledge is manufactured according to a methodological orthodoxy likely to distort reality.

3.1. The Dynamics in Relations Between Bakola-Bagy ɗi and Neighbors

Over the last century, the perception of the other in Bakola-Bagy ɗi and neighboring relationships has evolved. This dynamic in the relationship with others leads to a reconsideration of the self-perception of the Bakola-Bagy ɗi in relation to neighboring groups. On a scale beyond the Bakola-Bagy ɗi, the authors are divided on the new direction of interactions between so-called hunter-gatherer communities, in Central Africa, and their agricultural neighbors [5].

In the report of an internship carried out with the Bagy ɗi between 1984 and 1986, on food ethnoecology, Edmond Dounias describes the evolution of hunter-gatherer relationships as oriented in favor of neighboring farmers. In the author's opinion, relations between the two communities start from balanced barter, motivated by the complementarity that governed them in the old days, to shift into "unilateral dependence with no escape" [33]. Bruel, as reported by Philipart de Foy, on the subject of the Babinga, also presents relations in the process of deterioration. Yesterday's Babinga clientele finds itself converted into servile labor [9, 5]. On the same subject, Lalouel also evokes degradation when it comes to talking about the evolution of the terms of exchange between so-called hunter-gatherer groups and farmers [7].

Unlike previous authors, Althabe places the subjection of hunter-gatherers to the Bantu chief much further back in the history of relations between the two large communities [8]. He already finds in these relations of the time the germ of slavery characterizing the relations between the two communities today. With the rise of young, dynamic cocoa farmers, hunter-gatherers will have the opportunity to find new economic partners. The latter will become the new "bosses", taking advantage of the decline in the economic power of the former "owners", who were the Bantu lineage chiefs.

The relationships established with the new bosses are more advantageous to the so-called Pygmy communities than those resulting from historical ties. We are then witnessing a redefinition of the terms of the "social contract" governing the relations between the two interacting communities [9].

The advent of the new "bosses" undoubtedly inaugurates

the era of relationships of a new type between the so-called Pygmy populations and the original population of the "bosses".

The spirit of equality emerging with the era of the new "bosses" is reinforced by the teaching conveyed in education centers associated with Catholic faith groups. This is, among other things, the mission of the Community of the Little Sisters of Jesus domiciled in Bipindi since 1950 among the Bagy ɗi downstream of the Lokoundjé. The Little Sisters of Jesus settled later in Ngovayang in Bakola territory from the 2000s.

This religious congregation works with the Bakola to change their self-perception regarding the so-called Bantu group. This is undoubtedly one of the missions that the Foyer Notre de Dame de la Forêt (FONDAF) in Bipindi has given itself since the beginning of the 1950s.

An analysis of the objectives sought in the teaching offered by FONDAF makes it possible to discover that the recruited children, aged [5-11 years] are trained in the sense of developing self-confidence and a feeling of assurance towards neighbors, in order to claim their individual and collective rights.

Messages appearing on panels presented at the entrance to the classrooms as well as the dormitories set up within the FONDAF premises deliver some elements of the spirit of the teaching given to the Bagy ɗi children.

The preferred age of recruits as well as the analysis of the objectives sought in FONDAF missions reveal the symbolic dimension of the interactions between the Bagy ɗi, Bakola and their neighbors [23].

3.2. The State of Transformations in Material Culture Since 1990

Several changes have been observable in the material equipment of the Bakola-Bagy ɗi for decades. However, from the 1990s onwards there has been an ever-continuing increase in equipment of manufacturing origin and recent introduction. The presence of object shapes as well as previously used manufacturing materials is gradually becoming rare [22].

Today, we are seeing a remarkable decline in the products of ancestral technology. Productions whose work requires know-how in the transformation of wood, bark or various plant fibers are clearly decreasing. Thus, the number of spoons, bowls and crossbows made from wood, as well as that of tree bark quivers and hunting nets, spun from bark taken from shrubs, is decreasing considerably.

Domed dwellings with a subcircular floor plan, built from sheets covering a pole frame forming a vault, are becoming rarer on sites located along motorable roads.

Alongside these abandonments, there appears an accelerated accumulation of objects made of metal, glass and plastic. Cement, compressed earth in blocks, beaten earth, raffia mats, sawn wood and corrugated iron predominate in construction

materials, to the detriment of previously used materials which are disappearing.

At the same time, dwellings with a quadrangular plan and straight walls are experiencing a strong upsurge. However, we notice a layout of the dwellings highlighting and in sight the “Bantu” style houses with the Mongulu in the background, an architecture identified with the group [9].

(...) it would be wrong to believe that the quadrangular Bantu dwelling is totally rejected. The Pygmy is implicitly convinced of the technical superiority of the “villagers” and the adoption of this box is for him an illustration of his promotion, it is rather the use he then makes of it which no longer sticks to the borrowing "Figure 3.



