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THEORETICAL PROBLEMS IN THE DESCRIPTION OF AFRICAN LANGUAGES

1. THE SITUATION AT PRESENT

In a work that appeared in 1967¹ but which has lost none of its interest today, P. Alexandre gave a list of the 51 languages of Black Africa (or homogeneous dialectical and linguistic groups) that approached or surpassed a million speakers. For each of them he evaluated available documentation, on a scale of from 1 to 6. He gave the rating 1 to languages for which the documentation was poor (outdated grammars and dictionaries, incomplete or absurd systems of unscientific transcription) and the rating 6 to languages for which works conforming to modern requirements were available (correctly noted sound systems, phonological and phonetic descriptions, annotated texts, dictionaries, stylistic and dialectological studies, audio material). Only three languages

Tanslated by Jeanne Ferguson

¹ P. Alexandre, Langues et langage en Afrique Noire, Paris, Bibliothèque Scientifique Payot, 1967, 170 p.

merited the rating 6 and only four were rated 5. This means that only seven languages out of about 1200 could be considered as accurately described, that is, offering all the necessary guarantees to the specialist.

If we want to measure the progress made in more than twenty years, we must compare the figures furnished by Alexandre with the point of view expressed in an inquiry made in July, 1985 by the African Studies Center of Michigan State University. This inquiry proposes to evaluate presently-existing material for the purpose of learning and teaching 83 languages given a high priority at the end of a consultation by African linguists at the same university. It goes without saying that the 83 languages thus selected must necessarily be considered as the most important with respect to the number of their speakers and also that the documentation concerning them is sufficiently rich to justify their choice. I do not want to challenge the results of that inquiry, but I doubt that at the moment there are more than fifty languages meriting Alexandre's rating of five or six, that is, for which the existing material is entirely satisfactory. Thus, much remains to be done, and we are not at the end of our efforts.

2. WHAT DO WE EXPECT FROM A DESCRIPTION?

We may clarify this question by putting it in a different way: what do we have the right to demand so that we can say a language is well described? First, a detailed analytical phonology, that is, not just a simple recapitulative table of the phonemes of the language with some complementary remarks. Each phoneme must be defined and its pertinence shown after the data is analyzed. This procedure must make it possible for the reader to control the demonstration and allow his judgement in a field where the arbitrary is inevitable, while the linguist who furnishes only a list of phonemes adds to it his own interpretations that are not submitted to critical study. After that, it is a matter of going on to the presentation of grammar itself, from morphology to syntax. We cannot have a complete idea of the language if we do not also envisage the edition of bilingual texts with commentaries and an equally bilingual dictionary, accompanied by a classification by subject.

3. WHY THE DESCRIPTION AND WHO IS IT FOR?

For linguists, there are no "major" languages or "minor" languages. The number of speakers is of little importance: each language is of interest because it reflects a particular segment of reality. Naturally, practical necessities control the choice of languages to be described. If the minor languages-the number of whose speakers diminishes every year in Africa almost to the vanishing point—must be carefully recorded as quickly as possible, since they are threatened masterpieces and, all the more important, because in cultures with an oral tradition linguistics supplies a sort of archaeology and history based on written archives, in the present-day context we are required to give our attention to the more widely-spread languages. It is normal that the independence of developing countries should not be affirmed only at the political and economic levels but should also be manifested at the cultural level. In the consciousness of the search for their identity, they have given language an essential place. Many governments have therefore launched programs of teaching in their national languages. On this level as on many others, the results are uneven. Between the small number of countries in which only one language is used by practically everybody (Ruanda or Burundi) and those in which there is maximal diversity (Cameroon) other situations may be met: those in which a prestigious language is diffused among more or less bilingual users (Tanzania and the Central African Republic); those who know several prestigious languages more or less in competition (Nigeria and Mali); those where there is only one major language and a large number of minor languages (Senegal), without counting the linguistic situations particular to each country if we consider social stratification.

M.Houis has brilliantly analyzed the matter in one of his studies.² It goes without saying that the task of the describer will

² M. Houis, Anthropologie linguistique de l'Afrique Noire, Coll. SUP "Le Linguiste," Paris, P.U.F., 1971, 232 pp.

not be the same when he must concentrate —often at the official order of such or such a country —on the study of a language to be used for teaching. Even if the methods used will be, on the whole, identical, he must know that in this case he will often have to collaborate with teachers and consider the practical side of his work: perfecting feasible and progressive manuals for teaching the language plus the formation of teachers called on to instruct in their language or that decided on for eradicating illiteracy, while they have not been trained for this task, instruction being still primarily in English, French or Portuguese.

4. METHODS AND THEORIES

Whether we like it or not, we have to admit that the theoretical options, beginning with the methods of description, are tied to historical events and choices from the colonial era. It is in this light that we must try to understand what is being done today.

4.1 The German school

For the most part, the first pioneers in African linguistics were German. At the end of the last century the center of linguistic studies was undeniably Germany. Whether it was a matter of comparative grammar of Indo-European languages, historical grammar of Germanic or Romance languages, it is indisputably in Germany that these disciplines had their impetus. The strong historical component of their approach has from the start influenced the early descriptions of African languages. Even though the phonetic precision of the notations and the relatively exhaustive nature of the analyses were from the beginning striking, we are surprised to see that this research was made less with a concern to describe the specifics of a particular language than to stake out claims that would result in the reconstruction of a commom ancestor, so that the famous names that emerge are first those of the comparativists: K. Meinhof³ for common Bantu and

³ K. Meinhof, Grundzüge einer vergleichenden Grammatik der Bantusprachen, Hamburg, 3rd ed., 1948.

