

Nominal morphology chaos in Plateau languages: trees versus networks

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SYMBOLS

- B b or p
- C any consonant
- N any nasal
- S s or ʃ
- V any vowel
- Z z or ʒ

1. Introduction

1.1 The Plateau languages

Among the many language groups represented in Nigeria, one of the largest and most complex is the Plateau languages, representing some 50-120 languages, depending on how inclusive the term is taken to be. Many of these languages have a restricted number of speakers, being confined to a few villages. Plateau languages dominate the centre of Nigeria, spreading from Lake Kainji to the region south of Bauchi. The status of the Middle Belt Languages of Nigeria and well as an evaluation of current knowledge is analysed in Blench (1998).

It seems never to have been in doubt that Plateau languages form part of the broader unit represented by Benue-Congo (Williamson 1989). Westermann (1927) assigned the few languages for which he had data to a 'Benue-Cross' family, corresponding to present-day East Benue-Congo. However, the modern subclassification of Plateau derives principally from the work of Joseph Greenberg (1963) who proposed dividing these languages into seven co-ordinate groups (including modern-day Kainji and Tarokoid). With numerous emendations and additions these have been reprised in almost all subsequent works (notably Williamson and Shimizu 1968; Williamson 1971; Maddieson 1972; Williamson 1973; Hansford *et al.* 1976; Gerhardt 1989; Crozier and Blench 1992; Blench 1998, 2000). With the exception of the material in Benue-Congo Comparative Wordlist (BCCW), published comparative materials on Plateau languages are sparse in the extreme. Despite the sometimes eccentric choice of items and the often defective datasets, the BCCW remains the only large published compilation of data. Often the source of wordlists is 'Nigerian government files' which generally means an orthographic list filled in by an administrator. Other classifications have relied on unpublished wordlists, also usually orthographic, most of which come from University of Ibadan students¹.

None of the authors who have presented classifications of Plateau languages have presented evidence for their classifications. This is not a criticism; faced with large arrays of data it is easier to set out what appears to be the case impressionistically than to write a monograph demonstrating it. A partial exception can be made for Shimizu (1975) and Gerhardt and Jockers (1981) who give lexicostatistical classifications of sample languages together with Kainji and Jukunoid. Their calculations, however, do not include many of the languages under discussion here. However, this neither demonstrates the unity of Plateau nor even the unity of particular subgroups. The series of publications on Plateau subgroups, especially Plateau II and IV, by Gerhardt (e.g. Gerhardt 1972/3a, 1972/3b, 1974, 1980, 1983a, 1983b, 1989, 1994) assume the unity of these groups, they do not demonstrate it.

Perhaps more importantly, there is no evidence at all that the languages ascribed to Plateau form a distinct group in opposition to Kainji, Jukunoid, Dakoid or Mambiloid. Rowlands (1962) was the first to suggest that there was a dichotomy between the languages of the Jos area linked to West Kainji and the remainder. However, his short wordlists were far from constituting linguistic proof. While some Plateau subgroups appear to be valid, it remains to be shown that these have any more relation to one another than to the other languages of Benue-Congo as a whole. As a result, the classification of Plateau languages and their place in the larger scheme of Benue-Congo languages has been more a matter of assertion than demonstration.

Work on Plateau languages has also been made more difficult by a failure to publish existing data. The very short orthographic lists from students at the University of Ibadan exist only as personal papers. Selected lexical items were published in the Benue-Congo Comparative Wordlist (Williamson & Shimizu 1968; Williamson 1971, 1972). The SIL, based in Zaria and then Jos, collected a large number of Swadesh lists in the 1960s and 1970s and these were the basis of some parts of the first edition of the Index of Nigerian Languages (Hansford *et al.* 1976). In the 1980s and 1990s there has been virtually no survey work, although quite large lexical, and in some cases grammatical, databases have been collected in relation to Bible

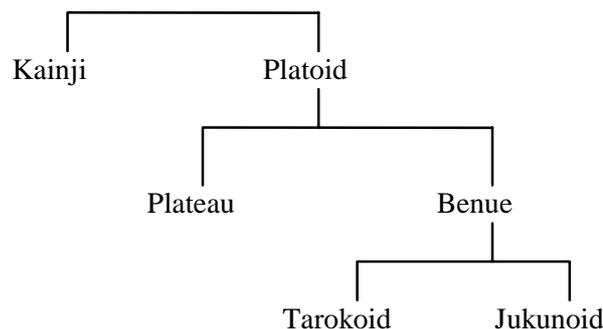
¹ I am grateful to Tom Cook (†), Carl Follingstad, Richard Gardner, Ludwig Gerhardt, Hanni Kuhn, Ian Maddieson and Kay Williamson (†), and all of whom have freely allowed me to copy these materials. Thanks to Orin Gensler and Tucker Childs for comment on a preliminary version of this paper.

translation. It is fairly certain that there are languages whose existence is yet to be recorded and certainly some for which no published data is available.

