

zahl der linguistischen Arbeiten über afrikanische Sprachen erscheint heute in der Schreibung des Afrika-Instituts.

## IV

Die Herstellung einer brauchbaren Orthographie für eine afrikanische Sprache wäre leicht, wenn mit der Aufgabe ein europäischer Phonetiker, der zugleich praktischer Kenner afrikanischer Sprachen ist, und ein verständiger, für seine eigene Sprache interessierter Eingeborener betraut würden. Dieser ideale Fall wird aber nie eintreten. Die Orthographie soll einer Gemeinschaft dienen, und diese Gemeinschaft will in der Sache gehört werden und mitsprechen. Da liegen die Schwierigkeiten. Die Gemeinschaft entscheidet nicht nach wissenschaftlichen, auch nicht nach praktisch-sachlichen, sondern nach persönlichen Gesichtspunkten. Freude am Ueberlieferten, unkontrollierbare Vorurteile, Eifersucht und reiner Unverstand spielen oft eine verhängnisvolle Rolle. Es genügt, wenn ich einige Beispiele dafür nenne. Eine Erziehungsbehörde oder eine Gruppe von Missionen erbitten Beratung in ihren orthographischen Nöten, stellen aber von vornherein die Bedingung, die Schreibung müsse mit den Buchstaben des lateinischen Alphabets auskommen, sie dürfe weder diakritische Zeichen noch neue Buchstaben enthalten. Das ist etwa gleichbedeutend mit der Forderung, die europäischen Sprachen dürften fortan als Vokalzeichen nur noch *a*, *i* und *u* verwenden, alle übrigen wären als überflüssig zu eliminieren. Oder: die neuen Buchstaben werden abgelehnt, weil sie zu schwierig seien; das mag für den Europäer insofern zutreffen, als sie ihm ungewohnt sind, aber nicht für das afrikanische Kind, das lesen lernt. Oder: die Orthographie muss der des kolonialen Mutterlandes angepasst sein, weil die Schwarzen doch später dessen Sprache lernen sollen. Das heisst, alle Dummheiten unserer Schriftsysteme, die grossenteils nur historisch verstanden und vielleicht auch entschuldigt werden können, nach Afrika übertragen und ihnen dort zu neuem Leben verhelfen. Oder: die Sprachgemeinschaft weigert sich, die Orthographie eines Nachdialektes anzunehmen, weil sie sich dadurch etwas zu vergeben glaubt. Schwierigkeiten können auch von der entgegengesetzten Seite kommen: der Bearbeiter einer Sprache besteht darauf, dass alle von ihm angeblich oder wirklich entdeckten Laut- und Tonunterschiede in der Schrift ausgedrückt werden, und ist schwer zu überzeugen, dass in der praktischen Orthographie ein Unterschied zwischen wesentlichen und unbedeutenden oder gar zufälligen Unterscheidungen gemacht werden muss. Es muss aber andererseits ebenso betont werden, dass es überall in Afrika Europäer und Eingeborene

gibt, die mit Verständnis und Takt an die Aufgabe gehen, denen es gelingt, Widerstände zu überwinden und ein Ergebnis zu erzielen, das zuletzt doch alle befriedigt.

## V

Die Aufgabe, für eine Sprache die geeignete Schreibung zu finden, ist nicht mit der Festlegung der Lautzeichen abgeschlossen. Eine weitere Frage ist die Behandlung der Vokalelisionen und im Zusammenhang damit die Worttrennung. Beim Zusammentreffen zweier Vokale fällt in der Regel einer aus; soll dieser geschrieben werden oder nicht? Die Frage scheint ziemlich belanglos, führt aber in der Praxis häufig zu grossen Schwierigkeiten. Das gleiche gilt für die Worttrennung, die sogenannte disjunktive oder konjunktive Schreibung; auch sie führt infolge der eigenartigen Struktur dieser Sprachen und der vielfachen Möglichkeiten der Zusammensetzungen zu den mannigfachsten Verlegenheiten, die erst in wenigen Sprachen wirklich überwunden sind.

Auch die Auswahl des Schriftdialektes schliesst orthographische Fragen ein. Bei der grossen Zahl der Sprachen ist es eine selbstverständliche Forderung, dass die Dialekte einer Sprache und selbst mehrere nahverwandte Sprachen zu einer Schriftsprache zusammengefasst werden. Hierbei gilt es eine Schreibung zu finden, die dem Ganzen der Sprache gerecht wird und doch von den Angehörigen der einzelnen Dialekte nicht zu grosse Opfer erfordert.