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D. Westermann⁴ for the languages of the Sudan. African studies today are widely diversified, but this early orientation is still seen in the interest shown for studies in dialectology⁵ and the reconstructions of photo-Chadic⁶ or Khoisan.⁷

4.2 The Anglo-Saxon school

Colonial administrators, within the cadre of indirect rule, were required to know at least one African language before taking up their posts. This certainly played a role in the orientation of the English school, much more practical and pragmatic, though an offspring of the German school. Without neglecting comparative studies, especially in the Bantu area—M. Guthrie will long remain an irreplaceable reference for his monumental *Comparative Bantu*⁸ the first half of the 20th century saw a flourishing of grammars and dictionaries of exceptional quality. We mention offhand those of G.P. Bargery and R.C. Abraham for Hausa, that of F. Johnson for Swahili.⁹ If the first grammars follow their traditional models, the combined influence of the Americans L. Bloomfield, E. Sapir and their disciples¹⁰ was soon felt, aided by the community of

⁴ D. Westermann, Die Sudansprachen. Eine Sprachvergleichende Studie, Hamburg, 1911.

⁵ For example, B. Heine and W. Möhlig, Language and Dialect Atlas of Kenya, Vol. I: Geographical and Historical Introduction, Berlin, D. Reimer, 1980, 120 pp.

⁶ H. Jungraithmayr, K. Shimizu, Chadic Lexical Roois (A First Evaluation of the Marburg Chadic Word Catalogue), 2 vols., Tentative Reconstruction, Grading and Distribution, Berlin, 1981.

⁷ O. Koehler, Les langues khoisan, in Les Langues dans le monde ancien et moderne, first part: Les langues de l'Afrique subsaharienne, Paris, Editions du CNRS, 1981, pp. 455-615.

⁸ M. Guthrie, Comparative Bantu. An Introduction to the Comparative Linguistics and Prehistory of the Bantu Languages, 4 vols., Farnborough, 1967-1971.

⁹ G. P. Bargery, A Hausa-English Dictionary and English-Hausa Vocabulary, London, Oxford University Press, 1934, 1226 pp.; R. C. Abraham, Dictionary of the Hausa Language, London, University of London Press, 2nd ed., 1962, 992 pp.; F. Johnson, A Standard Swahili-English Dictionary, London, Oxford University Press, 1939, x + 548 pp.

¹⁰ Especially C. F. Hockett, G. L. Trager and B. Bloch, who published in collaboration the *Outline of Linguistic Analysis*, in 1942, the first complete manual of Bloomfieldian descriptive analysis. As followers of E. Sapir, we note the names of B. L. Whorf, H. Hoijer and K. Pike.

languages and favored by the originality of their theories, which attempt to elude the Indo-European model underlying the first descriptions. This concern is not foreign to the ethnological and linguistic formation of the leaders of this school. Confronted with very particular cultures (American-Indian) and types of language that are especially complex and remote from the Indo-European model, the absence of written documents forced them, moreover, to suggest an approach that was non-historic and to explain the languages they studied for themselves and in themselves.

It is certainly the excesses of neo-Bloomfieldian structuralism, especially marked in the studies of Z. Harris,¹¹ that led N. Chomsky to look for other directions. Today, most of the Anglo-Saxon descriptions are inspired either by the Chomskian method or the "Tagmetics" of K. Pike,¹² a follower of Sapir. Unfortunately, the excesses that Chomsky rightly denounced when he challenged the neo-Bloomfieldians have not been spared the holders of generative grammar. They seem to be more inclined to test their theories within a given language than to describe it from its interior. Aside from the fact that their methods, based on questionable postulates, are little adapted to furnish exhaustive descriptions, they fail, in my opinion, to present phonologies that are useful for practical purposes. The profound structures, hard to disengage and at the price of specific rules are no doubt interesting for reconstruction, but are practically without interest when it comes to disengaging immediately useable transcriptions for the notation of a given language. Pike's methodology, supported by a worked-out theory, is much more satisfying. This methodology is becoming widespread, due to the courses organized on a world scale by the Summer Institute of Linguistics, whose most recent list of publications is impressive.¹³

¹¹ Z. Harris, *Methods in structural Linguistics*, Chicago, The University of Chicago Press, 1951.

¹² K. L. and E. G. Pike, *Grammatical Analysis*, Summer Institute of Linguistics and University of Texas at Arlington, 1977, 505 pp.

¹³ S. I. L. Publications Catalog, 1985-1986, 207 pp.

4.3 The Belgian school

The linguistic situation of Zaire, a former Belgian colony where nine out of ten of the spoken languages are Bantu, justifies the interest of Belgian linguists for this group of languages. The founder of this school is A.E. Meeussen, who was at first a follower of M. Guthrie and at the end of his career a Bloomfieldian admirer of Chomsky. This double influence is seen in his monographs on several Bantu languages¹⁴ and in his comparative studies, in which he was especially original.¹⁵ His disciples continue their work taking inspiration from the theoretical cadre he had perfected, particularly appropriate to the Bantu languages,¹⁶ and if they are still mainly Bantuists, they are beginning to be increased in other groups.

