# CENTRE AND PERIPHERY: CHADIC LINGUISTIC EVIDENCE AND ITS POSSIBLE HISTORICAL SIGNIFICANCE \*)

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### Introduction

Since the early beginnings of Chadic linguistic classification the opposition between 'Centre' and 'Periphery' implicitly played an important role. The development and different steps in the history of Chadic Comparative linguistics reflects the permanent, on-going discussion on this matter. The fact that J. Lukas had distinguished 'Chadic' from 'Chadohamitic' (cf. e.g. Handbook 1952), a distinction that goes back well to the 1930ies, was based on typological grammatical criteria (grammatical gender, 1st plur. incl. / excl. pronouns, internal plural, etc.); Greenberg's overreaction to this mainly typological classification was thus that he completely refused to recognize any fundamental internal division and merely enumerated nine groups without accentuating any dichotomic features or oppositions (Greenberg, 1955, 1963). Therefore Greenberg's pragmatic classificatory treatment of the Chadic languages was nothing more than an objective inventory but not an evaluating classification. P. Newman and R. Ma's comment on this runs as follows: "In establishing a single Chad family, Greenberg discarded the dichotomy between Lukas's 'Chado-Hamitic' and 'Mandara' groups; instead, he tentatively reclassified these languages into nine subgroups." (Newman/Ma 1966: 219). Paul Newman, a pupil of Greenberg, and Roxana Ma returned to the principle of a basic dichotomy - "... it appears that Lukas's dichotomous framework will form the basis for a proper subgrouping of the Chad family". (Newman/Ma op. cit.: 219) - by proposing the two groupings termed 'Plateau-Sahel' and 'Biu-Mandara'. Surprisingly, in 1977 Newman "reversed [his] earlier opinion and broke up Plateau-Sahel into its two branches, which were taken to be equally distinct from one another and from BM [Biu-Mandara], thereby setting up three coordinate branches for Chadic". (Newman 1977:8).

The third attempt at classifying the Chadic languages which involves a dichotomous view is that of Jungraithmayr published in 1981 (Jungraithmayr 1981), but largely elaborated already in the earlier 70ies. The view is terminologically manifested in the oppositional pair of notions ("classes") 'West-Eastern group' ('Groupe ouest-est') vs 'Central Group' ('Groupe Centre-Ouest' and 'Groupe Centre-Est'); the subdivision within the Central group into 'West-Central' and 'East-Central' was meant to hint at certain tendencies (perhaps merely areally conditioned?) of the 'West-Central' languages towards the neighbouring 'western' languages (of the 'West-Eastern class') and of the 'East-Central' languages (Masa, Kotoko. etc.) - which Lukas had even included in his 'Chadohamitic' class towards the neighbouring 'eastern' languages of the West-Eastern class.

Whereas Newman and Ma (1966) and Newman (1977) had based their 'class' dichotomy' on essentially phonological and lexical arguments, Jungraithmayr applied mainly grammatical criteria in establishing his basically binary classification. 1) The following table summarizes the development of the notion and the terminology used with the dichotomous view in the classification of Chadic languages:

### Dichotomic classifications:

Lukas (1934): 'Chadohamitic' 'Chadic' ('Mandara') VS

VS

Newman-Ma (1966): 'Biu-Mandara' 'Plateau-Sahel! ٧S Jungraithmayr (1981): 'West-East' 'Central'.

## Trichotomic classifications:

Newman (1977): 'West' vs 'East' 'Biu-Mandara' (vs VS

'Masa')

Jungraithmayr/Shimizu

'West' vs 'East' 'Central'. (1981):

Obviously both Newman and Jungraithmayr/Shimizu in their most recent classifications abandoned their original dichotomous concept in favour of a threefold division. This was certainly done out of caution. Newman said that "research ... still failed to turn up any features - whether

lexical, grammatical, or phonological - that could be said to be exclusive innovations shared only by EST and WEST. (Newman 1977:8).

