Is there a boundary between Plateau and Jukunoid?

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1.1 Plateau and Jukunoid 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 are confined to a few villages and some are severely endangered, threatened principally by the expansion of Hausa (Blench 1998). Plateau languages dominate the centre of Nigeria, spreading from Lake Kainji to the region south of Bauchi.

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 what would now be called Benue-Congo languages into seven co-ordinate groups (including modern-day Kainji and Tarokoid). With numerous emendations and additions, this view 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, in press). 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 data¹.

None of the authors (including the present one) who have classified Plateau languages have presented any compelling 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, lexicostatistics neither demonstrates the existence of Plateau nor even the unity of particular subgroups. The series of publications on Plateau subgroups, especially Plateau II and IV, by Gerhardt (1972/3a, 1972/3b, 1974, 1980, 1983a, 1983b, 1989, 1994) assume the boundaries of these groups.

A particular issue on the internal classification of Plateau and Jukunoid is the 'Benue' classification. Shimizu (1975:415) was the first to propose that parts of Greenberg's Plateau would be better placed with Jukunoid. In particular, he argued that Eggon (and by implication the other Plateau V languages, including Nungu and Yeskwa) and Tarokoid (at that time consisting only of Yergam (=Tarok) and Basherawa (=Yankam)) formed a group together with Jukunoid, which he christened 'Benue'. This emerged from his lexicostatistic tables and was further supported by five isoglosses, the words for 'drink', 'tail', 'meat', 'fire', and 'four'. Gerhardt (1983b) was the first to question this in print, noting both that his own lexicostatistical work (Gerhardt, & Jockers 1981) did not support this hypothesis, and that the five isoglosses proposed by Shimizu had at the very least question marks against them. The 'Benue' group had, however, a sort of halflife, appearing in Gerhardt (1989) and Crozier & Blench (1992) as a subgrouping of Jukunoid and Tarokoid against the remainder of Plateau. This paper also does not retain the view that a 'Benue' group exists at all; Tarokoid is part of Plateau, albeit a primary branching, and similarities with Jukunoid are due to proximity, with the most geographically remote member of Tarokoid, Sur, the least similar to Jukun.

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. Barau Kato, Selbut Longtau and Bitrus Kaze have been my principal assistants on field data collection.

The paper presents an overview of Plateau, taking in research up to November 6th 2005. It looks at the likely characteristics of proto-Plateau and compares these with Jukunoid, particularly the nominal affixes and verbal extensions. The core of the paper, is a series of lexical isoglosses, sufficiently well-dispersed across Plateau to suggest a potential reconstruction to the proto-language. These are compared with the proto-forms given by Shimizu (1980a) in his reconstruction of proto-Jukunoid and its subsets. Only glosses are given where there is reason to think that one or the other group has innovated; many more potential proto-Plateau forms exist in my database, but these are not given.

1.2 Existing subclassification of Plateau languages

Gerhardt (1989), Crozier & Blench (1992) and Blench (2000, in press) represent published ideas on the subclassification of Plateau. But these all incorporate much received classification that has in some cases no empirical base at all. The present version maintains the concept of a Proto-Central Nigerian with four major co-ordinate branches, Kainji, Plateau, Jukunoid and Dakoid. This is shown in Figure 1;





Beromic, Ninzic, Alumic, Ndunic and Jilic are demonstrably discrete groups named for their major language which do not appear to have a hierarchical relationship. This is not entirely satisfactory and I hope to develop more characteristic names that do not privilege a particular group. 'Central' is frankly a residual category of languages without any clear subgrouping; the North/South division would be hard to defend in terms other than geography. The inclusion of Eloyi is very speculative; Armstrong has argued in print for its membership of Idomoid; but it seems more likely the Idoma cognates are the results of contact with Alago than evidence of a true genetic affiliation.

1.3.1 Plateau and related groups

The major published source of comparative lexical data on Plateau is the Benue-Congo Comparative Wordlist (Williamson and Shimizu 1968, Williamson 1973). Despite the sometimes eccentric choice of items and the often defective datasets, this remains the only large body of published data. Many more languages have come to light since the BCCW, and information about these can be found in Crozier & Blench (1992) and more recently in the Ethnologue (SIL 2005). The present paper depends largely on unpublished material for Plateau, in general collected by the author.