4.4 The French school

At its beginning, the French school was influenced by the comparative linguist A. Meillet, who directed the thesis of L. Homburger on the historical phonetics of Bantu that appeared in 1914.¹⁷ It later championed the genetic relationship of the entirety of African languages that it even attempted to compare with Dravidian languages. Although we must respect the work of M. Delafosse on the languages of West Africa, we are obliged to admit that until around the sixties the works of any real scope were those of missionaries and administrators. Africanism in the universities developed quite late, for reasons that were essentially those of colonial policy. Aside from some attempts, quickly abandoned, at

 ¹⁴ "Esquisse de la langue ombo (Maniema-Congo Belge)," Annales du Musée Royal du Congo Belge, Linguistique 4, Tervuren, 1952, 45 pp.; "Linguistische Schets van het Bangubangu," Annales du Musée Royal du Congo Belge, Linguistique 5, Tervuren, 1954, 53 pp.; "Essai de grammaire rundi," Annales du Musée Royal du Congo Belge, Linguistique 24, Tervuren, 1959, 236 pp.
¹⁵ Especially "Bantu Grammatical Reconstruction," in Africana Linguistica, 3, pp. 79-135, 1967, and "Bantu Lexical Reconstructions," in Archives d'Anthropologie 27, Musée Royal de l'Afrique Centrale, Tervuren, 1980, 55 pp.
¹⁶ For example, A. Coupez, Abrégé de grammaire rwanda, 2 vols. Butare, 1980, 590 pp.

⁵⁹⁰ pp.

¹⁷ Etudes sur la phonétique historique du bantou, Paris, H. Champion, 1914.

bilingual teaching in Wolof-French, associated with the name of J. Dard at the beginning of the 19th century,¹⁸ the only language taught in the schools, accepted in the courts, used in administration, was French. This principle found its definitive expression with the decrees of the 30's, forbidding the use of any language other than French in teaching, even privately. The result was that the decolonization of the 1960s had to be waited for so that scientific interest in African languages would be awakened and concretized by the creation of university posts, so that today there is a time-lag between the relatively high number of researchers and the scarcity of teachers. This poses problems for the formation of students.

As for methods, we can say that French African linguists or those working in the French sphere have felt the strong influence of A. Martinet. A large audience, due as much to his personal talent as to the clarity of his teaching, allows him to popularize the structuralism issued from the Prague phonology that he extols in his work.¹⁹ With that as a beginning, his students have been able to perfect different methods that have proved to be particularly well adapted to the description of "exotic" languages, because they are sufficiently realistic not to distort the data and make them of no use if we want to interpret them from another point of view, which happens in the case of descriptions drawn up in the generative perspective, principally with the followers of Chomsky.

This overall picture would be incomplete if we failed to mention E. Benveniste and A. Haudricourt. If they only incidentally dealt with African languages, their thought underlies many studies. That of Benveniste gave rise to fruitful reflections on the particularly delicate aspects of grammar. Most of us have been profoundly influenced by Haudricourt and his working methods. If his contribution is felt in all that concerns phonology, it is his vision

¹⁸ Cf. J. P. Makouta-Mboukou, *Le Français en Afrique Noire*, Bordas Etudes 299, Paris, Bordas, 1973, especially the chapters entitled: Les tâtonnements précoloniaux: Jean Dard à la recherche d'une méthode; La portée de la méthode de Jean Dard; Mise en cause de la méthode de Jean Dard, pp. 17 to 32.

¹⁹ Especially Eléments de linguistique générale, Paris, Armand Colin, 1960 (edition of 1980); Grammaire fonctionnelle du français, Paris, Didier, 1979; Syntaxe générale, Paris, Armand Colin, 1985.

of language as a total social phenomenon—a view that shows the influence of Mauss—that convinced us that we cannot remain outside all human context of linguistic study and that the inquiries made in the contiguous fields of ethnobotany, ethnozoology and traditional techniques must be part of the procedure of the linguist in the oral milieu.

4.5 Other schools

This rapid, necessarily schematic and incomplete survey of the most active schools in African linguistics, and their tendencies, should not however make us forget that other linguists in the world are interested in African languages. A South African school, affiliated with the German school, marked the beginnings of Bantuistics and was the first to call attention to the particularities of the Khoisan languages, following W. Bleek. The Netherlands have recently furnished some valuable linguists strongly influenced by the American and Belgian schools but relatively little interested in purely descriptive work.

In Russia, African studies go back only to the 1920s. Also an offspring of the German school, the leader of the Soviet Africanist school, D.A. Olderogge²⁰ and his students are interested in the major African languages but are more tempted by the broad syntheses, the problems of classification and reconstruction than by monographs on particular languages. There is a section of African linguistics at the Academy of Sciences and the Institute of Eastern Studies in Moscow; African languages are taught in the universities of Moscow and Leningrad and at the Institute of Foreign Relations. The emphasis is principally put on the major Bantu languages (Swahili, Lingala), on Hausa, Bambara and Amharic, but comparative studies, mainly in the Hamitic-Semitic area, are also respected. Among the outstanding publications are a General Map of African Languages that appeared in 1960 and sometime after 1980 a Lingala-Russian Dictionary and a Comparative Dictionary of Foulani Dialects (with translation of the

²⁰ Yazik hausa, 1954; Hausa-russkiy slovar, 1963; Russko-hausa-slovar, 1967, Moscow.

entries into Russian and French). A large volume of African historical linguistics is being published under the direction of V. Porkhomovsky. It will encompass the studies on the phonology and vocabulary of the Chadic languages of the western group; on the reconstruction of consonant systems in the Mande and West Atlantic languages; on the evolution of the phonological system of general Afro-Asiatic and on the tonological reconstruction of the Saharan languages of the Kanuri-teda group.