## Common retentions in the Periphery versus innovations in the Centre

There do in fact not seem to be any remarkable in novations shared by the eastern and the western languages only which would distinguish them from the central languages, but there are some fundamental retentions found in the peripheral language areas that are missing in the centre. It is mainly the apophonic or ablaut nature of verbal constructions and conjugations which is present in the extreme west as well as in the east but absent in Central languages. If verbal forms like

Ron-Daffo:	mot (p	erfv.)	1	mwa <b>á</b> t (	imperfv.)	'to	die'
Migama:	ápíré	(")	1	ápárrá	(")	'to	choose
Mubi:	mất	(")	1	mùwáat	(")	'to	die'
Mokilko:	'îndâ	(")	/	'ûntó	(")	'to	die'

supposedly had no immediate parallels and genealogical connections with comparable forms in other families of the common Hamitosemitic stock, they would have to be interpreted as coincidental typological resemblances and to be rejected as indicators of genetic relationship and thus as retentions from a pre-Chadic period in the development of Hamitosemitic languages. The same applies to the fact that the great majority - if not all - of the peripheral languages distinguish between masculine and feminine forms in the 2nd and 3rd persons of their pronominal sets - a morphological feature that could well be taken as typologically interesting but genealogically irrelevant if the characteristic morphemes would not betray their common Hamitosemitic origin. Cf. for instance

187	Ron-Daffo	Ron-Bokos	Karekare	Angas	Mokilko	Migama	EDangla
2. m.	ya	ha	ka	ya	k-	ki	ki
f.	ki	shi	ci	yi	m-	ka	ka
3. m.	shi	1 1 <del>-</del> 0	sa	(di)	<b>y</b> -	ga	na
f.	ti	ti	ta	(da)	t-	gi	tya

Compare this finding with some examples taken from Central languages:

Margi Lamang

2. m./f. ga -ka

3. m./f. ja -Ø, -de.

It is worth looking at some danguages situated in between the periphery and the centre where transitional stages occur:

Ngizim Pa'a

2. m. ci u (<\*ku)

2. f. kəm in (<\*kin)

3. m. aci na

3. f. 'atu i (<\*ti).

It is beyond doubt that the non-peripheral and central languages which generally lack the pronominal gender distinction have innovated their pronominal systems by reducing the dual representation to a single pronominal morpheme to each person.

In addition to the important morphophonological function of ablaut, e.g. in the formation of verb stems, present in the eastern and western languages, we should also take into account the phonological fact that the Ron languages in the extreme west as well as Hausa and the various languages of the far east, e.g. Mubi, Migama, Kofa, Mogum, Dangaleat and Mokilko have a vocalic inventory of only five vowels (a, e, i, o, u); on the other hand, the more we move towards the centre, from both sides, the number of vowels may increase. Tangale may serve as a particularly progressive/innovative example: here we have 9 vowel phonemes - forming a vowel harmonic system - which are, however, not original but innovatively developed by contact with neighbouring Adamawa languages like Waja which possesses the same number of vowels and the same type of vowel harmony. (Typologically speaking it may be worth noting that whereas in the 'Middle-West' the number of

vowels has been increased by adding further non-centralized qualities  $(\varepsilon, \tau)$  and r, u), in the Middle-East the predominance of the centralized qualities aand is remarkable (Mahwa, Sibine, Ndam, Kwang, etc.). As to the languages of the very centre, i.e. preferably those which I once labelled the 'Centre-Ouest' languages (Tera, Bura-Margi, Higi, Bata-Bachama, Lamang, Mandara, Sukur, Mafa-Mofu, Daba and Gidar groups), a certain vagueness, instability and flexibility - in opposition to the clear-cut and invariable quality of vowels in peripheral language groups - is to be noted. Here, vowels may change their quality depending on the morphosyntactic position they are in; they may even suffer total syncopation. For example, in Giziga hay is 'house', but hii- (=hiy-)-do 'my house'. In other words, one may state that the more morphological weight vowels have to carry as in the Ron and the Northeastern languages -, the less flexible they can afford to be in phonological/phonetic respects; on the other hand, the less morphological weight they are charged with - as in most Central languages - the greater their phonological and syntactic variability may be.