Wie ich schon zu Anfang sagte, handelt es sich in dem von mir behandelten Gegenstand nur zum kleinen Teil um Aufgaben, die den phonetischen Forscher reizen werden, aber doch um solche, die ohne Mitwirkung des Phonetikers nicht oder nur unbefriedigend gelöst werden können und denen sich deshalb auch der wissenschaftliche Phonetiker nicht entziehen sollte.

57. Dr. IDA C. WARD (London): *Tone in West African Languages*.

West Africa, like China, provides excellent examples of tone languages and tone behaviour. By tone languages is meant those in which tone is an integral part of the formation of a word, as essential as any other element, as for example, vowel or consonant sound. A survey of the main West African languages shows these to be of two — or possibly three types.

a) What may be called strictly tonal languages, in which a large number of pairs of words, or even groups of three or four, are distinguished by tone alone, i. e. which have semantic tone,

and in which accuracy in the use of tone is necessary for understanding. Yoruba, Ibo, Efik, Ewe, Ga are examples of such languages.

b) Languages, which, while not having so many words distinguished by tone alone, still have some definite musical accent, and certain tone patterns which belong to particular constructions. In such languages, tone, while still important and far from negligible in speech, is not essential to the same degree as in the first type. Twi, Hausa, Mandingo, Wolof may be said to belong to this group. I should almost feel inclined to subdivide this group and to put Twi and possibly Hausa nearer to type (a), while Mandingo and Wolof, as far as my experience goes are further removed from the true tonal type of language like Yoruba.

This second class *may* be in a transition stage between the purely tonal languages and those which have a recognised sentence intonation: not enough preliminary investigation has been done to formulate any theory on this point.

In the short time of this paper, I must limit myself to a small section of the question. I have left aside, therefore, the relation of sound, tone and meaning, since this has been fully set out by Professor WESTERMANN in the *Meinhof Festschrift* under the title of „Laut, Ton und Sinn in Westafrikanischen Sudan Sprachen”, and will content myself with illustrating a few aspects of the incidence and function of tone in those languages I have studied. These in themselves provide some problems which I should like to offer for the consideration of an audience of this kind.

#### SEMANTIC TONES

A few examples of these will suffice.

Yoruba has three essential levels of monosyllabic tones, high, mid and low: thus

ba (ˉ) alight, ba (ˊ) crouch, ba (ˋ) overtake

In a list of all the possible monosyllables in Yoruba, (some 170) 46 of them have three meanings according to tone, 61 have two, 40 have one, and 23 are not made use of at all.

ilu (ˋ) drum, ilu (ˊ/ˋ) town

koriko (ˊˊ) grass, koriko (ˋˋ) wolf

*Ibo*

akwa (ˊˊ) cry, akwa (ˋˊ) egg, akwa (ˊˋ) cloth,  
akwa (ˋˋ) bed.

bu (ˊ) carry, bu (ˋ) grow fat

o na-ebu ibu (ˊˋˋˋ) he is carrying a load

o na-ebu ibu (ˊˋˋˋ) he is growing fat

These essential tones — inherent, etymological, lexical are names which have been given to them — do not always remain constant. They may change under the influence of assimilation — a principle which is not difficult to explain and illustrate — and for grammatical purposes of some kind. Some of these latter are not always easy to explain.

#### GRAMMATICAL TONES

a) Straightforward examples of grammatical tones.

*Ibo*

o ricaa nri (ˊˋˋˋ) he has finished eating

o ricaa nri (ˊˋˋˋ) when or if he has finished eating

emesea (ˋˋ) it is done, afterwards

emesea (ˊˊ) when it is done, when

*Bamum* (a Cameroon language)

kpaara (ˋ) gun, kpaara (ˊ/ˋ) plural

manze (ˋ) road, manze (ˊ/ˋ) plural

*Efik*

enye odu do (ˋˋˋˋ) he lives there

enye odu do (ˋˋˋˋ) if he is there

One of the most interesting examples of grammatical tone I have found occurs in Ibo and expresses the relationship of a relative clause. Examples will make this clear. The interval (ˊˋ) is necessary in this construction, whatever part of the verb is concerned, when adjectives follow the noun and in the verbal noun formation used relatively. The high tone of this interval belongs to the main clause and the mid-tone to the first syllable of the subordinate clause. If the main clause ends in a word which normally has a low tone at the end, this must be raised up to make the essential interval.

ofe de oko (ˊˋˋˋ) the soup is hot

ofe de oko (ˊˋˋˋ) hot soup, soup which is hot

ala de oko (ˋˋˋˋ) the ground is hot

ala de oko (ˋˋˋˋ) hot ground

onye na-alò olò (ˊˋˋˋˋˋ) the one who is working

onye ga-alò olò (ˊˋˋˋˋˋ) the one who will work

ihe oriri (ˊˋˋˋ) something to eat (for eating)