1.2 The subclassification of Plateau languages

The intention of this paper is not to rehearse the history of Plateau subclassification, which is adequately dealt with in Gerhardt (1989) and Blench (2000). Gerhardt (1989) presents a comparative table of the various proposals for classifying Plateau languages and proposes a synthesis that splits this ensemble of languages into a number of co-ordinate branches. This is shown in Figure 1;

Figure 1. Synthesis tree of Kainji/Plateau languages



The listing in the Appendix gives the names of the Plateau languages and the groups to which they are conventionally assigned. Although this paper expresses scepticism about this layout, it provides the reader with a basic navigational tool.

1.3 A more radical proposal

The proposal to be launched in this paper takes a radical approach to Plateau internal classification: that none of these groups exist and that they are simply artefacts of fragmentary language data and an inappropriate approach to classification. This idea develops from some key observations;

- a) loans of even fundamental vocabulary are extremely common between adjacent languages
- b) there is no reliable method for recognising such loans
- c) loans usually include morphological elements, notably in nominal and verbal plurals
- d) a consequence of this is extreme complexity and diversity in morphology even within one language
- e) this leads to waves of simplification or regularisation of morphology often only partially completed
- f) roots often incorporate fossil morphology
- g) speakers disagree about the 'correct' plural pairing of verbs or nouns
- h) some strategies for regularising morphology spread across regions, rather than being adopted simply within individual languages
- i) sound-correspondences always exhibit numerous 'aberrant' cases

The paper draws principally on unpublished sources to suggest that Plateau would be better analysed as a 'network', as a set of languages linked by innovations, but for which a single common innovation cannot be established because of the historical pattern of interaction of these languages. This study focuses on nominal morphology simply because the data is considerably richer than for other areas of the lexicon. Concord systems show comparable diversity, but less adequate data suggested that they are best excluded from the discussion at present. However, the same demonstration could be made for other elements of morphology, notably verbal extensions. The paper also suggests some sociological correlates of the linguistic situation.

1.4 Plateau data collection project

In view of the deep lacunae in available data on Plateau, a project has begun to try and develop a more comprehensive and accurate listing of Plateau languages with recent information on their status, location and to collect as far as possible, basic lexical data. Results of this are being published in the millennium edition of the *Ethnologue* and Appendix II provides a list of material so far collected. Draft electronic dictionaries are also being edited into publishable form. At the same time older unpublished data is being put into usable electronic formats.

2. How things get classified: networks versus discrete subgrouping

The history of the classification of African languages has been dominated by scholars convinced of the existence of very large phyla. Meinhof, Westermann, Greenberg and their inheritors were absorbed by the idea that languages must fit somewhere, preferably into over-arching groupings. The division of African languages into four phyla, Niger-Congo, Nilo-Saharan, Afroasiatic and Khoisan owes much to the work of Greenberg (1963) although many of his component elements have been re-assigned since his proposals were first set out. The coherence of the first three phyla is generally accepted among scholars although it is difficult to point to a single, authoritative source that provides the type of proof usual in say, Indo-Europeanist or Austronesianist circles. This has led some non-Africanists to consider the unity these phyla undemonstrated and perhaps no more than a series of independent families exhibiting contact characteristics (for comment on Niger-Congo see Dixon 1997 and *contra* Dixon Williamson & Blench 2000).

Inside the phyla there are said to be well-defined groups, and these groups are in turn subclassified using trees². While there is a general discourse that ‘trees are useful, but...’, as a visual metaphor they have had a powerful effect on Africanists’ vision of how subgroups are constructed. Although there is an increasing recognition that neighbouring languages often borrow from one another, there is a residual sense that ‘basic’ vocabulary is not borrowed. Thus languages split, their core vocabulary diversifies, and peripheral vocabulary is borrowed. But correct analysis can always resolve these layers, peeling them away like the skins of onions to reveal the underlying relationships.

This may seem like high-flown rhetoric, but it has practical consequences. Classifications are established, repeated and expanded while their actual basis is rarely questioned. Thus the sources on Plateau described in the previous section all agree in dividing it into a number of subgroups most of which can be mapped against one another. Each source makes some additions and some emendations, re-engineering the previous classification.

Outside, in the larger world of linguistic theory, there has been a significant growth of interest in rhizotic and network models of language genesis. Ross (1997) provides a useful overview of some of the primary references as well as discussing the parallels and differences between ethnic and language genesis. The key texts that have generated much more recent discussion are those by the Milroys (e.g. Milroy, L. 1987; Milroy, J. 1992) which grew out of studies of phonetic innovations in Belfast. The other element in the intellectual background of linguistic networks is the concept of a *Sprachbund*, relatively ancient in Indo-European linguistics, especially in relation to the Balkans and India. Studies of networks in English are on a smaller scale and could be conceived of as a re-invention of dialectology. But the notion is essential the same, conceptualising language relations in terms of multi-valent linkages rather than simple pairwise constructs. Applications to African languages remain sparse, although various authors have proposed that such analyses would be more effective in the case of Chadic (Jungraithmayr 2000) and Bantu (Vansina 1995).