1.3.2 Jukunoid

The Jukunoid languages have been recognised as a unit as far back as Koelle (1854) and Meek (1931). Described first in detail by Shimizu (1980a) there has been a gradual accumulation of further data during the following years. Publications include Shimizu (1980b), Dykstra (n.d.), Priest & Priest (n.d.), Koops (1990, n.d.) and Storch (1997, n.d.). Data on Oohum [=Yukuben] and other languages such as Bete and Lufu are surfacing from the Vienna project (Rennison et *al.*, ined.). In addition, Jukunoid languages in Cameroun are becoming known as a result of the linguistic survey (Brye, n.d.), and some data has become available.

2. Does Plateau have distinctive features?

The phonology of proto-Plateau cannot be known from reconstruction, but simply surmised based on a balance of probabilities, through surveying existing phonologies.

2.1 Vowels

The most credible inventory for proto-Plateau is seven phonemic vowels;

	Front	Central	Back
Close	i		u
Close-Mid	e		0
Open-Mid	ε		э
Open		а	

Although phonemic nasalised vowels occur in Ninzic languages, they are probably secondary developments. Long vowels occur in many languages, but show few or no external correspondences, suggesting internal development, usually through deletion of intervocalic consonants and vowel regularisation by analogy. The ten vowels of Ce are entirely exceptional and it is suggested below (§2.4) that these are not original. The central vowels characteristic of Tarokoid and SE Plateau seem to arise from the merging of the mid-vowels, resulting in a six-vowel inventory.

Plateau languages are known for their very rich consonant inventories, but many of these are secondary developments, reflecting erosion of the CV prefixes. Regional phonemes such as /r/ are widespread but cross subgroup boundaries freely. The inventory of proto-Plateau may have been something like that shown below;

	Bilabial	Labio- dental	Alve- olar	Alveopalata l	Palata 1	Velar	Labial- velar	Glot- tal
Plosive	p b		t d		t∫ dʒ	k	kp gb	
						g		
Nasal	m		n		n	ŋ		
Trill			r					
Fricative		f v	S Z	∫ 3				h
Approximant					у		W	
Lateral			1					
Approximant								

[f] and [v] are contrastive in few languages and then often only in ideophones or special word classes, so may not have been separate phonemes in the original inventory. [5] and [3] are often positional allophones of [s] and [z] and their status must be regarded as uncertain. Implosive /6/ and /d/ occur in some languages, such as Tarok, but are not widespread enough to assign to proto-phoneme status and may be the result of interference from Chadic. Ninzo has developed a contrastive retroflex series, apparently by analogy with the /r/ common in this region.

Some languages, such as those of the Hyam cluster, have a great many more consonants than this, but it is easily demonstrated that these are secondary developments resulting from morphophonemic oppositions. The Tyap cluster languages have developed systematic long/short consonant contrasts, but again this is a local development.

2.3 Tones

The great majority of Plateau languages have three level tones and often phonemic glides. The type of four and five-tone systems characteristic of some Jukunoid languages are not recorded for Plateau.

2.4 Noun-classes

Most Plateau languages have elements of what look like concordial noun-classes. In some groups (Alumic, Ninzic and Ndunic) these are considerably eroded. Mada and Hyam, for example, have reduced pluralisation almost entirely to tone changes. Alumu depends on a single pluralizing suffix. Only Ce (Ninzic = Plateau IV) has a full Bantu-like system with elaborate concord, while some other members of its group have much more limited arrays. Central Plateau (Greenberg's Plateau 2) includes a wide range of systems from quite elaborate to highly eroded. Tarok has a similar affixes, but much reduced in number of classes. The usual interpretation of this would be that these are relics of the full noun-class system that once operated across Plateau. This assumption is explicit in the study of De Wolf (1971) and implicit in much of the writings of

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Gerhardt (e.g. 1973/4, 1974, 1988). Underlying this is the widespread assumption that noun-classes essentially degrade from complete Bantu-like systems.

Probably the time has come to question this; making sense of Plateau nominal strategies in terms of erosion is increasingly difficult to support. The vast majority of Plateau languages show only limited evidence for noun-classes and a wide variety of other, co-existing strategies, notably consonant alternation, tone-change, reduplication of the first CV syllable. I know of no case where a language has productive suffixes, but Horom has an incipient infixing system. A more economical view would have it that in the era of proto-Plateau, the nominal affix system and concord was already breaking down and alternative pluralisation strategies already co-existed. In some words, the prefixes had already become bound to the stem (see the nasal prefix in 'smoke', 1., below).