The basically typological feature of relative instability and excrescence also applies to the phonological domain of consonants. Whereas East-West languages in general have consonantal systems which rarely exceed about 30 phonological units (Ron-Fyer: 32, Migama: 24, Mokilko: 22, Bidiya: 23, Tumak: 24, Sibine: 24, Dangla: 23), there are some Central languages with 50 up to 90 consonantal phonemes, e.g. Gude possesses 58 (according to Hoskison 1983) and Margi 95 (Hoffmann 1963). (Others, admittedly, like Lamang (Wolff 1983), display a rather 'normal' situation regarding the number of consonants, i.e. 37 or 34, respectively.) The increase - or even inflation - of consonantal phonemes is to be explained by the appearance of secondary features like labialization, palatalization, prenasalization and a general tendency towards clustering of consonantal phonemes; it is highly probable that even the lateral fricatives (tl and dl) which are limited to central (and west-central) languages are the outcome of such an innovatory development within the phonological systems of the central languages. Moreover, besides the greater number in consonantal phonemes, there is also a greater degree of qualitative instability to be observed with

consonantal phonemes. For instance, in Tangale which in many respects is to be considered typologically as 'central', there is quite a regular syllable-initial consonant permutation rule according to which k changes to g and n, p to b and mb, t to d and nd, depending on which syntactic construction the word is situated in (cf. Jungraithmayr, in press). - As to the feature of consonant gemination, the general impression is that whereas west-eastern languages, including Hausa abound in geminates - e.g. Hausa daddafa, Migama gorossa -, Margi, Gude and Lamang, for instance, hardly display double consonants; cf. Wolff 1983: 49 where he says: "Geminate consonants are rather infrequently heard in Lamang utterances." For Gude it is said (Hoskison 1983:9) that "consonant length ... is not phonemic." (cf. Appendix). - All things being what they are, they are able to link together all those languages in the west and the east displaying these more archaic features as opposed to the languages in the centre which have obviously given up these features and through this very fact constitute an innovated stage in the history of the Chadic languages.

## How to interpret the common West-East retentions and Central innovations?

On these questions we can only speculate. We have tried to outline - on some accompanying maps - the possible 'Urheimat' of the Chadic speaking peoples in the Central Sahara showing their close interconnections with such groups like - what we call today - the Early Saharan linguistic community as well as - at least part of - the Early Cushitic language group. With the gradual dessication of the Sahara the various groups - probably within themselves linguistically already diversified to a certain degree - started moving mainly towards the east, the southeast and the south, each of them defined by its basic linguistic identity, i.e. the Proto- -> Early Ancient Egyptians, the Early the Saharans and the Chadic speaking peoples. The Proto-Berber speakers may in fact have had their early homesteads in a southeastern corner of N-Africa - as P. Behrens (1984/85) thought - and may subsequently have migrated in a northwesterly direction thus crossing some parts of the ancient 'Sprachbund' area in the Central Sahara; it may well be that the Eastern Chadic speakers had already been on the move to or had even

already arrived in a region somewhere north of where they are found today (Eastern Chad). Aside from the common origin of the two groups, a longer period of common residence could explain the fact that the Berber-East Chadic isoglosses are considered to be of particular importance in quantity and quality (cf. H. Fleming 1981 (unpubl. ms., p.5)).

A crucial question concerning the route(s) the Chadic speakers took when moving southward is which side of the Lake Chad they may have prefered. Our hypothesis is that, judging from the particularly conservative nature of parts of the Eastern languages' vocabularies and structures, the Early East Chadic speakers took the eastern route (east of the Lake) thus avoiding the turmoils and influences that most other linguistic community members had to expose themselves to. A majority of Early Chadic speakers probably migrated to their present homes via routes west of the Lake, being at first concentrated in the region south of the Lake but later on further diverging into groups which migrated to the west and southwest. (Bole-Tangale, Angas-Sura etc.). Others still took the eastern route, yet did not go east but south(west) thus founding the communities known today as 'Centre-Est' within the Central Group (Kotoko, Masa. As to the western route it appears - from the linguistic inventory that certain groups - especially the Bade-Ngizim - never reached the central area but as 'late-comers', so to say, stopped their migration in the western shore area of the Lake from where they were later on driven away towards the west/southwest by the Kanuri. Other groups, like the Ron, would have moved far to the southwest from the outset and penetrated deeply into the mountainous regions of what is referred to nowadays as the Northern Nigerian Plateau where - under conditions typical for a 'Rückzugsgebiet' - they were able to preserve essential features of their original morphological structures. Peoples like the Angas-Sura-Goemai, today neighbours of the Ron on the Plateau who display a much more innovative linguistic structure than the Ron languages would have certainly reached the mountain region at a much later time having moved on from the western Lake region in a southwesterly direction. Their modern linguistic appearance is the result of fundamental influences by 'Nigritic' Benue-Congo languages. In general the on-going pressure triggered by expansive