A key conceptual term is the ‘speech community event’ (SCE), a situation that may have social, economic or geographical elements but which simultaneously has an impact on language. Ross (1997:253) lists a number of SCEs that can occur within the framework of a social network model;

² Although Greenberg does not generally make use of tree structures, and prefers the listing of discrete subgroups, ‘co-ordinate branches’ in tree terminology.

- a) reshaping of network structure
- b) the use of multiple languages within a network structure
- c) abrupt language generation
- d) transmissions of innovations across lectal boundaries
- e) reintegration of lects and linkages
- f) changes due to bilingualism
- g) glottogenesis (i.e. transformation of creoles with transparent sources into locally-integrated languages)

The Plateau languages are numerous, and confined to a contiguous geographical region. Speakers of these languages have been constantly in social and economic relationships with one another, while warfare and ecology have stimulated complex internal migrations. As a result, almost all the SCEs listed above can be documented for different regions of Plateau.

The larger task, however, is to link identified innovations with proposed SCEs. A relatively common SCE is the bilingualism associated with inter-group marriage. Anthropological records illustrate the marital relations between groups in the pre-colonial period and they can often be recovered with current ethnographic fieldwork since they were in many cases retained until the 1960s. Women, who usually moved between groups became bilingual in their home language and the group into which they moved and very often passed on aspects of their home language to their children, who may in turn have become bilingual but more likely picked aspects of the speech of the mother that unconsciously reflected the lexicon and grammar of her home language. This particular model, by the way, corresponds to indigenous models; Zhire [=Kenyi] is locally said to be a mixed language³ incorporating elements from other languages of the Hyam [=Jaba] cluster because of in-marriage. Polyandrous systems such as those of the Che or Nungu will have quite different impacts on language interaction from polygynous systems. The widespread circulation of songs in 'different' languages creates a fragmentary knowledge of other languages (something like the Aboriginal 'songlines').

Marriage relations are only one example, but many others can be proposed. The fragmentation effects of warfare and slave-raiding have clearly had crucial effects on apparently closely related languages such as those of the Jili group [often referred to in older sources as 'Koro']. The principal Jili population lives around Lafia town, now in Nassarawa state. However, they seem to have been scattered in the nineteenth century by the persistent slave-raiding throughout this region. At least three 'island' populations live far to the west in Niger State, including the Jijili [=Koro Huntu, a pejorative name in older sources] around Adunnu. Existing in isolation, surrounded by Nupe and Gbari, the Jijili have reduced their noun morphology, compared with Jili. However, in the 1990s, communication opened again between the two groups and now each is adapting to the other's speech. The consequence at the moment is that the Jijili are beginning to recover their lost noun-class prefixes. This process will probably not lead to a remerger between the lects as Jili can easily understand a speech-style with restricted pluralisation. However, it may lead to the gradual elimination of Nupoid loanwords in favour of their Jili equivalents.

Ross (1997) has proposed a distinction between 'innovation-linked' and 'innovation-defined' subgroups; between languages that share numerous common features but cannot, however, be reconstructed to a hypothetical proto-language and languages that historically all share one or more distinctive innovations that are unlikely to be typological. In a network such as the Plateau languages, individual languages are related in an 'innovation-linked' fashion; they share common features without apical innovations. But there are small groups of languages that are more clearly sprung from the same (recent) common source. The Tyap cluster, Nandu-Tari, Shall-Zwall and the Tɔrɔ/Alumu-Təsu lects are examples of these. Even so, these relatively small groups have yet to be properly defined and justified. All these, unfortunately, represent tasks for a future in which even half-reasonable lexical and other data is available for a comprehensive set of languages.

This paper will argue from an examination of nominal plurals in Plateau that it is more useful to treat any but the most close subgroups as taking part in a rhizotic network rather than as being divided into clearly divided subgroups with clearly reconstructible proto-forms. The evidence for this is the great variety of plural strategies, their co-existence in individual languages and their scattering across language boundaries in unpredictable fashions.

³ The expression used for it in local Hausa is *jakin doki*, i.e. 'donkey-horse' which is as good an analogy as any.

3. Nominal morphology in Plateau

3.1 Options for nominal plurals in Plateau

Plateau languages all have either functioning noun-class affix systems or traces of such systems. Miede (1991) studied prefix systems more broadly in Benue-Congo, thereby providing a recent analysis of the existing literature. De Wolf (1971) represents an attempt to generate a proto-system of nominal affixes for East Benue-Congo, although the absence of published data tables to support De Wolf's assertions make his work difficult to use. Nonetheless, it is assumed that because Plateau languages form part of a larger whole characterised by such affix systems, and that these must have been somehow more complete and coherent in the proto-language. Synchronic nominal morphology is thus a result of the erosion of this system. I now believe this is highly unlikely, and that probably much of the diversity observable synchronically was already present in the proto-language. However, this is presently undemonstrable and the argument concerning networks versus trees does not depend on it.