If this is accepted then the existence of regularised noun-classes in Ce and Tarok becomes problematic; to what extent are these are not relics of proto-Plateau what is their source? The case of Ce is particularly striking since all the other members of the Ninzic group have eroded affix systems and no evidence for the thoroughgoing \pm ATR harmony characteristic of Ce. The most likely explanation is that Ce rebuilt its system under the influence of neighbouring East Kainji languages. East Kainji languages are astonishingly Bantulike in this respect and those neighbouring Ce in the northern parts of the Jos Plateau have complete nounclass systems and 7-vowel \pm ATR harmony. Such a rebuilding would not be so strange; it is fairly certain that the isolated Usaghade (Lower Cross) and Gade (Nupoid) nounclass systems are rebuilt from existing fragments.

The case of Tarok is interesting. As it stands at present, the noun-class systems of Tarok and Pe look very like the Jukun V/N affix bundle². The remoter Yaŋkam and Sur seem to have now-fossil prefixes such as tiand k- which are apparently remnants of a more complex system. It therefore seems likely that proto-Tarokoid had a noun-class system very different from Jukunoid, which came under strong Jukun influence at the Pe-Tarok node and then came to resemble it. Meanwhile, the system eroded strongly in Sur and Yaŋkam leaving only fossil morphology.

Within Jukunoid, the picture is apparently clearer. The Oohum languages have by far the most elaborate system of nominal prefixes whereas most of the group has undergone levelling, with a smaller set of mostly V and N prefixes, sometimes becoming suffixes. This is largely behind Shimizu's phylogenetic tree (Shimizu 1980: 6 ff.), which has a primary branch of Yukuben-Kuteb, essentially conservative languages in this view. Incidentally, Shimizu (1980: 197) has a table of correspondences between proto-Benue-Congo affixes (as reconstructed by De Wolf) and those proposed for Jukunoid. The matches are nearly perfect, which can be interpreted in two ways; either they were all absolutely correct in their methods, or else De Wolf was heavily influenced by Jukun evidence and Shimizu in turn influenced by his reading of De Wolf.

If this view is accepted, then a fundamental difference between Plateau and Jukunoid is that proto-Plateau was characterised by noun-classes already in partial breakdown. Some current systems have been rebuilt and restructured, and compiling these gives an illusory image of a richer proto-language. Jukunoid may have had such a system, which may have looked something like Kuteb (with Oohum elaborating the system in a highly idiosyncratic way).

 $^{^{2}}$ Tarok has agreement, in that adjectival prefixes agree with nouns and some pronouns show agreement (with stem vowels not prefixes) but there is no concord in the manner of Ce, where freestanding pronouns have multiple forms reflecting the noun-class of the noun they reflect.

Another major distinction between Jukunoid and Plateau is in the realm of verbal extensions. To judge by the three available grammars (Shimizu 1980b, Koops 1990, Storch 1997) Jukunoid has three main ways of extending and transforming verbal meanings. The verb;

can be reduplicated (Shimizu's 'long verbs') or repeated an optional number of times as an intensifier

can be part of a serial verb construction

can be part of a fixed collocation that may include verb + noun/verb/ideophone

None of these resemble classic Niger-Congo verbal extensions, which, although best-known from Bantu, are present in almost every branch of Niger-Congo which has noun-classes.

Plateau, on the other hand has traces of verbal extensions in almost every branch which has been studied³. Tarok, for example has a number of persistent verb-final elements that are no longer productive, which were probably originally verbal extensions that have become fused to the stem. The most important of these are - ci, -d(/t)Vr and -ri. -ci and -ri are common elsewhere in Plateau. But it is likely that in most cases the more complex repertoire of extensions survive as in the morphology of 'plural' or 'pluractional' verbs. In many Plateau languages, verbs have at least two morphologically distinct forms, one of which can be derived from the other by more or less transparent processes, except in rare cases of suppletion. Although plural verbs occur in all four language phyla of Africa (Brooks 1991), the way they are described varies from author to author, often making data hard to compare. The first description of plural verbs in this region may be Bouquiaux' (1970) account of Berom, but Gerhardt (1971) presents an overview of what was known about Plateau languages at the same period. Izere has been the subject of at least two partial accounts (Wolff & Meyer-Bahlburg 1979; Gerhardt 1984) and McKinney (1979) has characterised Jju (Kaje).