forces in the Centre seems to have caused secondary migratory movements within the areas between the western Central and 'Middle' Western languages, that is for instance between the Bura-Margi and Tera on the one hand and the Bole-Tangale languages on the other. Thus, the Tangale - together with the Pero, Wurkum and Kushi - were pushed deep into the area of Adamawa languages which exerted a very strong influence upon them, thus creating a special type of "interferential" Chadic ('Tangale type').

In the 'Middle East', that is mainly in the south-central Chadian region along and between the two rivers Logone and Chari, the incoming Chadic speaking peoples first encountered Adamawa-Ubangi speakers and later - only in the 1st Millenium A.D., according to D. E. Saxon (unpubl. ms. 1980) - also Central Sudanic language speakers (Bagirmi, Kenga, etc.). These circumstances certainly created a new 'brand' of Chadic languages quite different from what had developed - under different ethnohistoric conditions - in the 'Middle West' (NE-Nigeria).

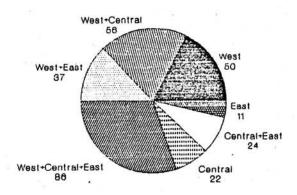
Our hypothesis according to which the peripheral areas of the Chadic speaking community would have preserved more archaic stages in the (morphological) development of Chadic languages and that the Centre represents the area of innovation is in agreement with the general principle of the Italian 'areal' school of linguistics, the Neolinguistica. Of course, the present-day Central Chadic area is not the Urheimat of Chadic but it became a place of refuge of sorts, a second 'home' for the majority of the Chadic languages - after the speakers had been forced to move from north of the Lake to its southern side.

## Some lexicographic findings and their interpretation

The semantic and historical analysis of the Common Chadic lexicon is still in its beginnings. As to the number of reconstructed roots for the entire family a first sample has been taken and provisionally some hypothetical results may be drawn from it. In <u>Chadic Lexical Roots II</u>, 286 roots have been proposed for the first 48 glosses ('arrow' - 'croccdile') that is an average of 6 per gloss. The distribution of these 286 roots over the three branches (W, C, and E) is as follows:

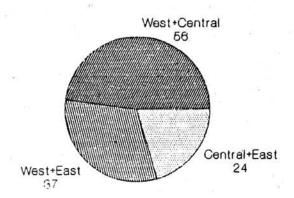
W WC WE WCE C CE E 50 56 37 86 22 24 11

## (1) Distribution of 286 roots



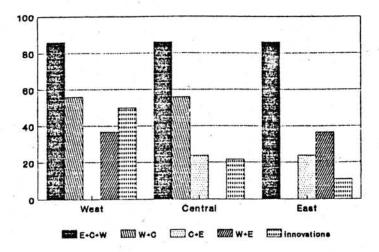
graphics by M. Brof

## (2) Distribution of 117 bilateral roots



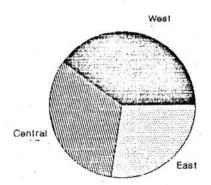
graphics by M. Broß

## (3) Differentiated distribution of 286 roots



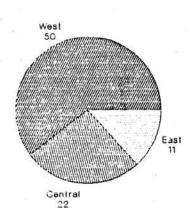
graphics by M.Broß

## (4) Distribution of the common roots



graphics by M.Brof

## (5) Distribution of the innovations



Obviously, the highest density of roots is to be found in the western branch where more than 3/4 of the total number of roots occur. In other words, there are 229 roots occuring either in the West only (W) or in the West and the Centre (WC) or in the West and the East (WE) or in all three branches (WCE). On the other hand, the eastern roots occuring in the East only or shared also by the West and/or the Centre total 158; and the number of roots occuring in the Centre but also those which are shared by the West and/or the East is 188. This may be illustrated by the following:

1. Chadic-wide W-roots:

2 2 9

2. Chadic-wide E-roots:

158

3. Chadic-wide C-roots:

188 .