Figure 3. “Bantu” style house in a Bakola-Bagy ɗi hamlet. © Medjo (Mbikiki 2016)

New spaces are appearing both at the dealership level and inside the homes. Thus on the scale of the concession, we see the culinary area stand out to constitute a separate space, separately from the space reserved for individual privacy and that open to the public. The introduction of bedrooms and a living room in certain dwellings surveyed appears to be another illustration of the transformations in the material equipment of the populations studied.

The birth of new compartments in the layout of space, among the Bakola-Bagy ɗi, is accompanied by the introduction of new furniture.

While the beds, dressers and racks furnish the kitchen, the living room accommodates the armchairs; chairs and tables. All of this furniture comes from know-how that is absent among consumers. These are models reproducing a catalog of imported shapes. For a long time, these models were the exclusive domain of the neighboring group [9].

“The Pygmy, who was characterized by a material culture that was crude to say the least and who had few lasting objects, developed a veritable binge on imported things and visiting huts and huts in “village” neighborhoods. are eloquent: bottles and flasks, pots of all kinds, mosquito net, hurricane lamp, flashlight, lighters, glasses, clothes, shoes, nail polish, without forgetting wire and cables, the current basis of the traps.

The changes listed appear as an innovation, that is to say the palliative of a limitation long suffered by the Bakola-Bagy ɗi in access to the resource represented by material equipment

imported from the West [10]. Its progressive accumulation among the “Pygmies” reveals itself as an imitation of the apparent characteristics which for a long period constituted the negatively discriminatory mark of the former compared to their agricultural neighbors [Figures 4, 5].



Figure 4. Kitchen interior of a Bakola-Bagy ɗi woman. © Medjo (Mashuermasheur 2016)

The remains revealed by archaeological surveys on sites where the Bakola-Bagy ɗi live agree, in terms of quality and quantity, with the dynamics observed in the ethnographic field. Products of Western origin largely predominate in the remains compared to endogenous productions.



Figure 5. A manual water pump among the Bakola-Bagy ɗi. © Medjo (Mbikiki 2016).

Faced with such a situation we observe, at the material level, the progressive reduction of the gap that the populations of farmers had long maintained with a population known as hunter-gatherers. However, the findings show that the material transformations recorded are more the result of external factors. This concerns in particular the intervention of NGOs and faith-based groups committed to removing the Bakola-Bagy ɗi from their ancestral way of life, considered socially demeaning. These civil and ecclesiastical institutions therefore work to install Bakola and Bagy ɗi in the comfort of locally exalted modern life in order to improve their quality of life [16].

Despite the large scale of transformations of material equipment, the persistence of certain objects, such as the spear,

emerges. We thus record one spear, on average, per household. The Bakola-Bagy ɗi manufacture this weapon themselves. They use scrap iron when they cannot acquire the object in shops in urban centers. The spear is one of the most used tools in the acquisition of game. Hunting and gathering, notwithstanding technological transformations, remain the basis of the Bakola-Bagy ɗi economy.



Figure 6. A Bakola-Bagy ɗi with a bagged alcoholic drink. © Medjo (Mbiliki 2016).

3.2.1. Archaeological Witnesses Contradict Oral Testimonies Among the Bakola-Bagy ɗi

Archaeological surveys carried out in deposits accumulated in situ reveal a fact. This is the observable discontinuity in the chronological distribution of remains, independently of categories. Despite this discontinuity, in the stratigraphic distribution of the remains, a predominance of organic, animal and plant remains of wild origin is nevertheless observed, through successively deposited archaeological layers. This observation then reflects the persistence of seasonal mobility of populations. This mobility finds its explanation in the double need for these populations to isolate themselves periodically in the forest, before returning after a period to the common places of life with the farmers next to the roadways.

Such a need appears difficult to attribute to a single cause. As much as hunting and gathering could explain the seasonal movement of the Bakola-Bagy ɗi, this phenomenon could be the consequence of a cause independent of the economy.

The analysis of qualitative data collected through interviews, to verify the current importance of hunting and gathering activity among the Bakola-Bagy ɗi, delivers its results. In a speech that they rationalize compared to the expectations of an institutionalized standard of living, the Bakola-Bagy ɗi openly affirm that they are no longer attached to hunting and gathering. These are two stigmatized practices in a widely shared perception.

“By analyzing all the situations observed among the Pygmies, we deduce some constants. First comes the passion for hunting: even the employees continue to hunt. Secondly, and closely related, comes seasonal mobility: there are few Pygmies who do not leave at least for a few weeks, in order to camp in the forest to hunt or harvest.” [27]. To these two preferences is added a third. This is the heavy consumption of alcohol and tobacco [figure 6].