The exact definition of plural verbs is more than a little confusing, in part because they are almost always in fragmentary systems and because the emphases of their use do indeed vary from language to language. Bouquiaux (1970) used the term *frequentatif*, for Izere and Fyem they have been described as 'continuous'; in Jju and Berom as 'plural' verbs. Newman (1990) coined the term 'pluractional' as a cover term for these uses. Aron (1996/7) contrasts 'distributive' (where the subject or object can be plural) with 'iterative' where an action is performed many times. Their uses can be described as follows;

- 1. Describing an action repeated many times
- 2. Describing an action with multiple subjects
- 3. Describing an action with multiple objects
- 4. Describing an action conducted over a long time
- 5. Any combination of these

The iterative use of the plural forms has led some researchers to associate these forms with an imperfect; if an action is undertaken many times it is presumably incomplete and thus contrastive with a completed form. However, in most languages where the verbal system has been described, aspect and plurality are distinct.

The morphology of Plateau plural verbs is highly confusing and in a given language, many different strategies may be pursued, often simultaneously. Typically;

³ I say this with care, as Alumic and Ndunic have not been studied in sufficient depth to be sure.

a suffix or infix may be added to the verb consonant alternation vowel lengthening vowel ablaut tone change suppletion

Evidence for borrowing between languages together with intact verbal plurals further adds to the complexity of accounting for the synchronic data in a single language. Rather as with noun-classes, a rich system such as in Degema, Edoid or Lower Cross was in partial breakdown and was being re-interpreted as a system of verbal plurality, either because this already existed in the language in incipient form or under the influence of contact with another group. In some languages, verbal plurality became highly developed, elsewhere it became fossilised with the extended forms acquiring distinct meanings.

If this argument is accepted, then Jukunoid had no verbal extensions, even in the proto-language, although they must have been present in pre-Jukunoid. Alternative strategies for extending basic meanings had already developed. Plateau, on the other hand, had a partly functioning system with several verbal extensions still productive and the process of transforming it into verbal plurality would have been just beginning.

3. Comparative Plateau data tables

3.1 Presentation of data tables and reconstructions

The tables in this section represent roots which can be used to define Plateau or subsets of Plateau and are sufficiently widespread in Plateau to be assigned to the proto-language with some confidence. These do not represent a complete set; Plateau languages exhibit many common Niger-Congo roots which are present in scattered attestations. Others, such as the numerals, three, four, five are certainly reconstructible but do not illuminate proto-Plateau as such, since they are so similar in many Niger-Congo languages. The first column gives the language name. Jukunoid and other external cognates are given for selected languages below the horizontal line that follows Plateau. The family affiliation is noted for these languages. If there is any discussion of a root in print, I have included a reference to it. This does not mean I endorse the view of the author, and the expanded datasets used here make possible conclusions unavailable to earlier researchers. No attempt has been made to include all Plateau attestations; in particular those in Gerhardt (1983a) have yet to be integrated. The objective was to include a sample from every group where a cognate occurs.

1. Smoke	
Language	
Kulu	ìnci
Berom	(se) kyéŋ
Iten	ňkòy
Cara	imveŋ
Shall	ki
Iregwe	ńcú
Izere	ìtsiŋ
Firan	ìntsiŋ
Ganang	i-nsɛŋ
Yeskwa	újò
Hyam	j ວິŋ
Ce	Ìnci
Mada	ntsàntsē
Ningye	ntɛŋ
Gbantu	ntsəŋ
Numana	ntsiŋ
Bu	Ente
Təsu	ù−zò
Toro	muŋzu
Hasha	i∫we
Sambe	cucwá
Ndun	mesan
Shakara	man∫u
Eggon	odzo
Во	i∫é
Horom	∫i∫eŋ
Sur	ոշiŋ
Pe	ntsaŋ
*PYK	kyáŋ
*PKI	*fu
*PJM	*vin

Commentary: One of the most convincing isoglosses for Plateau, it seems not to be attested outside. The Jukunoid forms are diverse and quite different