Synchronically, the pluralisation strategies of Plateau languages can be classified as follows;

- a) non-cognate plural affixes
- b) noun-class affixes, prefix, infix and suffix, alternating with zero or similar affixes
- c) consonant mutation
- d) labialisation or palatalisation, usually of C₁
- e) stem-tone changes
- f) stem-vowel quality
- g) stem-vowel length changes
- h) stem reduplication
- i) suppletive plurals

In addition, some languages are losing singular/plural alternation. In the most diverse languages several strategies can co-occur, and it is common for two or more strategies to be marked on a single lexical item.

3.2 Non-cognate plural affixes

Some Plateau languages have developed systems of pluralising affixes relatively recently, as illustrated by their non-cognacy. Examples;

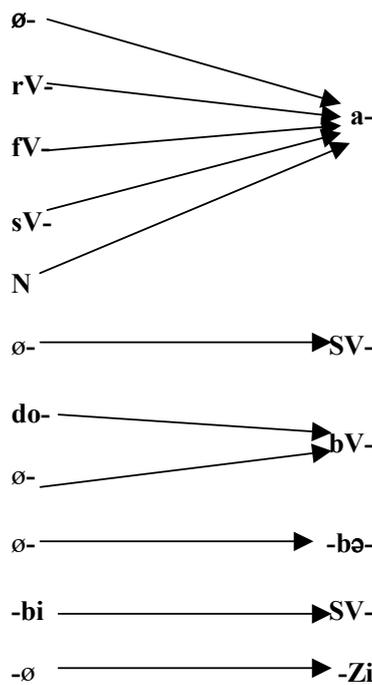
Ake	-gigi
Alumu-Təsu	-mbɔ
Sur	a-
Tari	-gbak
Təɔ	-mbo

Parallel processes have long been at work in West Benue-Congo languages, for example Nupoid. Proto-Nupoid clearly had a rich nominal affix system, but this has been systematically eroded in all languages except Gade. Gbari is characterised by **a-** prefixes whereas Nupe and related languages have allomorphs of –**ʒi**.

3.3 Noun-class affixes, prefix, infix and suffix, alternating with zero or similar affixes

Examples of the nominal class affixes of Plateau are displayed and discussed in Bouquiaux (1967), De Wolf (1971) and Mieke (1991). This section presents two languages, Lopa and Horom, both of which have a rich system. Lopa is a Kainji language spoken by fishermen on both sides of Lake Kainji. A wordlist of some 400 nouns was taken to provide a preliminary analysis of the affixes. Figure 2 summarises the Lopa system of singular/plural affix alternation:

Figure 2. Lopa noun-class affix pairings



Lopa has prefixes, infixes and suffixes (indicated by the position of the hyphen). Tones are not marked since these do not seem to be underlying in the affix, but copied from the stem, as in other West Kainji languages. Many examples of plural formation occur just once or twice in the list, suggesting that more pairings might be elicited from a larger dataset. Apart from the -bə- affix for persons, few of these show much relationship with Bantu or other systems, and internal evidence within Lopa suggests that the pre-existing prefixes became unproductive and were incorporated in the stem at least twice.

Horom is spoken by about 1000 people near Richa southeast of Jos and is surrounded by speakers of Ron languages, which are Chadic. Despite the fact that most speakers are bilingual in Ron, lexical evidence for this is surprisingly slight. Horom morphology is also different from its two closest relatives, Fyem and Bo-Rukul. Horom, like Tiv, can have prefixes and suffixes simultaneously (Table 1).

Table 1. Horom nominal suffixes

Gloss	sg.	pl.
knife	mbok	ba-mbuk-u
moon/month	u-fel	ba-pel-e
mother	wo	ba-wo-ne
root	u-liŋ	be-liŋ-i
skin	hɔr	ba-hɔr-ɔ

Note a unique stem vowel change in ‘knife’ and a single case consonant mutation in ‘moon’⁴. Some Horom words also insert a vowel between the syllables of a polysyllabic word (Table 2);

Table 2. Vowel insertion in Horom

Gloss	sg.	pl.
okra	zabla	i-zab-i-la
shoe	paksak	i-pak-ə-sak
sweet potato	damʃik	i-dam-ə-ʃik

It is possible that this is a 'broken' plural, typical of Afroasiatic and recorded in the neighbouring Ron languages which has diffused to Horom. However, none of the Horom terms are direct loans as far as can be determined, and curiously, the term for 'sweet potato' at least must be of relatively recent origin.

3.4 Consonant mutation

The most well-known languages exhibiting consonant mutation are the Beromic languages (former Plateau 3) –Berom, Cara and Aten. The usual hypothesis is that these are original CV nominal prefixes that have lost the vowel leading to merger of the prefix consonant with the stem. Bouquiaux (1967) has described nominal alternations for one dialect of Berom and Aten. Table 3 shows the fw/t alternation found in Forom Berom where the system appears to more restricted than in other lects.