Japan is also beginning to show interest and to send researchers to be trained in the United States, France and West Germany.²¹

Here we will also mention the work of Spanish and Portuguese linguists. In spite of the extent of their former African possessions, especially true of Portugal, most of this production is essentially due to missionaries, certainly interested but little acquainted with the demands of scientific method. For this reason, Angola and Mozambique are still today *terrae incognitae* as far as a precise knowledge of their languages is concerned.

5. LINGUISTIC STRUCTURE AND DESCRIPTION

The classification of African languages into four large families might lead us to think that they present comprehensively large characteristics in structure and a common vocabulary; that their phonological systems are more or less similar and that it should therefore be easy to propose a common descriptive framework on their subject. If certain typological comparisons are indeed possible, they still offer many disparities with regard to each other. If their vocalic system is for the most part relatively simple (5 to 7 vowels), some of them, for example the West African languages, have an especially rich inventory of vowels. The same is true of the consonant system, in which the number of consonants may go from simple to double within the same group (Bantu, for instance). If the morphology of the Ubangi languages is relatively simple, it is of great complexity in the Plateau, Chadic and Bantu languages. If we have been able to establish correctly the functioning of the sounds---one of their almost general characteristics--for a large

²¹ K. Shimizu, Comparative Jukunoid, 2 vols.; A Jukun Grammar, Vienna, 1980.

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number of them, we are still far from the mark in certain Bamileke and Grassfield languages. In the area of synthematics (derivation and composition) we find, side by side, languages of great richness and others in which these phenomena are almost non-existent. On the other hand, some phenomena transcend the linguistic groups. Thus the especially characteristic form of class languages, whether they belong to the West Atlantic, Plateau or Bantu group, effects a descriptive model that is not necessarily suited to languages where class does not exist. The result is some relatively convenient types of presentation, if we stay within the same typological framework, but ones that are difficult to use in other cases where different morphological or syntactical restrictions bring about another presentation. Habits being once established, it is difficult to change, due to inertia or temporary convenience, all the more so because some of them are practical as long as we keep in mind the idea that a linguistic monograph may be used for comparative ends. Thus, the enumeration of the classes of Bantu that was proposed for the first time by Bleek in his thesis (1851)²² is still used, with some changes, by the comparatists, while the hierarchy it implies is far from suitable for all Bantu languages. It follows that the Africanist who wants to become acquainted, for comparative or typological reasons, with languages belonging to different groups must first of all be permeated with the peculiarities of description proper to each group, which is not simple and makes the task especially delicate for whoever wants to have an overview of the entire field. The formation of researchers is not made easy, and one must be careful that during the course of study he is put into contact with the different models of description, to say nothing of the schools. These problems have not eluded those who, endowed with a vast experience in the matter of description and having realized how extremely diverse the linguistics of the Black Continent are, have wanted to suggest something new, permitting uniformity and normalization in description. In this light, M. Houis made proposals for a systematic description of the Negro-African languages.²³

²² De nominum generibus linguarum Africae Australis, Copticae, Semiticarum aliarumque sexualium, Bonn.

²³ M. Houis, "La description des langues négro-africaines" in *Afrique et Langage*, 1974, no. 1, pp. 11-20; no. 2, pp. 5-40; and "Plan de description systématique des langues négro-africaines" in *Afrique et Langage*, 1977, no. 7, pp. 5-65.

6. TOWARD AN IDEAL METHOD

6.1 The presuppositions

An ideal method for description would appear to be a difficult objective and a reality that continually escapes our efforts to define it. It must respond to multiple and at times contradictory demands. This is precisely the reason why different methods of description exist, supported by different theories: each brings a more or less satisfactory and diverse clarification but one that still leaves doubts. Each new method shows something lacking in the preceding ones, raises questions that had not even been thought of before and ends by convincing us that a language moves and changes aspects, one or another of which perpetually eludes us. We can however list the qualities that we have a right to expect from a good description, hoping it will give us a maximum of clear data that we may use in many ways.

First of all, an analysis must necessarily be founded on a solid theory. This implies that there has been order and method in the collection of material. We postulate that to describe a language is to carry out an operation that is always unique, whose ultimate objective is to arrive at defining specifics so as to disengage the universal. "To proceed inversely, neglecting the specific by searching for only the universals will result in showing the ingenuity of the describer but will fall short of attaining the objective."²⁴ It is therefore a matter of first researching the specifics and then discovering the universals but in guaranteeing their authenticity by eliminating all *a priori*. In this view, we formulate a series of hypotheses tested on natural languages; these hypotheses are arranged as the experiments made on that language progress. The study of the problems posed by each new sample obliges us to continually revise the theory, which is thus protected from any dogmatism. On the contrary, it is a matter of setting up a dialectic between the material collected, its analysis and its description.

In this perspective, our attitude must be as neutral and objective

²⁴ J. M. C. Thomas, Préface à l'ouvrage de Tersis-Surugue, Economie d'un système, Unités et relations syntaxiques en zarma (Niger), Bibliothèque de la SELAF, 87-88, Paris, SELAF, 1981, p. 13.

as possible and we must be careful not to impose the pattern of a foreign thought that would reflect, for instance, the Indo-European model on which theorization is too often exercised. What we think might respond best to these demands is a description at several graded levels, following a model that is well known in the natural sciences and has been defined as "holism." This model postulates that all physical reality brings with it a certain number of elements that make up unities proper to the level on which the analysis is situated. The combination of these elements forms another type of element, making up the unity of the level above. This position does not make a judgement on the structure proper to the language, but il does allow the research and description of its specificities, the disengagement of the universals, with the greatest possible objectivity.