Populations resistant to a standard of living acquired by a culturally dominant majority trick themselves through an admission of abandoning stigmatized practices. The Bakola-Bagy ɗi affirm their conversion to a sedentary lifestyle and to agriculture according to qualitative data collected on the basis of a questionnaire. It is a methodological tool specific to cultural anthropology.

3.2.2. Archaeological Surveys Contradict Ethnographic Data

The discontinuity recorded in the distribution of remains as well as the predominance of organic remains of wild origin in archaeological deposits seems rather to confirm the persistence of seasonal mobility of populations for needs that could, a priori, be linked to hunting, and picking [figure 7].

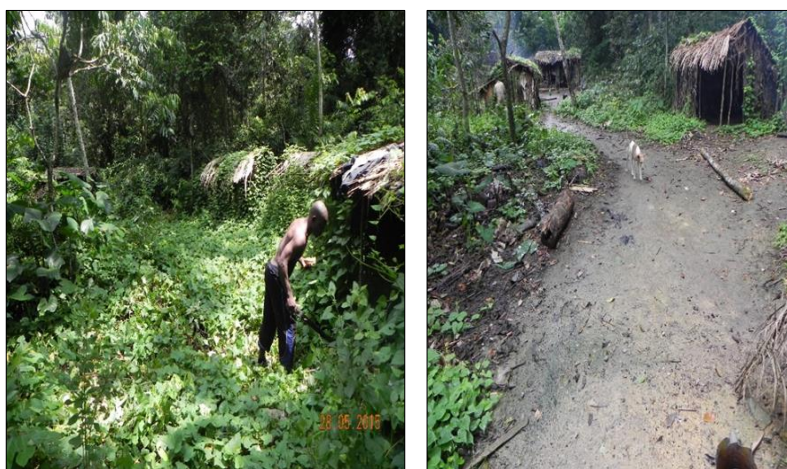


Figure 7. Solaba temporary residence site in the forest. From left to right: a. the period of abandonment. b. period of occupation. © Medjo (Solaba 2015) © Medjo (Solaba 2015).

While these same populations openly affirm the abandonment of these practices, they demand a sedentary life justified by their conversion into farmers.



Figure 8. Collection of ethnographic data among the Bakola-Bagy ɗi. © Medjo (Nidoua 2016).



Figure 9. Archaeological survey of deposits accumulated on a site frequented by the Bakola-Bagy ɗi. © Medjo (Solaba 2016).

Archaeological surveys highlight two facts: First, animals acquired through hunting as well as plant species obtained through gathering dominate the food remains. Secondly, a rupture is recorded between successively deposited layers [Figure 9]. This break concerns the chronological distribution of the remains, independently of the categories. The alternation of stratigraphic units rich in remains with layers poor in archaeological materials marks the persistence of the seasonal mobility of populations. Just as much as the predominance of organic remains, animal and plant, of wild origin proves a predilection for an economy of predation to the detriment of agriculture. However, qualitative ethnographic data, collected by means of a questionnaire, reports the opposite of this reality. Beyond oral testimonies, observable facts demonstrate the persistence of predation activities. Figures 8, 10, 11.

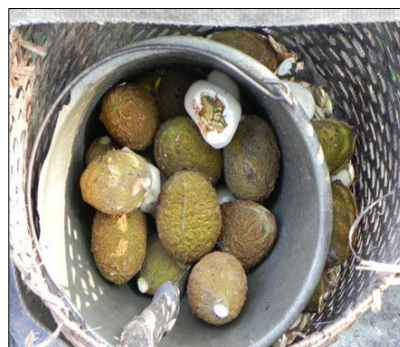


Figure 10. A pick-me-up Photo. © Medjo (Mougoband é2015).



Figure 11. Processing of harvested fruits on a site alongside the motorable road © Medjo (Ngoyang 2015)

Such discordance between the discourse and the archaeological witnesses of a specific socio-cultural group shows the possibilities of truncation inherent in any archaeological reading guided by theories developed on the basis of empirical data collected with methodological tools specific to cultural anthropology uniquely.

The transformations of the material culture of the Bakola-Bagy ɗi, over the last decades, present a singular aspect, due to the possible disorganized or chaotic nature of the causes at the origin [2, 11, 27].

3.2.3. Group Interactions at the Origin of Changes in Material Culture

The Bakola-Bagy ɗi, just as much as their neighbors, respectively give meaning to the position of one and the other group in their interaction.

(i). The Bakola-Bagy ɗi Seek to Hide the Stigma

Exchanges with the Bakola, in the surroundings of Lolororf, tend to show that access to recently introduced material symbolizes the end of the inferiorization of which these populations say they are victims. The Bakola recognize the Bagy ɗi, living around Bipindi, as better advanced in a process of “de-inferiorization”.