No relative pronoun is necessary: there is a relative pronoun in the language which is used emphatically, and when this happens the essential interval is made by the pronoun ending in a high tone.

nna anyi nke bi n'elu igwe (ˊˋˋˋˋˋˋˋˋ) Our Father,  
which art in Heaven

nke bi (ˋˋ) who lives.

b) In addition to what I may call variants of one sound form,

each of which has a definite grammatical function, which is usually shown by no other factor than tone, it is to be noted that certain tone patterns are required for particular constructions even when other elements give more than a hint of their nature. Thus in Twi *ɔ̀reko* ( \_ - \_ ) means *he is going*. The same sound form is used in a subordinate clause which has an introductory word showing the nature of the clause, but the tones of the verb must be ( - - - ).

bere a *ɔ̀reko* no ( - - \ - - - ) when he was going.

Here the particles *a* and *no* are part of the construction.

In the interrogative another tone arrangement of the same sound form is required

*ehe* na *ɔ̀keko* ( \_ - \_ - - ) Where is he going?

Here the interrogative nature of the sentence is obviously shown by the word *ehe*.

This brings me to the problems of tone languages which I should like to lay before you. That is the changes of tone which on the surface are not grammatical. Nor are they due to assimilations. Why, for example, should the Yoruba noun *ɔ̀mɔ* ( - - ) with two middle tones be pronounced ( \_ - ) when as subject of a sentence it is directly followed by the verb and not when an adjective of any kind or and article follows it?

*ɔ̀mɔ* ri i ( - - - - ) the child sees it : *ɔ̀mɔ* na ri i ( - - \ - - )  
that child sees it

*ɔ̀mɔ* jε ε ( - - - ) the child eats it : *ɔ̀mɔ* na jε ε ( - - \ - - )  
that child eats it

*ɔ̀mɔ* wo o ( - - \_ - ) the child look at it : *ɔ̀mɔ* na wo o ( - - \ \_ - )  
that child looks at it.

Why do nouns of a particular tone class in Ibo have a different tone in genitive relationship and not other those of another tone class?

*isi* ( - - ) head, *enyi* ( - - ) elephant, *isi enyi* ( - - - - ) head of the elephant

*oke* ( \_ - ) rat, *isi oke* ( - - - - ) head of the rat

but *obu* ( \_ - ) coucal (kind of bird) *isi obu* ( - - \_ - ) head of the coucal

*ɔ* na-*egbu enyi* ( - \_ \_ - - ) he is killing the elephant

*ɔ* na-*egbu oke* ( - \_ \_ - - ) he is killing the rat

but *ɔ* na-*egbu obu* ( - \_ \_ - - ) he is killing the coucal

and *o gburu enyi* ( - \_ \_ - - ) he killed the elephant

*o gburu oke* ( - \_ \_ - - ) he killed the rat

*o gburu obu* ( - \_ \_ - - ) he killed the coucal.

The only explanation — if it can be called explanation — which I have to offer is that a tone language must be examined not only from a point of view of inherent tone nor even of the obvious grammatical tones : but from the point of view of

„tone-groups”. Since it would appear that these languages have grown up making use of certain tone patterns in particular combinations of words and rejecting others, just as any language makes use of certain combinations of the sounds which compose its sound equipment and not of others. Thus some combinations of inherent tones do not exist in the language. For example, *onɔ* ( - - ) *price*, *akwa* ( \_ - ) *egg*, together have the tones ( - - - - ) and not ( - - \_ - ) which could not occur in such a juxtaposition of words. It would seem that in spite of the number of changes of tone I have illustrated, the number of tone patterns in a language is limited. European languages, after all, make use of a limited number of intonation tunes. I have made no statistical examination of the languages under consideration, however, and cannot therefore elaborate and illustrate this theory. It is interesting to note that as far as my observations go, Yoruba, which has three essential monosyllabic tone levels admits of fewer changes of tone than Ibo and other languages with only two.

This brings me finally to a question which I am often asked. How many tone levels occur in a particular language? My answer is „I don't know”. Nor does it matter enormously. The question should take the following forms :

a) What monosyllabic tones are used in the language?

b) Do any other levels occur in the formation of words of more than one syllable?

c) What tone patterns occur in the formation of groups of closely related words?

d) How are these groups related tonally?

To illustrate again and answer these questions from the language I know best :

a) Ibo has two levels in monosyllabic words, viz. high and low.

b) It makes use of a mid tone in a class of nouns of the patterns ( - - ), ( \_ - - ) and ( - - - ), and in certain word groups.