Using this principle as a starting point, we will have units defined at the simplest level, combining with each other to reach a higher level, more complex, in which the units will have their own characteristics and their own way of combining. These are in every case distinct from the characteristics and combinations of those of the lower level. The chain of combination, increasing complexity, continuing from level to level gives a gradation of units and levels that will go from the definition of the traits pertinent to phonology and discourse. Our point of view, resolutely structuralist, considers in fact that the principles of the phonological model can be extended to all the linguistic data. Even if other levels exist that are accessible for the approach to the grammar of a language, we hold to those that allow the definition of what assures its function of communication, that is, its role in society. This point of view, even though it seems somewhat limited, is in no way restrictive, because it implies that the isolated object, language in this case, although delimited with a certain precision, is itself always involved in a larger whole to which it is bound by an infinity of correspondences, interferences, reciprocal influence in which it may in its turn represent a unit. If the study of the languages of well-known civilizations may be conceived as strictly linguistic, the study of languages with no written tradition cannot be envisaged without a study of their cultures. To analyze grammatical structures of a language without any idea of the realities it serves to express seems utterly vain to us and however intelligently the operation may be conducted, an undertaking doomed to at least partial failure, since there is no dissociation between a society and the language it uses as a means of communication. The opposite seems just as valid: the study of the structures of a society, independently of those of its language, can only have a limited value.

These considerations lead us to not separate linguistic description from connected disciplines, such as socio-linguistics (the study of social and cultural interactions and contacts between languages) or ethno-linguistics (the reciprocal interaction between a language and the exterior world proper to a social group), because they furnish descriptive tools for lexicography (preparation of dictionaries and lexicons), for cognitive anthropology (the study of practical and ideological categories proper to a given culture), for psycho-linguistics and for the studies on ethno-sciences and oral literature.

6.2 Adequate tools

These are presuppositions that have led us to suggest a manual responding to the often-expressed wishes of the scientific community: to be able to proceed to a rapid, orderly and progressive collection of facts, dispose of useful tools that respond to the joint needs of linguists and ethnologists. Appearing in 1971 in five parts, the work entitled *Enquête et description des langues* à tradition orale²⁵ attempts to answer these needs. A second, revised and augmented edition appeared in 1976 (three volumes). A third edition is in preparation as are also translations in English, Spanish and Portuguese.

The first volume is devoted to inquiries on the terrain and to grammatical analysis; it is inseparable from the other two volumes, the first of which deals with the linguistic approach and the second, with the thematic approach.

It seemed essential to devote half of the first volume to inquiries in the field; in fact, this conditions the quality of the description.

²⁵ L. Bouquiaux and J. M. C. Thomas, editors, *Enquête et description des langues à tradition orale*, Numéro Spécial 1, Paris, SELAF, 3 vols., 1976, 2nd ed., 950 pp.

A large space is given to the material aspects of the inquiry, which includes among other things the techniques of sound and written recordings. The choice of people from whom to get the information is also not to be neglected; twenty pages are devoted to this. Considerations on the use of the guides for making inquiries (the second and third volumes) precede a chapter on the best use of data, in which practical and less important problems are dealt with, such as the scrutiny of documents and the cataloguing of the material gathered.

The volume devoted to linguistics first gives questionnaires on grammar. The first, a linguistic inventory, worked out from the list of 200 words compiled by M. Swadesh, is essentially intended for an intensive inquiry concerning several neighboring languages, with the view of establishing their degree of relationship so as to specify the existing classifications and make up atlases somewhat more refined than those that are presently at our disposal. A second questionnaire, called extensive inquiry or beginning of inquiry, proceeding from lists of words illustrated with examples, is intended to gather information on various aspects of the language under study. Other questionnaires follow, of which several would be better qualified as guides, that bear respectively on phonology, morphology, the phenomena of derivation and composition, verbal syntagm, noun syntagme and types of statements. If these questionnaires are carefully completed, they allow material to be gathered from which the grammar will be elaborated. They are followed by a section of 6371 sentences permitting the exploration of the lexicon of the studied language, from French.

The third volume illustrates our view that the study of a language with an oral tradition can only be done jointly with a knowledge of its culture and its social context. It includes a guide for inquiry on techniques and some thematic guides relative to ethnobotany, ethnozoology, animal and vegetal anatomy and physiology, sociological phenomena (family, political and social organization), psychological phenomena, denomination (names of people, lineage and/or clan, names of domestic animals), measurements and expressions of weather. The last part deals with oral tradition in the broad sense: collection of texts, ethnomusicology, inquiry into the oral style of traditional story-tellers. The volume ends with two grids of inquiry, on the contacts between languages and sociolinguistics, that require a reproduction in several hundred examples.

Contrary to the linguistic approach, the thematic approach does not necessarily have to exhaust the different guides proposed to the researcher: one could prefer not to devote an in-depth study to the vegetal milieu, neglect ethnopharmacology and not go deeply into expressions of weather. More than the preceding, this volume is auxiliary to the kind of society whose language is being studied: a society of shepherds will not realistically offer a rich vocabulary on fishing techniques; a society of farmers will not have particularly elaborated hunting techniques. We have, however, wanted to offer a broad range of possibilities among which a choice could be made according to the type of society being dealt with or, also, and why not, according to personal taste.

It goes without saying that we must always keep a critical, open and not servile attitude toward these questionnaires. We must never try to force the information but use it as an introduction to fields that otherwise would remain largely uninvestigated. A long experience has also convinced us that the length of the research period being necessarily limited, an inquiry using prepared questions is much more rapid and fruitful, because it allows us to gather a maximum of data in a minimum of time.