The populations upstream of the course of the Lokounj é

deplore the disparity between upstream and downstream concerning the respective shares in the external assistance provided by “development” partners. The latter are providers of a category of goods and services, locally represented as indicators of the level of each community on the local scale of collective or individual status. Among these values are education, learning paid trades, and building homes on the model formerly identified only with farmers [35].

The Bakola, upstream of the Lokoundjé, recognize that their reduced access to education, to learning paid trades and to the possession of homes built on the model of their farming neighbors earns them the condescension of the populations downstream in view of which the former appear as inferior.

The Bakola largely share this perception. The latter, for the most part, recognize that the condescending posture of the farmers followed by the Bagy ði towards them comes from the gap created between the populations by the level of education and the importance of the accumulated quantities of Western imported equipment. Bakola and Bagy ði thus perceive their difference with the neighboring group, as better off, in these three respects.

(ii). The Neighbors of the Bakola-Bagy ði Fear a Downgrading in the Hierarchy of Positions in Relation to the Modernity of the Facade

The possession of imported objects has meaning in a shared perception between the “Pygmies” and their neighbors. Access to these goods symbolizes the upgrading of some, downgraded by others, with regard to each of the interacting groups.

A member of the farmer population reveals awareness of a change in interactions between “village people”, as farmers are locally called, and the Bakola-Bagy ði implicitly identified with the forest. In the opinion of this informant, “The Pygmies have changed because they say they have arrived. We are no longer their masters, it is because of the NGOs. Here they say, the NGOs have put the “Pygmies” on top”

The expressions “have arrived” and “put the “Pygmies” on top” are two metaphors of a graduated and ascending movement in which the positions of each are determined by the levels of education and accumulation of material goods imported from the West. The Bakola-Bagy ði, usually confined to the forest, are today seen differently compared to their neighbors identified with the motorable road. The latter, as well as the former see, the growing importance of the accumulation of imported objects as a factor of mobility on the path leading to modernity or progress.

Direct observations in the field, supplemented by interviews with informants encountered in the two groups, thus confirm the awareness of a “de-inferiorization” in a perception common to the two interacting groups. The need for social affirmation of the populations, experienced among the Bakola-Bagy ði, then appears as one of the possible explanatory causes of the changes recorded in their material culture in the recent past.

The large-scale material transformations thus described could therefore turn out to be the consequence of a need for representation less than the fact of a material constraint. All of the facts highlighted therefore give rise to a discussion.

4. Discussion

The evidence of transformations in material equipment among the Bakola-Bagy ði as well as the contradiction noted between qualitative ethnographic data and archaeological witnesses, all combined with the materialist and determinist leaning of the explanatory theories of socio-cultural dynamics, are all aspects to be discussed. The discussion argues in favor of the need for an interdisciplinary approach capable of highlighting the disorganized character characteristic of socio-cultural phenomena [12]. The naturally disorganized character of socio-cultural phenomena is often reduced to a necessary organization, to the detriment of the dynamic and contingent essence of reality. The origins of such a deformation can be shared between three complementary causes. First of all, there are truncations linked to established methodological practices. The distortions of the reality of human societies could be linked to qualitative data collection techniques. To these methodological biases are added the unintentional effects of the differential conservation of archaeological remains after their deposition. The voids that the activity of taphonomy introduces inside archaeological deposits are generally recovered in the inferences of archaeologists to establish preconceived dogmas [12, 13]. The third filter that reduces the complexity of cultural phenomena remains the deterministic conception underlying functionalism and evolutionism. [19].

4.1. Biases Attributable to Qualitative Data Collection Techniques

Qualitative data collection techniques can often distract from the complexity of socio-cultural phenomena. This reality earns methodological individualism the criticisms formulated to its detriment. This is precisely because, contrary to the logic of the rational actor, there exist meanings other than those given by the actors to their own actions. Therefore, wanting to consider science and the explanations put forward by individuals to explain their practices exposes itself to a distortion of reality.

The use of complementary methodological approach techniques then makes it possible to reduce the risks of bias through the production of more objective quantified measurements [31]. As such, Robert Cresswell suggests that the boundaries between the sciences are limited to their conventional and therefore semantic nature [31]. It is, in short, about overcoming, through dialectic disciplinary oppositions to find unity in the problem. That of the search for objective knowledge of the complexity of phenomena belonging to an order established between biological organization and ex-

tra-somatic reality. It is a problem shared by the human sciences ~~as a whole~~, independently of the conventional limits between disciplinary fields. Cresswell's exhortation is: "In reality, what we must strive for if future research is to lead to real discoveries, is a collaboration of specialists trained as a team. From then on, the relationships between disciplines go beyond the formal definition, to enter into that of problems to be solved or concrete groups to study, which will allow the researcher in the social sciences to discuss methods and tools of analysis, and no longer of the belonging of this or that field of investigation to this or that classical discipline" [31].