*ɔ* na-*esi ya* ( - \_ \_ - - ) she is cooking it

*ɔ* na-*ase ase* ( - \_ \_ - - ) he is telling a lie

*isi enyi* ( - - - - ) the head of an elephant.

d) When the groups have a close grammatical relationship, the tonal relationship may be very strict, as has been shown in the sentences illustrating the relative clause in Ibo.

When the relationship between the groups is not very close, e. g. when it is a continuation of the narrative, the tonal relationship is generally not so strict. Actually the normal process of assimilation has its way and the sentence gradually descends towards the end.

It is, of course, the work of the investigator to find out what

are the essential tones and tone relationships and to present these as simply as such a complicated system allows, for the practical student of the language to learn.

## DISCUSSION :

Prof. MARCEL COHEN (Paris) :

L'emploi du tambour parlant existe-t-il seulement chez les populations ayant des langues à tons?

ANSWER of Miss WARD :

I have no experience of this.

Prof. W. HEINITZ (Hamburg) :

Die „Tonhöhe“ in den behandelten Sprachen ist überwiegend an die Vokale gebunden. Vokale können geflüstert werden. In der Flüstersprache können seitens des Hörers die verschiedenen beabsichtigten Tonhöhen nicht sicher unterschieden werden. — Können sich die Eingeborenen in einer Tonsprache flüsternd verständigen? — Wenn ja, dann müssten mindestens in diesen Fällen die akustisch wahrnehmbaren Tonhöhen gegenüber etwaigen (womöglich optisch wahrzunehmenden) Intensitätsunterschieden nur sekundäre Verständigungsbedeutung haben.

ANSWER of Miss WARD :

The difference in tone cannot be heard in whisper, but it is possible that some kind of extra breath-force may give the clue as to what form of the word is meant.

58. Mr. T. EARL PARDOE (PROVO) : *African Tonal Patterns... Extant in Present Day Afro-American Speech.*

(Summary ; complete text not having been sent in.)

The use of phono-photographic technics is fast developing as a material aid in linguistic and dialect study. The peculiar melody of Afro-American speech in the isolated southern districts of the United States has not been phono-photographically analyzed until the present study.

By selecting negro subjects whose parents or grand-parents were slaves brought over directly from Africa, we find tonal patterns and speech cadences, similar to present day African pitch-patterns, dominating the Afro-American dialect. The study shows that the first negroes, when brought to America, did not

degenerate into the low forms of English dialects, but adapted the new language to their African traditions and linguistic forms. This marks a new approach to the study of Afro-English dialects.

59. Mr. N. C. SCOTT (London) : *The Vowel System of the Tagalog Language of the Philippine Islands.*

Excluding dialects, GABRIEL FERRAND names more than twenty languages of the Indonesian branch of the Malayo-Polynesian family spoken in the Philippine Islands. Of these, Tagalog is said to have 1½ million speakers, including the native population of Manila, the capital. At the present time, this language has a particular interest, for with the promise of political independence a movement has grown up in favour of a national language, and in competition with a number of others, including Bisaya, which has a greater number of speakers, but, I understand, a considerable diversity of dialects, Tagalog has been chosen as the lingua franca of the Islands.

In 1917, Professor BLOOMFIELD of Illinois published in the *University of Illinois Studies in Language and Literature*, Vol. III, Nos 2-4, a detailed study of the speech of a Tagalog speaker from Balacán Province, P. I. My own observations have been made on the pronunciation of Mr. R. A. RODRIGUEZ of Sariaya, Tayabas, P. I., a lawyer practising in Manila. Mr. RODRIGUEZ is interested in the adoption of Tagalog as the national language, and uses it in private, though, in accordance with common practice, he uses Spanish in the Courts and on formal occasions. In general, his pronunciation appears to be very similar to that of Prof. BLOOMFIELD's informant, with certain differences that are probably dialectal.

To phoneticians, Tagalog is interesting for the fewness of the phonemes it uses ; probably nineteen, and possibly eighteen, in all. In the case of vowels, there appears to be the remarkably small number of three. In writing according to Spanish tradition, the letters *a*, *e*, *i*, *o*, and *u*, are used ; but the sounds represented by *o* and *e* seem to belong, in Tagalog words, to the same phonemes as those designated by *u* and *i* respectively.

The *u* that is used in non-final stressed syllables is, compared with Cardinal *u*, more open and advanced ; it resembles the short *u* of English Received Pronunciation. In the same phoneme, are sounds that are between this and one that lies between Cardinal *o* and Cardinal *ɔ*. I have discovered no simple rule for the distribution of the members of this phoneme, but, in general, the situation is as follows :

An *u* of the type first mentioned is used in non-final stressed