6.3 Linguistic analysis

The second part of the first volume is devoted to linguistic analysis. It gives necessary clarification on the theoretical and methodological bases that led its authors to suggest one procedure rather than another, to prefer one order to another and to opt for a determined interpretation. We later take up the great classical divisions of linguistic description; phonology and grammar, the latter comprising morphology, synthematics, syntagmatics and syntax of the propositions, in that order. This account is in itself a program in that it orders the analysis in a way that does not necessarily correspond to that used by other linguists. In any case, we believe this order is most apt to give the best account of the data.

opinion, phonology is an autonomous chapter, In our independent of grammar. It gives the pronunciation habits of the linguistic community under study and shows that they lead to a discrete inventory of pertinent sounds, monemes. In Section 2 of this paper (What do we expect from a description?) we said that the inventory of phonemes must be made systematically and in detail, the definition of each phoneme must be accompanied by the description of its phonetic realization and allow a possibility of control. Phonology is not limited to a definition of phonemes and their presentation in a chart setting forth its system. From our point of view. there are also problems of distribution. demarcation combinations. frequency. and prosody. Bv distribution we mean the performance of phonemes in the chain, that is, their phonetic realization and the phenomena of neutralization and complementary distribution. In the examination of combinations, we review the groups of consonants that we will carefully distinguish from the single phonemes of complex articulation, groups of vowels, vowel and consonant agreement, tonal succession, consonant-vowel succession and vowel-consonant succession, in all possible positions (initial, central, final of moneme and in the chain); syllabization will also be considered under this heading. Frequencies in the lexicon and in the chain will also be examined, in different positions, phenomena of demarcation group all the phonological and phonetic characteristics allowing the definition of the limits of a lexical, syntagmatic or syntactic unit. Finally in prosody we will consider tone as a supra-segmental phenomenon-when it has not had its place as a pertinent vocal trait-intonation and accent. phonetic or phonological.

The study of all these phenomena, which we too often tend to ignore or which do not always receive enough importance, seems to us indispensable, given the importance they have in the later study of morphological and syntactical phenomena. Even though they are seen from a strictly synchronic perspective, we see that they offer new and often unexpected perspectives for the study of diachrony and linguistic relationships.

The second panel of linguistic analysis, if we conform to the method considered here, starts from the identification of phenomena and ends in syntax, and comprises grammar itself. This initially leads to the study of morphology which we define as the study of the formal variations in a paradigm affecting either the verbal paradigm of the conjugation or the noun paradigm. The main problem facing the describer is to precisely define the part belonging to morphology; morphological phenomena must be clearly distinguished from phonological phenomena, and their description must not intrude on the area reserved to syntax. Morphology must permit the disengagement of rules of application; this done, we see that there are exceptions in all languages, fewer or greater in number, but always present, irregularities making up a sort of unassimilable residue resisting all attempts at interpretation. This is where an especially perfected technique comes in, one that gives an account of these formal variations without having recourse to a historical explanation: morphophonology. This takes in cases such as elision, contraction, consonant alternations in traditional descriptions within a strictly synchronic description. It is therefore an articulation between phonology and actual morphology.

Morphophonology postulates that we must distinguish a third level along with the phonetic and phonological levels, a structural, grammatical or morpho(pho)nological level in which the monemes are analyzed in morphonemes, operational units chosen to bring out the characteristics proper to each moneme, especially those that are independent from the influence of the latter. Rules of the representation, in which agreements between morpho(pho)nemes and phonemes are stated, give an account of the characteristics linked to the ensemble: just as a sound (phonetic realization) is the realization of a phoneme, so a phoneme, seen in this way, may appear as the representation of a morphoneme. We thus have the following three levels, which we carefully distinguish in notations, with their correspondences:

phonetic	sound	tone	[]
phonology	phoneme	toneme	11
morpho(pho)nology	morpho(pho)neme	morphotoneme	
or ° preceding the stru			

The study of the formal variations of the signifying. which issues

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from morphology, permits the exact delimitation of the contour of the units of primary articulation, the monemes. Before we go on to their identification, which will be done in the chapter on categories, we will proceed to the study of another type of units, derivations and components—synthemes in the terminology of A. Martinet. Since it is not easy to trace a clear dividing line between derivation and composition, we are naturally led to study these phenomena together.

Once the study of synthematics is completed, we are ready to take up the study of syntax. The first level is to define the syntactical units traditionally called grammatical categories, parts of the discourse or classification of words. In our opinion, far from being a priori identifiable from one language to another, grammatical categories, the pivot of any syntactical description, must be redefined in a given setting for each language following methods adapted from those used for the definition of phonemes. Until 1960, the descriptions of "exotic" languages were very traditional. The categories of discourse responded to semantic definitions of the type "a noun serves to designate beings or things that belong to the same logical category..., a verb expresses an action, a state ... " Faced with an unknown language, we proceeded by analogy, showing that such or such a category corresponded more or less to what we called in French (or in the usual Indo-European language of the describer) a noun, a verb, and so on. This procedure, clearly ethnocentric, could not be justified in a description that wanted to be as objective as possible. The moneme, a convenient unit on the semantic level, did not necessarily coincide with the syntactical unit. At the level of syntactics we needed other units. The problem was presented on two levels: first, we had to have a label to designate the operatory units; these were called "terms" or "elements" to avoid the ambiguity of monemes with a discontinuous signifying or with a zero signifying. Second, the defined units were then designated as "syntaxemes," units at the syntactic level. This terminology sought to avoid confusion and controversy brought about by the use of the term "categories" or "word classes."