Table 3. Consonant alternation in Forom Berom

Gloss	sg.	pl.	Also
stone, rock	fwà	betà	+ prefix
bridge	fwá(t)	tàá	Tone + -t deletion
work, job	fwōm	tòm	Tone
neck, voice	fwō	te	Stem vowel
bottle	fwùʃ	betùs	ʃ/s

⁴ A few Fyem nouns show voicing changes in singular/plural pairs but no in the word for ‘moon’.

The language with the richest system is, however, Cara (Table 4).

Table 4. Consonant alternation in Cara

Gloss	sg.	pl.	Alternation	Also
Bush-rat	ɓeŋ	adeŋ	b/d	–/a-
Chameleon	ɓakaka	aɗakaka	b/d	–/a-
Ear	kicuŋ	atuŋ	c/t	ki-/a-
Woman	fuk	nkuk	f/k	–/n-
Firewood	fɔn	akɔn	f/k	–/a-
River crab	faŋfaŋ	akaŋkaŋ	f/k	–/a-
Wooden door	kuri	aluri	k/l	–/a-
Child	kɔn	nɔn	k/n	
Wife	nekira	anenira	k/n	ne-/ane-
Weaver bird ⁵	kwika	asika	kw/s	–/a-
Hair	ikpo	sito	kp/t	i-/si-
Bow	kwa	a-ta	kw/t	–/a-
Person/people	mit	init	m/n	–/i-
Eye	ris	apis	r/ɲ	–/a-
Rope	roi	soi	r/s	
Vein	i-vip	si-dip	v/d	i-/si-
Medicine	val	agal	v/g	–/a-
Baboon	voos	agoos	v/g	–/a-
Female sibling	watal	fatal	w/f	
Blacksmith	wula	afila	w/f	–/a-
Tooth	windi	aɲindi	w/ɲ	–/a-

The tendency of Cara to re-prefix mutated consonants may have lead to further changes. Certainly, this diversity is problematic to analyse, because many of the alternations occur in only one example in a long lexical list.

Aten also has quite a rich inventory of consonant alternations (Bouquiaux 1967). However, none of these are clearly related historically to either Cara or Berom. A search has so far not turned up a single example of cognate lexical items demonstrating obviously cognate alternations. As these three languages are neighbours it seemed obvious that such an unusual system must constitute clear evidence of historical relatedness. Yet, Hoffmann (1978) expressed doubts about the genetic relationship between Aten and Berom because, apart from this feature, the languages seem to share very little, lexically or grammatically.

3.5 Labialisation or palatalisation

Labialisation and palatalisation are extremely productive processes in Plateau and alternations are a common method of making plurals. There is no standard direction; palatalisation and labialisation can be lost or gained. Table 5 shows loss of labiality in Berom;

Table 5. Loss of labiality in Berom

Gloss	sg.	pl.	Also
spring (of water)	lwēl	ləl	Tone-change
kunu drink	bwērè	bere	Tone-change
farm	bwí	bó	Stem-vowel change
blindness	bwók	bebok	Prefix addition
leg	bwol	bòl	Tone-change
shelter	bwúk	búk	

⁵ (*Ploceus cucullatus*)

In Ninkyop, palatalisation can be lost or gained and combined with consonant or vowel stem change (Table 6).

Table 6. Ninkyop palatalisation

Gloss	sg.	pl.	Also
Head	tyoo	too	
Stone	tyitya	tita	
Hut	bud	byid	u/i
Mouth	nuŋ	ŋnuŋ	+ n-
Basket	nsem	nsyeŋ	m/ŋ
Month	nhwa	nxwya	h/x

Source: Kadima & Jerzyk (n.d.)

The likely source of these changes is incorporation of u- and i- prefixes in the stem, and possibly simultaneous stem-tone change. Examples of recent loanwords in some languages suggest that the process may be adopted into the language and applied to new lexical items. As both tables show, reprefixing commonly occurs as well as other morphophonemic changes.

3.6 Stem-tone changes

Stem-tone changes are extremely common in Plateau, with or without other concomitant changes. The usual hypothesis is that a prefix has been dropped and left behind its tone which has in turn either coalesces with the existing stem-tone or becomes a floating tone. Table 7 illustrates some examples of tone plurals in Berom;

Table 7. Tone change plurals in Berom

Gloss	sg.	pl.
two	ba	bà
ancestors	bédá	bèdá
tick	byàné	byáné
blossom	cùyú	cúyú
ant-hill	càlāng	cálāng
garden	càp	´cap
spirit	cèng	´ceng
fly	cíng	´cing
black ant	còlōng	´cólóng

In many other languages with affix alternation, there are changes on the stem-tone, notably Izere, Eggon and Tarok. Plateau languages exhibit a general tendency to raise stem-tone when forming plurals, with very similar patterns occurring in languages as far apart as Tarok and Izere.

3.7 Stem-vowel quality

Stem-vowel changes occur scattered across the data (see Table 5, Table 6) but do not seem to form part of a regular process in any language.