2. Yesterday		
Language	S.	
Kulu	ùlé	
Cara	εnri	
Iten	ὲryε	
Iregwe	áwri	
Izere	kuré	
Ganang	noré	
Firan	hurí	
Yeskwa	élé	today
Hyam	rèŋ	
Mada	nānrēn	
Ningye	ryɛɛŋ	
Gbantu	àrèŋ	
Numana	álèŋ	
Bu	ĩri	
Təsu	nùmòlé	
Ake	kirye	
Eggon	kere	
Ndun	núnray	
Shakara	uturí	today
Rukul	irɛ	
Pe	niye	
Sur	ələŋ	
Tarok	ìlám	
*PJ	*dindàŋ	

Commentary: No evident external cognates. The Tarokoid forms are curious; all could be related to the remainder of Plateau by a serious of tortuous arguments, but none are evidently related to one another. The shifting between 'yesterday' and today' is very common in Plateau and many languages have related words for these two lexical items.

3. Wind	#-gbulu	
Language	S.	pl.
Kulu	u-wùrù	i-wùrù
Iten	ìgbîl	
Berom	gul	
Cara	wul	
Shall	wu	
Iregwe	u-wú	
Izere	kúwún	ìwùn
Ganang	u-wun	
Firan	huwîn	
Ake	owu	
Fyem	wùl	
Rukul	uwol	
Takum	wò	
*PJMW	vwò	

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Commentary: Ninzic and Tarokoid have both innovated. No reconstruction covers the whole of Jukunoid and the possible cognate in Takum is probably a reduction of **vwè** (Ashuku) rather than from forms with a labial-velar in root-initial position. The lateral/nasals in C_2 position appear to be distinctive to Plateau. Wind evidently attracts onomatopoeia and nothing can be quite certain in cognacy judgments.

4. Road			
Language	S.	pl.	
Kulu	ú-tùrà	í-tùrà	
Kadara	utera		
Izere	ìrèn	irèn	
Ganang	a-rèn	á-rến	
Firan	iryén	nèryɛn	
Hyam	fwor	swor	path
Ce	ku-cílí		
Mada	nkòn	kənkòn	
Ningye	tir		
Gbantu	krí	ànakrí	
Numana	ikle	kəklě	
Hasha	i-cwɛn	cu-cwen	
Ndun	usel	ísèl	
Shakara	u∫ɛl		
Eggon	o∫en		
Rukul	i-təl		
Tarok	asəl		
*PJM	*pin		
*PJMW	*tyo		
Nembe	etéli		Ijoid
Bubi	ètéllé		Bantu

Commentary: The Plateau forms are very diverse, but on the whole appear to all be linked. On the face of it, the external cognates in Bubi and Ijoid⁴ look convincing and yet it is surprising there are no other cognates in nearby groups.

⁴ Thanks to Kay Williamson[†] for pointing this out.

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5. Child			
Language	S.	pl.	
Kulu	ε-wen ⁺	bè-wén	
Iten	ŋwən	nìnon	offspring
Berom	hwéì wen	nèì bewen	boy
Cara	kon	non	
Iregwe	kə-wè	r à- wè	
Izere	igon	ìnòòn	
Ganang	i-ŋwən	i-non	
Firan	káŋgwén	nánuŋ	
Yeskwa	úwé	áwέ	
Hyam	wè	mo-wè	
Mada	fəvèn	nywɛn	
Ningye		mumwen	children
Gbantu	vávən	ámúmwán	
Numana	vəvən	ámúnún	
Ce	u-vIn ⁺	í-ŋmín	
Bu	ivrɛ		
Ninkyob	vyen	myeŋ	
Təsu	àmeré	0 5	
Hasha	a-mweŋ	a-mweŋ	
Shakara	anhwin	mahwín	
Ake	oye		
Eggon	à-wyí		
Rukul	a-wyen	i-wyen	
Horom	ùyèn		
Fyem	áyin		mother (?C)
Sur		mwanaŋ	
Yangkam		munda	
Tarok	ùyèn	ován	
*PCJ	*ŋu		
*PJMW	*su		

Commentary: Suppletive plurals are common in words for 'child' and the presence of a bilabial nasal in the plural is widespread if not perfectly distributed in Plateau. The cognacy of the Fyem form for 'mother' is not improbable as there are many cases where words for 'woman' and 'child' are interchanged. I know of no evidence for this persistent type of suppletive in Jukunoid.