In a first analysis of these basic statistics the following interpretations seem feasible, whereby we are assuming that there is a certain degree of correlation between density of root occurrence and intensity of historical events which would have led to such phenomena as double-lexicalization, lexical replacement, etc.

It is evident that the lexicographical findings do not fully support the morphological ones. The number of roots shared solely by the West and the East is relatively low (37), thus revealing a West-East relationship which is not particularly salient, at least not from a quantitive statistical point fo view. A great number of the WE roots is also shared by the Centre (WCE:86). In future, it will be the nature and historical quality of the vocabulary common to the West and the East that will have to be carefully analyzed.

The high number of roots (229) shared by the West marks this branch, i.e. the area of its distribution, as being full of cultural and linguistic contacts and interferences which will have accelerated the pace of change

and will thus have contributed to the increase and expansion of the cultural and lexical inventories. It is highly probable that future research will be able to demonstrate that the core of intense culture - historical mobility and innovativeness was situated between Lake Chad in the northeast, the N-Camerounian Mandara Mountains in the east and the eastern slopes of the Bauchi-Plateau in the west:

Banchi of Mandara
Plateau intense innovation

Benue river

Linguistically speaking, this is the zone where the West-Central and the majority of the Western languages amounting to almost 100 to be found today, i.e. at least 2/3 of the total number of Chadic languages; thus it is not only the area with the highest "root-productivity" but also the region with the greatest linguistic diversity. We know from the oral traditions that - within the last millenium and continuing up to the present time - various ethnic/linguistic shifts and displacements have taken place in this part of the Chadic speaking world. For instance, several groups including the Bade, Gamergu and probably also the now extinct Auyokawa and Mober were either displaced from the western and southwestern shores of the Lake or were even annihilated by the Kanuri. Such northeast-southwest migrations and conquests triggered otherous movements which eventually led to the penetration of the mountain Plateau region by the Angas-Sura groups, the westward expulsion of the Bole-Tangale groups by the Tera and the intrusion southward of the Tangale-Pero-Wurkum groups into Adamawa speaking territory situated south of Gombe.

## Conclusion

Just a glance at a language map of the Central Sudan would suffice in creating the impression of a particularly intense linguistic dispersion and splitting in this region. The Central Sudan, that is the region to the south, southwest and southeast of present-day Lake Chad, is not only

the home of the southwestern-most Hamitosemitic family but also accommodates large parts of the other two great African linguistic stocks, i.e. Nilo-Saharan and Niger-Congo (especially Benue-Congo, Adamawa-Ubangi and Central as well as Eastern Sudanic).

The present - largely hypothetical - attempt at interpreting linguistic facts in historical terms highlights the following theories:

- The Chadic linguistic WE periphery, which retained and conserved a number of morphological and phonological archaic features showing a particularly close relationship of these languages with Berber, Cushitic Ancient Egyptian and Semitic, represents an ancient area to which early Chadic speakers first took refuge after having abandonned their Central Saharan Urheimat.
- The area most evolutionary and innovative in phonological, morphological and lexical respects (reduction and reorganisation of the pronominal systems, abandonment of aspect stem apophony, development of new phonological consonantal and vowel systems, lexical replacement of a number of archaic terms and/or addition of newly acquired vocabularies, etc.) was and is situated between the Mandara Mountains and the Bauchi-Plateau south(west) of Lake Chad. This intense linguistic vitality could well be the reflection of a particularly turbulent social and cultural/historical past which has left its mark on this region over the past 3-4000years.

## Footnotes:

- \*) Thanks are due to M. David Anderson for kindly having read and where necessary corrected the English text.