3.8 Stem-vowel length changes

Scattered examples of length distinctions in singular plural pairs occur in many languages, but only Cara seems to make use of this feature on a systematic basis (Table 8).

Table 8. Stem-vowel length change in Cara nominals

Gloss	sg.	pl.	Also
Castrated goat	ʃàà	ʃá	Tone
Cow	nyàà	nyá	Tone
Louse (Human)	ciìn	cín	Tone
Rib	jiis	jis	Tone
Snake (Generic)	yòò	yó	Tone

3.9 Stem reduplication

Reduplication of the stem or part of it, sometimes combined with affixes is scattered across Plateau. Only one language, Hasha, seems to have adopted reduplication as its principal strategy. Although about half the nouns exhibit a simple reduplication of the stem-initial CV (Table 9), the remainder show a bewildering variety of patterns (Table 10);

Table 9. Exact reduplication of stem-initial CV in Hasha

Gloss	sg.	pl.
sand	ì-juk	ju-juk
corpse	ì-kum	ku-kum
wind	ì-mem	me-mem
day	ì-nim	ni-nim
vine	ì-ruʃ	ru-ruʃ
masquerade	ì-sɔ	sɔ-sɔ
slave	ì-tefe	te-tefe
room	ì-ti	ti-ti
grass	ì-tus	tu-tus
seed	ì-wur	wu-wur
forest	zəzəŋ	zə-zəzəŋ

Table 10. Partial reduplication of stem-initial C in Hasha

Gloss	sg.	pl.	Also
bush	a-hai	hə-hai	
algae	a-hwane	hu-hwane	
stone	a-marta	me-marta	
child	a-mweŋ	mu-meŋ	loss of labiality
fat mouse	a-njik	ji-njik	prefix omits stem nasal
beak (of bird)	aŋe	aŋeŋe	
in-laws	a-ŋeme	ma-ŋeme	
leaf	i-ifi	yi-yiʃ	+ y-
tree (generic)	iko	kukon	+ -n
star(s)	i-kpətik	ku-kpətik	
branch	i-nak	ni-nak	
large river	i-soŋ	su-soŋ	
name	i-tyak	ti-tyak	
thorn	i-tyok	tu-tok	loss of palatalisation
bark (of tree)	kwafan	ku-kwafan	
moon/month	nwar	nu-nwar	

Tyap also incorporates some reduplication in a system that focuses mainly on alternating prefixes and stem-tone changes (Table 12). Reduplication can be exact, be without labiality, change the V₁ and either be inserted before a V-prefix to be without it.

Table 11. Reduplicated plurals in Tyap

Gloss	sg.	pl.
Place	tyàn	tityàn
Farm	əbin	bibin
Tree	əkʷən	əkəkʷən
Tooth	əɲuŋ	əɲúɲuŋ
Root	ənan	ənɲnan

3.10 Suppletive plurals

Suppletive plurals are common in Plateau languages, although they are usually restricted to nouns referring to persons. Table 12 shows a set of such plurals for Tyap;

Table 12. Tyap suppletive plurals

Gloss	sg.	pl.
child	ŋgwon	mman
woman	əbiúk	ənyuk
person	ətyu	ənyet
boy	ŋgwoseam	zam
girl	ŋgwoneam	əkəneam

Source: Follingstad (1991:93)

Izere suppletive plurals cover similar lexical items and resemble those of Tyap;

Table 13. Izere suppletive plurals

Gloss	sg.	pl.
old woman	abukó	apákó
mother	abiniŋ	apíníŋ
child	igon	inòòn

3.11 Loss of plurals

Some languages seem to be reducing the set of nouns which exhibit morphologically marked plurals. In Izere, some 50% of nouns have no plurals. There is no clear semantic unity to these cases, but it seems that semantic salience is important. For example, the majority of trees, plants and animals have no plural. However, the most important and culturally significant trees and animals do have plurals. Izere also has a rich repertoire of plural verbs and it may be that these can substitute for nominal plurality in many sentences, thus eliminating redundancy.

A case of a language on the point of completely losing its system of plurals is Yangkam. A few reduplicated plurals and a- prefixes were recorded, but informants were generally clear that plurals are no longer morphologically marked. Yangkam is a dying language of the Tarokoid cluster, and is now spoken only by people over fifty, so this loss could be connected with sociolinguistic factors. However, the language contains numerous unproductive affixes embedded in stems, suggesting that the disappearance of productive affixes characteristic of Tarokoid in general was well under way before the Islamic incursions of the last century impelled the language towards terminal decline.

4. The case of Cara

Cara has already been cited as an example of consonant alternation. However, constitutes an extreme example of conflicting morphological systems, with three or four of the processes outlined in the previous section occurring simultaneously. The following sections outline the other possibilities for nominal plurals in Cara.

4.1 Tone-raising rules

Apart from tone raising of the stem-vowel shown in Table 8 Cara also exhibits other types of tone-plural which are more miscellaneous. Table 14 shows some samples of these. All involve some kind of tone-raising and at least three patterns can be detected, all of low frequency.