6. Hunger	#igbyoŋ		
Language	s.	pl.	
Kulu	iyoŋ ⁺		
Berom	vyoŋ		
Cara	kivəŋ		
Irigwe	ù−zõ		
Izere	ìzòŋ		
Gwot	jòŋ		
Туар	ddzòŋ		
Ataka	jjòŋ		
Jju	dzwoŋ		
Ayu	iyoŋ		
Mada	gyờŋ		starvation
Bu	iyõ		
Ce	ì-wyo		
Numana	gyòn		
Ninkyob	joŋ		
Hasha	i-yuŋ		
Təsu	nyu		
Ndun	ugórí		
Shakara	ugorí	igori	
Fyem	yóŋ		
Horom	уэŋэ		
Sur	yyəŋ		
Tarok	ayáŋ		
*PCJ	*mbud		
Mangar	յսղ		Chadic
Hausa	yunwa		Chadic

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Commentary: This is an old Plateau root that has probably been loaned independently into various Chadic languages. The forms with **g**- in C_1 position probably point to a velar in this position, widely weakened in Plateau to labial + palatal. If we assume the **gb**- sometimes weakened to initial **b**- this may then have been fricativised to **v**-. Cara may then have lost palatalisation giving **v**- in C_1 position. This hypothesis is illustrated below;

v

7. Egg			
Language	S.	pl.	
Kuturmi	ikpa	akpa	
Kulu	di-kpa ⁺	ε-kpa⁺	
Hyam	cèb	céb	
Cori	gép	ígép	
Ningye	kpaŋ		
Ninzo	inkpe		
Ndun	kyɛbí		
Shakara	akebi		
Ake	ake		
Jili	kúkpa	ákpa	
Jijili	akpa	_	
Gure	nī-kpa		East Kainji
Hausa	kwai		Chadic

Commentary: By a rather unusual semantic connection, for 'egg' and 'pound' are often related, and Niger-Congo #tu is replaced by #kpa. The image is apparently a chick pounding on the egg, according to one informant. Absent in Tarokoid, SE Plateau but presence in East Kainji may be due to contact. Tarokoid forms may be cognate with Jukunoid;

Pe	ti-ci	a-ci
Tarok	acì	
Sur	3i	
Yaŋkam	gyɔ	
Oohum	kíí-tsí	éé-tsí
Kporo	kĩ	
Wukari	a-kyề	

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8. Medicine	interna una s		
Language	s.	pl.	
Kulu	u-kàŋ	i-kaŋ ⁺	
Iten	hwál	ihál	
Berom	hwal	bèhàl	
Cara	val	agal	
Shall	kan		
Gyong	gop	gyòp	
Ashe	ú-g5p	ì-gɔp	
Cori	gwap	gyòp	
Hyam	gwap	gwyap	
Iregwe	rə-ké		
Izere	ríkán	nàkàn	
Ce	íkál		
Numana	kəka		
Ayu	a∫íyál	á∫îkàl	doctor
Ninkyop	ká	'nká	
Ningye	kəka		
Jili	mugá		
Ndun	uhal	íhàl	
Ake	oku		
Rukul	a-hal		
Fyem	dî-hyal		
Tarok	akàl		poison

Commentary: Apparently a Plateau root. The final consonant is always either a lateral or nasal except in West-Central Plateau where it is replaced by /p/. Not given by Shimizu, but the following two items certainly do not appear to be cognate.

Kuteb	kucīn	acīn
Jibu	gantí	

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9. Mouth	#ku-nyu		
Language	S.	pl.	
Kulu	ge-nyu ⁺	bè-nyu	
Iten	(a)nu	ninu	
Berom	nu	nènù	
Cara	ku-nu	a-nu	
Shall	nun		
Iregwe	kə-nú	r à -nù	
Izere	ka-nu	nà-nu	
Ganang	ka-nu	a-nu	
Hyam	nyi	mò-nyi	
Mada	nyū	mànyū	
Bu	enyu		
Numana	anu	nunu	
Ninkyob	nùŋ	ìnyûŋ	
Təsu	àní	εnyi	
Hasha	a-nye	a-nyenye	
Sambe	kanyî		
Ndun	unwen	ínwɛn	?C
Eggon	anyu		
Fyem	núŋ		
Pe	u-nuŋ	a-nuŋ	
Tarok	anùŋ		
Sur	kunu		
Yaŋkam	noŋ		
*PJ	*u-ndut	*i-ndut	

Commentary: A old Niger-Congo root #nu, the widespread presence of a **ku**- prefix in Plateau seems to be an innovation. Certainly there is no trace of it in Jukunoid, nor are the initial nd- forms (Oohum etc.) paralleled in Plateau. Postulating a palatal nasal make is possible to account for the front-vowel in V_1 position in several languages.