  I am also grateful to my co-workers, especially R. Leger, G. Tauchnitz and M. Broß for their assistance and the stimulating discussions which I had with them.
- The fact that in his subdivision of the central group there was a trinary division already inherent, eventually led to the pragmatic distinction of 'West Chadic', 'Central Chadic' and 'East Chadic' (Jungraithmayr/ Shimizu 1981).
- 2)Cf. also the striking fact that the well-known Akkadian lexeme <u>paraasu</u> (<u>iprus / iparras</u>) 'to split, separate' (Bezold 1926) also occurs in <u>East-Chadic! Cf. Sokoro purse / pursa</u> and Mahwa <u>parase / paras</u> 'to split, traverse'.
- Another model of thinking would be to assume that the majority of Chadic speaking groups certainly with the exception of the Hausa took the eastern route, some of them, the 'Easterners', having already separated at an early stage and moved directly to the east, the majority, however, having taken a south-southwesterly direction; they would have settled down in what is today Northern Cameroun but part of them would have left the Centre after some time and continued to the west. I do not favour this model (suggested by R. Leger, oral comm.) because it presupposes that such groups as the conservative Ron on the southern Plateau would have had to have passed a long way through the Centre where their languages would have certainly undergone many more modifications than is actually the case.
- 4) Cf. e.g. Matteo Bartoli 1925, Introduzione alla Neolinguistica (Geneva 1925) or Saggi di Linguistica Spaziale (Turin 1945). I am grateful to M. Lamberti for these bibliographical references. In addition, Petr Zima (Praha) drew my attention to relevant works of French and Polish dialectologists, e.g. A. Dauzat who writes in his book Les Patois, Paris 1927 35: "Un caractère moins connu, mais non moins important, des francais régionaux, c'est leur archaïsme, qui augmente quand on s'élaigne vers la péripherie... La province a toujours été en retard sur les innovations du centre; en revanche, elle a gardé bien des archaïsmes disparues à Paris...".A. Meillet in his "Essai de Chronologie des langues indoeuropéennes", B.S.L. de Paris 32, 1931, talks about I quote in German from H. Arens' Sprachwissenschaft, 21969, 470' the fact "daß die Unterscheidung von Maskulinum und Femininum im Indogermanischen zugenommen hat zwischen einer archaïschen Periode, vertreten durch die 'Rand'-Sprachen, und einer jüngeren Periode, vertreten durch die zentralen Sprachen." From among the Polish dialectologists my attention was drawn to K. Nitsch's Plan ogólnopolskiego atlasu jezykowego, Kraków 1939. Important information relevant to our topic of periphery vs centre is also contained in K. Jaberg's Sprachgeographie, Aarau 1908.

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## Appendix A

## Tentative Chadic Typology

### WEST - EAST - PERIPHERIC -RETENTIONS

#### CENTRAL

#### INNOVATIONS

1.	'Normal'	CONSONANT
1	SYSTEMS	

'Enriched' CONSONANT SYSTEMS often 'inflated' by palatalization, labialization, prenasalization, lateralization (?) and clustering

2. Stability of CONSONANT QUALITIES

Syntactically conditioned instability and variability of CONSONANT QUALITIES (e.g. Tangale: k=g=n, t=d=nd, p=b=mb)

3. Consonantal GEMINATION

Strong tendency towards SIMPLE CONSONANTAL PHONEMES only

4. 5-VOWEL SYSTEMS prevalent

Reduced VOWEL SYSTEMS (2-4) or augmented VOWEL SYSTEMS (6-10)

5. Stability of VOWEL QUALITIES

Instability of VOWEL QUALITIES (conditioned by syncopy and apocopy)

6. Phonemic VOWEL LENGTH

Tendency towards SHORTNESS of VOWEL PHONEMES

7. APOPHONY (ABLAUT) in verbal and nominal bases

Tendency towards INVARIABILITY of verbal and nominal bases

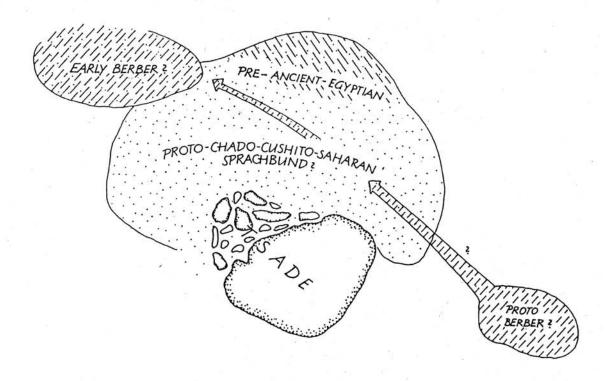
GENDER distinction in 2<sup>nd</sup> and 3<sup>rd</sup> pers. pronouns