The relevance of difference traditionally established to separate archeology from cultural anthropology therefore becomes questionable. This same criticism questions the unilateral relationship observed between the two sciences, concerning the application of concepts as well as theories used in the explanation of socio-cultural phenomena. The interpretation of the latter continues to unilaterally depend on models developed in cultural anthropology. The alternative solution, although possible, to the omnipresent and transversal problem of explaining socio-cultural dynamics was still to be proposed. Observations carried out in the field of archeology coupled with the experience of ethnographic situations would help to understand cultural phenomena. This would undoubtedly reduce the ideological *a priori* at the origin of the filters reducing the complexity of reality [11-14].

The data from qualitative ethnographic studies suggest the abandonment of predation activities as well as the end of seasonal mobility among the "Bakola-Bagyéli" in favor of the domestication of plants through agriculture while the archaeological surveys carried out on the three categories of sites on which it continues to take place, intermittently, the life of these populations testifies the opposite.

Archaeological evidence shows a predominance of organic remains of wild origins. Such a fact constitutes proof of the importance of hunting and gathering in the economy of the "Pygmies", regardless of the declarations.

The analysis of the dispersion of remains across superimposed stratigraphic levels shows a discontinuity between archaeological deposits. The observed alternation phenomenon then established proof of the seasonal mobility of populations [24].

The sites occupied respectively along the road, at the edge, and inside the forest record a demography whose size increases or decreases depending on the season [14, 15, 17, 18].

Archaeological witnesses studied based on techniques specific to the quantitative approach thus making it possible to discover the reality that populations hide behind explanations collected using the methodological tools identified with the qualitative approach.

This experience of the contradiction between data from different methodological sources on the same reality is worrying. The concern is justified in a research context characterized by the unilateral sense observed in the movement of transversality between archeology and socio-anthropology for

the need for inference of cultural phenomena.

Socio-anthropological theories, generally developed from a qualitative approach, serve, unilaterally, as a basis for explaining socio-cultural dynamics in archaeology. Such an approach continues to take place without any guarantee of factual evidence for the constructions due to cultural anthropology. Objective archaeological facts, moreover, should provide cultural anthropology with the necessary material to justify the postulated continuity between previous and current forms of socio-cultural organization. The realization of such a relationship between paleontology and biology makes it possible to verify the theory of the evolution of species improperly extrapolated to socio-cultural facts [19].

4.2. Differential Conservation of Archaeological Remains Increases the Risk of Reduction of Complexity in Cultural Processes

The archaeological implications of the ethnographic situation presented are multiple.

The differential conservation of remains in deposits formed in the interval [1990-2024] contributes to a recomposition of archaeological witnesses. The non-intentional action of natural agents helps to remove possible witnesses to the complexity specific to socio-cultural dynamics. However, intentionally developed theoretical constructions often use archaeological gaps to legitimize a preconceived conception of the meaning of the movement of socio-cultural dynamics [11-13].

Remains of non-biodegradable materials, such as plastic, glass, ceramics, cement, etc., and household floors, to a lesser extent, could alone resist the natural action of decomposition for a period of time [Figure 12].



Figure 12. Organic and non-biodegradable waste in a dump among the Bakola-Bagyéli along the road. © Medjo (Bigambo 2011).

At the same time, food remains of wild origin and biode-

gradable have all disappeared from archaeological deposits. The experience of differential/selective conservation concerns both the deposits accumulated among the Bakola-Bagy ði and those formed on the sites corresponding to their agricultural neighbors.

The disappearance of organic remains of wild or domestic origin will therefore create avoid with in a contemporary group of archaeological witnesses. The disappearance of the remains of food consumption in which the difference between populations characterized by two separate socio-economic organizations materializes will thus compromise the possibility of separating the two groups in the archaeological evidence. The prevalence in archaeological remains of objects that today are shared between two groups attached to separate forms of economy would tend to induce an identity. Thus, inferences systematically explaining the dynamics of socio-economic organization based solely on a succession of different morpho-technological states would engage in abusive extrapolations, compared to reality. The discourse of archeology continues to largely subscribe to the causal relationship between external morpho-technological aspects and the internal structure of a society. "In the west of the country near Meiganga, we know of the presence of other megaliths (...). In one case, a polished ax probably dating back to the time of construction was collected, embedded in the base. This therefore indicates that in Eastern Cameroon, the forest was occupied from the middle of the 1st millennium BC by populations of builders, logically sedentary and using polished tools" [37]. Ethnographic observations carried out in the field reveal, in the material equipment, a continuity between the Bakola-Bagy ði and their neighbors. However, this identity does not extend to the form of the socio-economic organization of the two communities. The relationship established between material culture, its transformations, and the level of production is then questionable. The ethnographic and archaeological data collected in the field reinforce the doubt concerning such causality. The Bakola-Bagy ði, regardless of a discourse favorable to a sedentary life and the practice of agriculture, maintain an economy based on predation. These same populations are fighting today to accumulate material equipment in proportions comparable to farmers. Such a situation therefore confuses inferences from archeology deducing socio-economic stages from the presence, in archaeological deposits, of a determined quantity of determined morpho-technological categories.