Retaining phonology as the model, it was a matter of discovering the heuristic processes as authentic and objective, to determine the categories, as that for the determination of phonemes. The moneme being sufficient to define the phoneme, it appeared that the type of statement could constitute the cadre for defining the syntaxeme, provided there was a strict numbering of "terms" or "elements," so as to be able to take into account positional, oppositional and combinational criteria. Without claiming universality, they have until now been effective for all the languages that have been tested. They are of a formal character and graded in the following way:

1. type of statement (marked/unmarked);

2. position or positions in the type of statement;

3. possibilities of commutation, permutation, coexistence and mutual exclusion in the type of statement;

4. possibilities of combination.

We add two characters to these criteria of identification, as traits able to characterize one syntactic unit with regard to another:

1. belonging to a type of inventory (limited/open);

2. formal characteristics: inflectional possibilities (possibilities for formal modification from a type of syntaxemes).

The graduated use of criteria enables some syntaxemes to be determined by fewer criteria than others, although we may use all of them systematically for the determination of each syntaxeme. However, to be effective the method absolutely requires the *hierarchical* use of the criteria. On the other hand, the *definition of the cadre* in which the analysis will be effected is indispensable. It is equally essential to exhaust the possibilities of each criterion before going on to the next, just as each type of statement must be thoroughly explored before going on to the one above it, having one more term, and to undertake its exploitation.

It is not a matter here of "nearly" or "more or less," any more than it is in phonology; syntaxemes are discrete units just as much as phonemes are. No more than with phonemes is it a matter of universal categories that we may consider as given or understood. Both are specific in each language and are parts of a system in which the units are opposed and characterized with respect to each other.

However, if each syntaxeme is defined by its opposition to all the others in the system, it will not be necessary—any more than for phonemes—to oppose each one to all the others since in syntagmatics we can disengage groups of opposition (such as series and orders in phonemes): here the type of statement or its position, as well as the specific traits, remains to be distinguished.

Once the determination of categories is completed, we examine their combinations at the level of the secondary determination within the study of noun syntagm and verb syntagm, that is, we review the relationships of noun and verb with their respective determinants. Then it remains to examine the functions, the role these units play at the new level of mechanism of the production of the statement (study of primary determination).

The following table clearly illustrates the different levels of description:

PHONOLOGY		phoneme	distinctive unit
MONEMATIC	phoneme = or \neq	moneme	simple significant unit
SYNTHEMATIC		syntheme	complex significant unit
SYNTACTEMATIC	moneme = or \neq	syntacteme	simple syntactic unit
SYNTAGMATIC		syntagmeme	complex syntactic unit
FUNCTIONAMATIC	syntaxeme = or \neq	functioneme	simple functional unit
ENOUNCEMATIC		enounceme	complex functional unit
	enounceme = or \neq	statement	final product

Note that the above terminology does not present particular difficulty if we know that:

- the ending *-eme* designates the simple or complex unit functioning at a given level: *syntacteme* - simple syntactical unit;

syntagmeme - complex syntactical unit;

- the ending *-matic* designates the level of the analysis in which is located:

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syntagmatic - formation of syntagms (secondary determination); the components are syntactemes, the resulting units are syntagmemes

If each level, seen as a particular system, has been treated correctly, the entire structure is coherent. If there is error or a faulty interpretation of the data, the incoherences immediately appear: the poorly-defined units cause a problem in the following level. We may quickly discover the faults and correct them. For instance, a badly-identified or overlooked grammatical category will block the analysis at the functional level. It is the same for each level of the construction.

Several works and some theses that are unpublished or in progress illustrate this method of description.²⁶

6.4 Lexicography

Grammatical analysis is only one stage in the study of language. There are relatively few really good descriptions of African languages and quality dictionaries are also rare. Our inquiry guides allow the collection of interesting data, especially on subjects that

²⁶ J. M. C. Thomas, Le parler ngbaka de Bokanga. Phonologie, morphologie, syntaxe, Le Monde d'Outre-Mer passé et présent, première série, études XXII, Paris-La Haye, Mouton, 1963; L. Bouquiaux, La langue birom (Nigeria septentrional). Phonologie, morphologie, syntaxe, Paris, Les Belles Lettres, 1970; C. Hagège, La langue mbum de Nganha (Cameroun). Phonologie, grammaire, Bibliothèque de la SELAF, 18-19, Paris, SELAF, 1970; G. Guarisma, Le nom en bafia. Étude du syntagme nominal d'une langue bantoue du Cameroun, Bibliothèque de la SELAF, 35-36-37, Paris, SELAF, 1972; P. Roulon, Le verbe en gbaya. Étude syntaxique et sémantique (RCA), Bibliothèque de la SELAF, 51-52, Paris, SELAF, 1975; G. Canu, La langue moré, dialecte de Ouagadougou (Haute-Volta). Description synchronique: Langues et civilisations à tradition orale, 16, Paris, SELAF, 1975; J. P. Makouta-Mboukou, Étude descriptive du Fumu, dialecte teke de Ngamaba, Paris, Univ. de Paris III (doctorat d'État non publié), 1977; J. Mba-Nkoghe, Phonologie et classes nominales du fang, langue bantoue de la zone A (Gabon), Paris, Univ. de Paris III (doctorat de 3° cycle non publié), 1979; le A. B. Akoha, Grammaire du fongbè d'Abomey, Paris, Univ. de Paris III (doctorat de 3° cycle non publié), 1980; A Gasana, La dérivation verbale en kinyarwanda, Paris, Univ. de Paris III (doctorat de 3° cycle non publié), 1981; J. Boyi, Phonologie, syntagme nominal, dérivation et composition en monzombo, langue oubanguienne de RCA, Paris, Univ. de Paris III (doctorat de 3° cycle non publié), 1982. F. Cloarec-Heiss, Dynamique et équilibre d'une syntaxe; le bànda-linda de Centrafrique, Paris, Univ. de Paris V (doctorat d'Etat non publié), 1983. are often neglected: tools, technical procedures and artisanal products, scientific identification of plants and animals.