No GENDER distinction in the pronoun

### Appendix B - D:

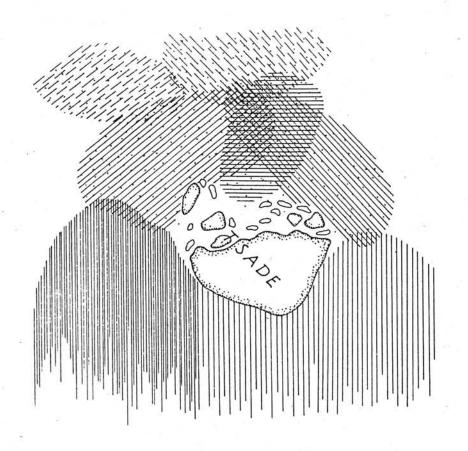
Maps tentatively indicating distribution and migrations of Pre-, Protoand Early ethnic and linguistic groups in the Lake Chad/Tsade Bassin.

## Appendix B



<u>Ca. 7000 B.C.</u>

## Appendix C



☑ Early Chadic □ Early Saharan

□ Early Ancient Egyptian
☑ Early Berber

MEarly Cushitic

Early 'Nigritic' \*

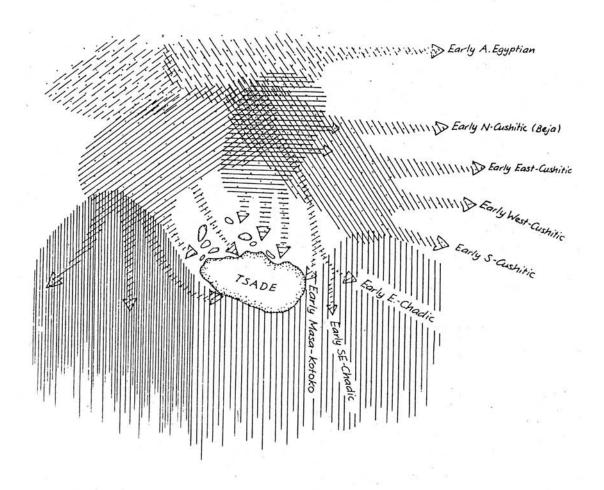
Early 'Nigritic' \*

Common 'Sprachbund' properties

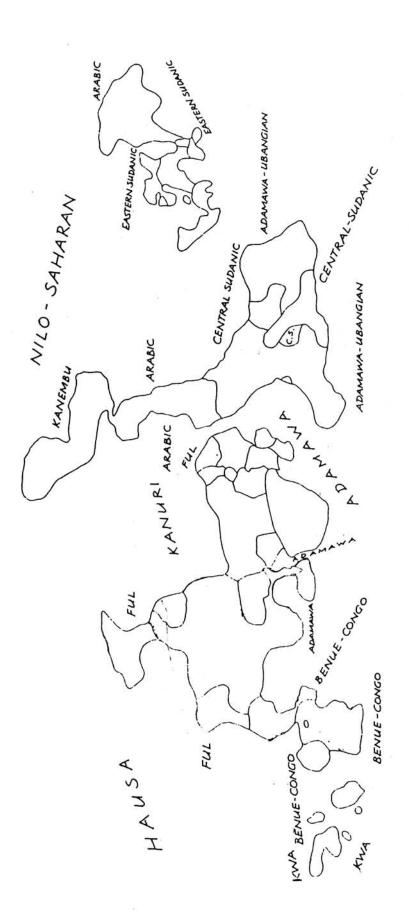
\* today's 'Benue-Congo'
\* today's 'Adamara-Ubangi'

Ca. 5000 B.C.

## Appendix D



Ca. 3000 B.C.
and before



Present linguistic distribution in the Central Sudan