Table 14. Miscellaneous tone-change in Cara nominal plurals

Gloss	sg.	pl.
Thorn	yǎ̀rò	yó̃rò
Work	cùncə̀m	cúncə̀m
Ancestors	zànkàmùt	zànkámùt
Hill	cùŋ	cǔŋ
Farm	càp	cǎp
Guest/stranger I	myàt	myǎt
Guest/stranger II	ʃin	ʃín
Skull	cùr	cúr

Almost certainly where the plural has a rising tone, the stem previously exhibited a lengthened vowel as in the singulars in Table 8, a tone-raising rule was applied and the vowel then shortened.

4.2 Prefix alternation

Prefix alternation in Cara is very complex and a very large sample of nouns is required for any definitive statement can be made. Many of the pairings given below occur only once in the data. Moreover, most of the prefixes seem to have been adopted subsequent to the system of consonant alternation suggesting strongly this is a system that has been rebuilt by analogy with neighbouring languages. The following tables give examples of the singular and plural prefixes identified so far are;

ø-/a-

Gloss	Singular	Plural
Tree (generic)	fɔ̃n	akɔ̃n
Root	liŋga	aliŋga
Moon/month	pɛl	a-pɛl
Eye	ris	anyis
Face	wɛn	anyɛn

ø-/n-

Gloss	Singular	Plural
Woman	fuk	nkuk
Widow	fugɔ̃n	nkugɔ̃n

These two words show the same consonant alternation and are built up from related lexical elements. The n- prefix might be an allomorph of ni-, except that ni- appears to occur before velars in other words.

ø-/ni-

Gloss	Singular	Plural
He-goat	gasu	ni-gasu

A unique example.

ø-/ti-

Gloss	Singular	Plural
Arrow	fi	ti-fi

A unique example.

i-/ø-

Gloss	Singular	Plural
Buffalo	i-yàt	yát
Hare ⁶	i-ʒum	ʒum

Only two cases recorded.

i-/a-

Gloss	Singular	Plural
Leaf	ikət	akət
Grass (generic)	igoi	agwi
Masquerade	i-rim	a-rim

i-/ni-

Gloss	Singular	Plural
Bush	i-kai	ni-kai
Pot	i-pəndəŋ	ni-pəndəŋ

These are the only two examples recorded.

i-/si-

Gloss	Singular	Plural
Vine (generic)	i-kin	si-kin
Forest	i-kət	si-kət
Vein	i-vip	si-dip
Intestines	i-le	si-le

⁶ (*Lepus Crawshayi*)

i-/ti-

Gloss	Singular	Plural
Charcoal	i-falaŋ	ti-falaŋ

This pairing is unique and may well be an allomorph of the i-/si- pairing.

ki-/a-

Gloss	Singular	Plural
Mushroom	ki-zazup	a-zazup
Grave	kihwak	asak
Horn	kiweŋ	anyeŋ
Cheek	ki-puk	a-puk
Night	ki-tuk	a-tuk
Room	ki-li	a-li
Wall	ki-vət	a-vət
Nest (of bird)	ki-rək	a-rək
Fireplace	ki-kik	a-kik

ke-/a-

Gloss	Singular	Plural
Compound	ke-ra	a-ra
Wing	ke-rani	a-rani

This is almost certainly an allomorph of ki-/a- since it occurs in the single restricted context shown above.

ku-/a-

Gloss	Singular	Plural
Mouth	ku-nu	a-nu
Body	ku-rum	a-rum
Mortar (wood)	ku-ruŋ	a-ruŋ

A second allomorph of ki-/a- where the stem vowel is –u- and C₁ is not a stop.

ki-/ni-

Gloss	Singular	Plural
Dry season	ki-hwani	ni-hwani
Stream	ki-gyɛl	ni-gyɛl
Place	ki-ti	ni-ti
Slave	ki-gyɛn	ni-gyɛn
Calf	ki-narɔn	ni-narɔn
Dog	ki-san	ni-san

u-/fi-

Gloss	Singular	Plural
Hunter	u-gari	fi-gari

A unique example.

4.3 Suppletion

Suppletion is here used for the nouns that cannot be explained by other means. The data suggest;

- A singulative **wun** that can be placed in front of nouns concerned with persons.
- A k/n/ alternation that is restricted to nouns for persons
- Others

Man	wurum-me	inrum-me
Thief	wun fajan	fajan
Blacksmith	wula	afila
Husband	dakira	adanyira
Wife	nekira	anenira
Child	kɔn	nɔn
Young man	maina	amase
Nail(Finger/toe)	cùrùgè	cùgè

4.5 Conclusion

This section can only outline some of the nominal plural strategies of Cara as recorded so far. A larger sample of nouns would certainly reveal more detail, as would a detailed study of the concord system. However, the data is enough to reveal with existence of a multiplicity of competing systems, some of extremely low incidence.