When there is a greater degree of abstraction, it becomes more difficult to furnish precise definitions, except for equivalences. In any case, the semantic field of terms is difficult to define with precision. Numerous cross checks that we find in the questionnaires have this research in mind. Finally, the problem is almost unsolvable when we consider the specific traits of the civilization if we do not have guides of inquiry permitting the disengagement of the structures proper to the society under study. The structure of the vocabulary and usage are other approaches that complete the "inventory" aspect given by a dictionary. We will say again here that it is not a matter of carrying out a sociological study but of seeing how the language of a society expresses its consciousness of its organization and also its conception of the material and spiritual world in which men live.

As for the rest, our procedure is not especially original, except that it tends to be exhaustive, as far as description is concerned. The organization of the lexicon also aims to show indigenous classifications that may be disengaged in some areas and present them in a classification by subject, which would be a companion to an "'x' language-French" dictionary—this latter furnished with many illustrations—and the "French-'x' language" lexicon. In current dictionaries²⁷ this classification by subject has only been projected. On the other hand, it will be found with the appearance of the totality of the different parts making up the *Encyclopédie des pygmées Aka*²⁸ compiled by an interdisciplinary team of linguists, ethnologists, musicologists, doctors and specialists in natural science. In the future, we also envisage the publication of explanatory dictionaries edited entirely in the chosen language, on the order of the Petit Larousse type.

²⁷ For example, L. Bouquiaux, in collaboration with J. M. Kobozo and M. Diki-Kidiri, *Dictionnaire sango-français et Lexique français-sango*, Langues et Civilisation à tradition orale, 29, Paris, SELAF, 1978, 667 pp. ²⁸ J. M. C. Thomas and S. Bahuchet, editors, *Encyclopédie des pygmées Aka*.

²⁸ J. M. C. Thomas and S. Bahuchet, editors, *Encyclopédie des pygmées Aka. Techniques, language et société des chasseurs-cueilleurs de la forêt centrafricaine (Sud-Centrafrique et Nord-Congo)*, Langues et Civilisations à tradition orale, 50, Études Pygmées IV, 1981, 1, 140 pp.; 2, 143 pp.

6.5 The texts

We cannot have a complete idea of a language if we do not have examples showing the various literary genres collected in the field. To transcribe the oral tradition of the societies we are studying, in all its different aspects, is to save an entire cultural patrimony from oblivion, to preserve the inheritance of the unique experience of each society throughout the centuries of its history. In the absence of written testimony and monumental sites. African civilizations bequeath us, through their oral traditions, a glimpse into their life and a clarification of their past. In an ideal perspective, these literary testimonials, to be grasped in their entirety, must be published with the same care for precision and the same refinement as the great classical texts: establishment of the text, a a critical analysis of the problems beloging to linguistics, various notes giving access to the knowledge of the society which alone will permit going beyond the obvious meaning, penetrating of the arcane mysteries of the text and grasping all its beauty. Only a few collections answer these requirements.²⁹ At times we have been able to accompany the collected texts with records or tapes, thanks to which we may have a living perception of the particular atmosphere of a recitation.³⁰ These attempts have remained too rare, unfortunately.

7. THE TRAINING OF SPECIALISTS

In the light of the above, we have been able to understand the demands that were made of us and the extent of the task. One does

²⁹ Thus *Classiques Africains*, Paris, Julliard, comprised twenty volumes; fifteen volumes of the collection *Langues et Civilisation à tradition orale*; several volumes in the collection *Annales-Sciences Humaines* of the Musée Royal de l'Afrique Central.

³⁰ Thus M. J. and J. Derive and J. M. C. Thomas, La crotte tenace et autres contes ngbaka-ma'bo (RCA), Langues et civilisations à tradition orale, 13, Paris, SELAF, 1975, 228 pp. plus two records; N. Tersis, La mare de la vérité. Contes et musique zarma (Niger), Langues et Civilisations à tradition orale, 19, Paris, SELAF, 1976, 129 pp. plus two records; N. Akam and A Richard, Mister Tameklor, suivi de Francis-le-Parisien. Deux comédies musicales ewe by the Happy Star Concert Band, Langues et Civilisations à tradition orale, 42, 1981, 300 pp. and two tapes.

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not become an Africanist by improvisation. The obtaining of a specialized training, indeed, the holding of a doctorate, are not enough if they are not accompanied by a solid experience in the field, preferably as a member of a team which is made up of at least some qualified researchers. If, passing in review the different schools. I have not referred to an African school, it is because Africa has not vet really taken up the challenge: there are some specialized centers of instruction, but research there is only in its infancy and largely a tributary of foreign contribution. The urgency of the work to be done has often led some countries to form collectors with too much haste, as has been the case also with describers. As could be expected, the results have not been too positive. The fact alone of being a native speaker does not bring with it a particular aptitude for linguistic description; the knowledge of a language and familiarity with a culture do not necessarily imply possession of technical means to describe one or the other, all the more so because the degree of scientificity we have reached today requires a long preparation to be mastered.

> Luc Bouquiaux (C.N.R.S.)