The possible action of taphonomy therefore makes archaeological witnesses confronted with the *in vivo* experience of socio-cultural dynamics among the Bakola-Bagy ði questionable.

4.3. Archeology's Bias Towards Established Dogmas

Upon analysis, archeology seems to have chosen the side of currently legitimized theories. Evolutionism and functional-

ism are among the latter.

4.3.1. The Evolutionary Cause to the Detriment of Complex Reality in Socio-Cultural Transformations

Research in archeology seems to be underpinned by evolutionary theory. Justifying in reverse the pre-established order of socio-economic stages imagined by cultural anthropology clearly constitutes the implicit goal set for archeology.

Thus, we generally interpret the morpho-technological state of material objects or their transformations in the sense of legitimizing a pre-established order of evolutionary stages. "(...) the sequence established at Shum Laka and Abeke (...) indicates to us the beginning of profound technical changes. (...) unfortunately we have not found direct evidence of a transition from a predatory economy to a production economy, even if the process should be initiated. (...)” [37]. Therefore, the evolutionary vocation of archeology carries the risk of ruining the complexity specific to socio-cultural processes. The filter of an evolutionary eye can then prove to be a source of distortion concerning the reality specific to socio-cultural facts. This filter balances the relationship between external aspects and the life of human societies.

"(...) when the documentation remains poor, the explanations are disproportionately largely hypothetical, the researchers filling the gaps in their factual knowledge with a theoretical apparatus which most often reflected the reigning ideology and culture of the time. (...) the questioning of the past, in prehistory no more than elsewhere is neutral" [25].

The reductive prism of evolutionism inclines to systematically deduce the evolution of socio-economic stages from morphologically or technologically separated states. Such an evolutionary deduction does not necessarily correspond to the experience of human societies in both ethnographic and archaeological contexts. An explanatory model of socio-cultural dynamics, based on the idea of a univocal balance between apparent morphological phenomena on the one hand and the structure of society on the other hand can sometimes prove inadequate to reality.

The Bakola-Bagyéli "Pygmies" preserve the structure of a hunter-gatherer society enclaved within a larger population of farmers. The former massively adopted the equipment associated with a life of sedentary farmers. At the same time, these populations deploy a strategy of resistance to limit the transformations of their society only in the form [14]. Such an experience, in which a lock is manifested in an ethnographic context escapes archeology overtaken by the dogma of evolutionism regarding the interpretation of socio-cultural dynamics [20].

An evolutionary reading of the apparent morphological transformations accumulated in the material equipment of the Bakola-Bagy ði would lead archeology to indiscriminately induce a complete evolutionary stage encompassing both the material equipment and the socio-economic organization, in a functional logic.

The accumulation of vestiges of transformations in the material equipment on the sites where the Bakola-Bagyɔi have lived since the recent past does not correspond to a transformation of the social structure and even less of the socio-economic organization of the populations in situ.

Resorting to the functional explanation would tend to induce, from the remains of material equipment, an equal level of transformations of both the social structure and the economic organization among the Bakola-Bagyɔi. While in the same way, changes recorded in physical equipment can constitute witnesses of dynamics in socio-economic organization, the same transformations are also likely to be used to block change. If technological transformations constitute a reliable indicator of the evolution of chronological stages, the dynamics of socio-economic organization, for their part, cannot be systematically considered as the consequence of morpho-technological evolution [14, 20].

The functionalism implicit in archeology earns this science the same criticism that Edmund Leach expresses about the first. "(...) the functionalist use of the notion of function was based on a logical equivocation: it covers, in fact, two distinct categories of reality, observable facts and supposed ends" [21].

4.3.2. The Criticism Against Functional Analysis Applies to Functionalism and Evolutionism

The functional approach operating in the traditional explanatory model of archeology manifests a double chronological and morpho-technological determinism with regard to cultural processes [29, 30].

This approach, in the explanation of cultural processes, establishes a relationship of univocal equality between successive chronological units and the level of complexity of the socio-economic organization. Levels of social complexity as well as developed stages of production are often associated with successive chronological stages, regardless of the existence of objective archaeological evidence.