5. Where next?

5.1 Order or chaos?

Plateau languages present an extraordinary diversity of systems of pluralisation (and concord and verbal extensions, in turn reflected in highly diverse phonologies) ranging from ‘one covers all’ affixes that are absolutely regular, to languages with large numbers of concurrent systems. A consequence of the existence of competing systems in one language is that it is very difficult to provide a coherent account of them that does not admit a large number of exceptions and single cases. Also, since many languages have only sketchily described tonal systems and tone plays a crucial role in plurals, it is almost certain that they are still more rococo than is yet understood. Similarly, there are problems with the typical lexical source data. Typical lists contain less than 200 countable nouns and yet in much larger datasets there can be many single cases.

The conclusion must be that Plateau languages constantly undergo intensive borrowing and re-analysis reflecting the constantly changing external relations of their speakers. As a consequence, it suggests that the traditional comparative method has extreme limitations for understanding the history of a language like Cara. The richness of particular languages also reflects a complex history of interaction with their neighbours and the borrowing or genesis of particular phonological and morphological features that track perhaps long-forgotten speech-community events.

A negative view of network models might be that they are admissions of defeat; that if we can no longer accept that subgrouping is a useful exercise for a particular set of languages we might as well list them alphabetically and publish etymological dictionaries. But reliable datasets should open up greater possibilities for analysis.

5.2 Is Plateau really distinct from Kainji, Jukunoid, Dakoid or Mambiloid?

This paper is concerned with the Plateau languages and does not really address the question of the boundedness of the group. But as Ross (1997:250) and Dixon (1997) have both pointed out, albeit from very different perspectives, published demonstrations of the existence of phyla, especially large ones, are thin on the ground. In the more restricted field of East Benue-Congo, the case for Plateau is based (again) on Greenberg's unsupported assertions. Plateau has not been shown to have any exclusive bound morphology and indeed, the East Kainji languages with which Plateau is imbricated geographically, seem to show many of the same morphological features. Although Dakoid and Mambiloid core languages have rather distinctive morphology, they nevertheless share numerous lexical items with Plateau that are not part of the broader Niger-Congo lexicon. Moreover, non-core languages such as Gã and Dõ isolated geographically between the larger language groups seem to have some links with all of them (see Blench, in press for further discussion of these issues). So we cannot exclude the possibility that Plateau is a subset of a still larger network whose internal linkages are temporarily obscured by present-day geographical separation.

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**Appendix I: CHECKLIST
OF PLATEAU
LANGUAGES**

This is a list of all the languages that have been classified as 'Plateau', i.e. part of Benue-Congo. It excludes Kainji (former Plateau 1) and the Jukunoid languages.

1. NORTHERN GROUP

Kadara
Kuturmi
Kulu
Idon
Doka
Iku-Gora-Ankwe

2. WESTERN GROUP

- a. North-western subgroup
 - i. Koro cluster
 - Ashe
 - Begbere-Ejar
 - Idun?
 - Yeskwa?
 - ii. Jaba cluster
 - Shamang
 - Cori
 - Hyam cluster (incl. Kwyeny, Yaat, Sait, Dzar, Hyam of Nok)
 - Zhire
 - iii. K-K
 - Kagoma
 - Kamantam
- b. Southwestern subgroup
 - i. Ninzic
 - Vaghat-Ya-Bijim-Legeri
 - Ninzam
 - Ce
 - Mada (Northern and Western cluster)
 - Bu-Ningkada
 - Numana-
 - Nunku-
 - Gwantu-
 - Numbu
 - Ningye
 - Kanufi

3. BEROMIC

Berom
Cara
Aten
Shall-Zwall?

4. CENTRAL

- a. South-central subgroup
 - i. Irigwe
 - ii. Izere cluster (Northwest northeast Izere, Ichèn, Ganàng)
 - Firàn
 - iii. Katab cluster (Tyap, Gworok, Atakar, Kacicere, Sholio, and Kafancan) Jju
- b. Nandu-Tari

5. SOUTHEAST

Fyem
Horom
Bo-Rukul

6. SOUTH

Mijili [=Koro of Lafia]
Ujjili [=Koro Huntu]
Koro of Zuba
Koro of Ija

7. LUMU

Tɔ̀rɔ̀
Alumu/Tə̀su

8. TAROKOID

Tarok
Yangkam

Ninkyop-
Nindem
Ayu?
Nungu

Pe [=Pai]
Sur [=Tapshin]

ii. Eggonic
Eggon
Ake

iii. Yashi

APENDIX II. Plateau data collection Project.

Unpublished Dictionaries.

Aten
Berom of Forom
Berom (Bouquiaux)
Eggon
Izere of Fobur
Mada
Tyap

New and unpublished wordlists

Ake
Alumu-Təsu
Bu
Cara
Che
Fyem
Hasha
Horom
Jijili
Jili
Kulu
Rukul
Ningye
Toro

Longer orthographic lists

Nandu
Shall
Tari