10. Rib			
Language	S.	pl.	
Kulu	e-cà		
Iten	tsan	ìtsan	
Hyam	saŋ ⁺	sáŋ	
Ningye	saŋ ⁺		
Rukul	a-kyen		
Tarok	nzakin		

Commentary: Despite the scattered forms, this appears to be a good candidate for proto-Plateau. The Jukunoid forms I have been able to access do not appear to be cognate.

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11. Hyena ⁵			
Language	S.	pl.	
Iten	murúm		
Iregwe	m̀-mò		
Izere	amurum		
Hyam	muri	mò-muri	
Hasha	murun		
PJ	*yàT+mìn		
PW	*dum		
Daffo	mùrûm		Chadic

Commentary: This Plateau root also occurs in Gur languages and its presence in Plateau reflects a time when Gur-Adamawa languages stretched across Northern Nigeria. Jukunoid, however, appears to have innovated.

12. Squirrel			
Language	S.	pl.	
Kulu	gɛ-cúk	bɛ-cúk	
Berom	rók	bèrók	
Ayu	ìtờk	àt ò k	
Ganang	a-rok	á-rok	
Alumu	i-tð		
Ndun	abwatok	mèbătok	
Eggon	edogo		
Pe	ì-toktoli	i-toktoli	
Tarok	ìritòk		
PJ	*tak		
Kuteb	ù-tsak		

Commentary: Shimizu's reconstruction is a bit unbalanced, being based on just three forms. However, if it is cognate, the shift to a central vowel is distinctive for Jukunoid.

13. Giant rat ⁶			
Language	s.	pl.	
Kulu			
Cara	ki-gut	ni-gut	
Hyam	kòòr		
Hasha	agur		squirrel
Ndun	ánhoro	mehoro	
Eggon	ekro		
Rukul	a-hətə		
Horom	kwede		
Jijili	ukoro		
Yaŋkam	ikot		
Sur	kwər		

⁵ (Crocuta crocuta)

⁶ (*Cricetomys* sp.)

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Commentary: The giant rat is widely eaten throughout the region. Although a convincing reconstructible in Plateau, evidence for Jukunoid is lacking.

Commentary: Some of Shimizu's citations suggest that the initial was originally a velar nasal ŋm- and the synchronic forms represent a reduction of this. The Plateau forms appear to be distinctive and the Fulfulde is probably a borrowing. There is another root for 'salt' in Plateau, #-tok, which occurs in Central Plateau, Ninzic and Tarokoid.

Kulu	bè-cok
Hyam	twak
Pe	ntok
Sur	n∫wak

It seems possible, given that both roots are widespread, that they refer to salt from different sources and that this is a rather ancient culture-word and not to be reconstructed.

15. Arrow			
Language	s.	pl.	
Cara	fi		
Shall	nbi		
Kwyeny	byie		
Hyam	\mathbf{gi}^+	gyì	
Ninkyob	ywe	ìywe	
Boya	bi		
Nungu	ubye		
Ake	obye		
Eggon	ò-bgá		
Pe	ti-bwi	a-bwi	
Wapan	abo		Jukunoid
PJ	*ri-bun	*a-bun	

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Commentary: This is a secondary set for 'arrow'. The primary set is **#kila** and it is not entirely certain these items are all cognate. The Jukunoid languages are close, but the vowels are persistently back instead of front. There is a surprising similarly between the Eggon form and Icen **bagã**, perhaps coincidence? Jukun also has a **#suŋ** (e.g. Jibu) root, not identified by Shimizu, which also occurs in Central Plateau and Kainji and survives as the central term for arrow in Bantoid.

16. Fish-net			
Language	s.	pl.	Gloss
Kulu	ì-sàk	ì-sak	
Hyam	tsaŋ		
Tarok	ìcà	icà	fish net, bird-snare
PJM	*dzúk		
Takum	zík-à		
Nupe	esa		Nupoid

Commentary: Plateau attestations are scarce but appropriately distributed. The Jukunoid forms might be cognate, but the differences still make this a useful piece of evidence for the distinct nature of Plateau.