Certainly, the evolution of chronological stages depends closely on the morphology of material objects as well as the transformations of the states of the latter. However, such causality is not necessarily verified between the form of material objects, its transformations and the socio-economic organization.

The experience among the Bakola-Bagyɔi presents morpho-technological transformations necessary to mark the transition to a socially and economically advanced chronological stage. However, populations are doing their best to block change in socio-economic organization. The "Pygmies" Bakola-Bagyɔi are maneuvering to ruin equality concerning the relationship between the transformations of material equipment and the continuous and increasing movement of the economic level of production.

Ultimately, it could be considered the existence of a causality between the accumulation of exogenous material equipment associated with drug addiction on the one hand and

the hindrance to the development of agriculture and to a permanent sedentary lifestyle on the other hand.

The concept of the "yes of refusal" with that of the lock, respectively due to Bahuchet and Guille-Escuret, could help to make such a cause and effect relationship intelligible [20, 28].

The increase in imported material goods as well as the high consumption of drugs seem to contribute to a clear common goal. These are two effects whose obvious cause would be the need to resist the domination of a culture that is powerful due to its numerical majority.

The acquisition of material equipment characteristic of the opposing culture together with an overconsumption of drugs could then find a common explanation in the disguised rejection of a culture embodied in agriculture and a permanent sedentary lifestyle.



Figure 13. A Bagyɔi holding a cigarette. © Medjo (Mashuer-mashuer 2014).

The populations would therefore have artificially entrenched themselves in a high consumption of substances recognized for their power of inhibition [Figures 13, 14]. Thus, a refraction to transformations of an external origin develops.





Figure 14. Some alcoholic remains revealed by archaeological surveys among the Bakola-Bagy ði. © Medjo (Foumban 2015).

The accumulation of exogenous material goods would then lend itself to a disguised refusal reinforced by high drug consumption. The process of conversion to agriculture and a permanent sedentary lifestyle is thus hampered, due to both practices.

Certainly, hunter-gatherer populations ostensibly assume the material witnesses attributable to the manifestation of both agriculture and a permanent sedentary lifestyle. However, the observable morpho-technological dynamics coexist in situ with practices opposed to the development of agriculture and that of a permanent sedentary lifestyle.

4.3.3. Disorganization Explains Socio-Cultural Dynamics Organized a Priori

The transformations of both living organisms and those accumulated in human cultures and societies are random, fortuitous, accidental or contingency. These changes do not obey a foreknowledge intentionally constituted in advance [32, 25, 11, 12]. However, the notion of organization, indifferently applied to living organisms and, through a questionable metaphor, to the facts of culture, contributes to distorting chance into necessity. The most complete version of the theory of the evolution of living species, developed by Darwin [36], gives a determining place to random phenomena or accidents, contrary to Lamarck's vision of necessity [3]. These are two conceptions of evolutionary theory. A theory whose proofs are irrefutable today regarding the observable differences between the form of living beings of the past and the present. The recovery in the explanation of the socio-cultural phenomena of this theory validated the understanding of the variability of forms between living organisms and distances from reality, not only in living societies but more so in those

made invisible after their disappearance [19, 26, 13].

The concept of organism and organization borrowed from biology contributes to make more difficult to access the true causes of socio-cultural dynamics. The notions of organ and organization suppose an intention pre-existing the observed facts. Both notions imply at the same time the idea of a purpose reserved for an organ, an organization as well as the transformation of the latter [11, 12]. However, the function of a material object cannot be deduced from its organized form separately from the manifestation of the usefulness of the latter in context, in the same way, we cannot determine an end to a supposed end to a set of disparate elements under the pretext of an organization of scattered cultural elements assembled into a whole [11].

The concept of disorganization then constitutes an alternative to the positivist conception of the causes of socio-cultural dynamics [27, 12, 2, 34]. Such a view deductively establishes organization separately from the manifestation of goals.

The notions of organ and then of organization all have a positive character. Both require objectification. Both, the organ and the organization depend on the establishment of a set of characterizable properties. These characteristics, often, constitute the source of explaining the better consequences of a predefined function. Such an approach makes the phenomena of living things intelligible but not necessarily the socio-cultural facts. The current state of the transformations observable in the material equipment among the Bakola-Bagyéli “Pygmies”, a population of hunter-gatherers, brings together the conditions or properties necessary for the transition to sedentary life and agriculture. Only the Bakola-Bagy ði seem to use these apparent changes to block through a “contrary reflex”, the process of their conversion into sedentary farmers [20]. These populations maintain the tradition of seasonal mobility of residences as well as a hunting and gathering economy independently of the accumulation of material equipment comparable to sedentary agricultural neighbors.

The characteristics of current transformations in the material equipment of the Bakola-Bagy ði correspond to a set of elements likely to be organized in anticipation of a preconceived end. Therefore, the failure to achieve the expected ends of the current transformations of the material equipment among the Bakola-Bagy ði explains the absence of an intention and of a pre-established organization capable of explaining the unpredictable outcome of the observed changes.

“The Pygmies are currently behaving towards the administration or development projects, as they have always behaved towards their village bosses: a facade of acquiescence, something that one could call “the yes of refusal”: say yes and do nothing, except run away. This is a real strategy, even if no leader organizes it. The Pygmies present us with the paradoxical image of a culture that is surprisingly powerful despite its fragile appearance” [28].

The Bakola-Bagy ði do not necessarily act in an organized

manner to resist their conversion into sedentary farmers. The current paradoxical state of socio-cultural dynamics among the Bakola-Bagyéli thus relates to a “contrary reflex phenomenon” or a “contrary reflex phenomenon” more assimilated to disorganization than to a so-called organization.

5. Conclusion

The discourse of archaeology developed on the basis of conceptual and methodological tools inspired by a linear and uniform conception of socio-cultural dynamics can sometimes prove contrary to the reality of human societies of the past and present. The model of current dynamics among the Bakola-Bagyéli illustrates this inadequacy. An economy of predation persists at the same time as we record the morpho-technological transformations necessary to mark the transition to an evolutionary stage in all respects. However, brought back to the archaeological context, the organic remains likely to testify in favor of such a reality will eventually all be deleted in the deposits being accumulated since the recent past among the Bakola-Bagyéli “Pygmies”. This is because of the differential conservation of the remains. The remaining half of the witnesses that can be found in an archaeological excavation will mainly consist of remains benefiting from a high capacity for taphonomic resistance, that is to say after passing through the deposits. So, the difference experienced today between the Bakola-Bagyéli itinerant hunter-gatherers and their sedentary agricultural neighbors could no longer be reflected in already truncated archaeological witnesses. The Bakola-Bagyéli “Pygmies” continue to struggle to maintain a life based on an economy of predation and the seasonal mobility of populations. However, the morpho-technological transformations of the material equipment of these same groups are found at a level of transformations necessary to mark the transition to an advanced socio-economic stage. Such an experience therefore ruins the supposed equality in the relationship between the form or transformations of material equipment. The determined level of socio-economic development often deduced from the continuous order of chronological periods becomes questionable. However, archaeology, in a widely shared conception, often seeks to establish balance in this equation independently of reality. To justify preconceived ideas, the inferences of archaeologists inspired by established dogmas often use the gaps left in archaeological witnesses made invisible by taphonomic activity [37, 25]. Ultimately, everything seems to demonstrate that the result of the action of taphonomy serves not only as an alibi but also as an adjuvant to legitimize pre-established dogmas. Faced with such an observation, it therefore appears necessary to put the deterministic conceptual model of socio-cultural phenomena into perspective. This is inspired by the biological metaphor of the biological organ [3, 19, 25, 13]. Such a model systematically considers human facts in terms of organization. It thus conditions the latter by de-

termined ends. Nevertheless, the comparison of qualitative ethnographic data with archaeological witnesses among the Bakola-Bagyéli reveals a paradox concerning the manifest function of the transformations recorded in the material equipment of these populations. Since the materialization of the claims underlying an organization necessary for the conversion of the Bakola-Bagyéli into sedentary farmers, these hunter-gatherers have used the dynamics accumulated in their material culture to block the process [20]. The observable contradiction between the claims of the established organization and the way of acting of the Bakola-Bagyéli not only reveals but highlights a phenomenon of disorganization [27, 34]. The discovery of this reality in the dynamics studied was made possible by means of a methodological approach based on a comparison of qualitative ethnographic data with archaeological witnesses. In the absence of such a dialectic in the approach, the manifestation of disorganization in the dynamics involved escapes the techniques specific to both the method of cultural anthropology and that of archaeology [31]. The proof methodological limits then suggest complementing the method of cultural anthropology as well as that of archaeology. This task consists, first, of finding methodological means to effectively cross-check the qualitative data used by cultural anthropology. This has the effect of reducing the biases inherent in the collection tools of the data category specific to this discipline. Secondly, it is a question of searching in the practice of archaeology for techniques capable of overcoming the problem that the gaps within the deposits pose to objectivity in the reconstruction of the reality of disappeared societies.

Abbreviations

| | |
|--------|----------------------------------|
| FONDAF | Home Our Lady of the Forest Home |
| NGOs | Non-Governmental Organizations |

Author Contributions

Protas Pamphile Patrice Medjo is the sole author. The author read and approved the final manuscript.

Conflict of Interests

The author declares no conflicts of interest.

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