17. Twelve/te	n # isok-	
Language	S.	
Kulu	isðgípààla	Twenty (10 x 2)
Izere	kùsók	Ten
Hyam	shok	Twelve
Ayu	ishók	Ten
Ninkyob	sôg	Twelve
Təsu	tsə	Twelve
Sambe	toro	Nine
Ndun	sək	Ten
Shakara	nsok	Ten
Eloyi	-80	Twelve
PJMW	*dub	Ten

Commentary: This appears to have originally been a word for 'twelve' in the duodecimal systems formerly characteristic of Plateau. It was adopted for 'ten' in many languages and was then replaced in turn, now surviving only in compounds. Its appearance in Eloyi is one factor that makes it appear more a part of Plateau than of Idomoid (Armstrong 1984).

Refs: Armstrong (1984)

18. Ask question	on	
Language	S.	pl.
Kulu	lírí	
Hyam	ribí	yibí
Gyong	riptsá	
Lungu	dèpá	
Doka	lirbi	
Ningye	ryip	
Mada	rì	
Nindem	rip	
Ninkyob	ríb	ryib
Təsu	lufu	
Hasha	rifi	riri
Rukul	rip	
Surubu	rivi	East Kainji

Commentary: Gerhardt (1983:101, 125) reconstructs PP2 as *lip +V and PP4 as *dip. Ndunic has innovated. Tarokoid patterns with Jukunoid; Sur bip, Yaŋkam bip, Tarok **6**⁴p. However, this root is a much more widely spread; cf. PLC *bíp, Gbari byibe, Ijo 6í, Reshe bípð. This suggests that the remainder of Plateau innovated or else the original form was something like #ribip, which eroded in different fashions.

Refs: Gerhardt (1983:101), BCCW (6/9)

19. To burn (fir	re)		
Language	S.	pl.	Gloss
Berom	fwúsh		to burn food
Cara	posse		
Shall	fi∫i		
Hasha	wu∫i	wu-wu∫i	
Təsu	fya		
Toro	fya		
Fyem	fwí∫		to burn off vegetation
Rukul	fyi		
Pe	tset		
Tarok	shì		
PJ	ton-a		
PJM	vòN		
Guruntum	∫i		Chadic
Wihə	síí		Chadic

Commentary: Most examples are intransitive but this verb can occasionally be transitive. Ndunic and Ninzic have both innovated. Borrowed into Chadic.

20. Carve (woo	d)	
Language	s.	pl.
Kulu	sep	
Kuturmi	u-soo	
Doka	o-sab	
Cara	∫ipal	
Jju	∫ab	
Gworok	∫ap	
Туар	∫ab	
Ashe	t∫ε	
Gyong	ntse	
Cori	cali	
Hyam	ca	tsa
Idun	tsen	
Kwanka	sep	
Ce	∫ip	
Nindem	sep	
Ningye	∫ε	
Bu	∫ε	
Ayu	∫abak	
Ndun	∫ap	
Hasha	sep	sɛ-sɛp
Eggon	tsen	
Fyem	sep	
Horom	sep	
Rukul	∫en	
Pe	∫ap	
PJ	*kwaP	
cLela	sèbè	West Kainji
Kurama	∫ava	East Kainji

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Commentary: The Plateau and Jukunoid forms are likely to be related in some way, but the loss of intermediate forms makes this an attractive isogloss for the boundary between them.

21. Come out			
Language	S.	pl.	
Kulu	wuluu		
Iten	wuru		
Shall	waa		go out
Iregwe	wùrù		
Izere	wúrúk		
Gworok	wurug		
Hyam	wut	wyut	
Ndun	wurak		
Ayu	wìrìk		
Hasha	wərɛk	wəwəsɛl	
*PJ	*du		
Anaang	wùŚ		Cross River
Degema	wòlá		Edoid

Commentary: Tarokoid has innovated. Degema may be a chance resemblance.

22. Laugh			
Language	S.	pl.	_
Izere	mas		
Ningye	mwar		
Nindem	más		
Ayu	mèm		
Horom	mis		
Pe	misi		
PJ	*swàŋ		-
PJMW	*vyen		
Nupe	mấtsã		
Diri	mēs	Chadic	
Tera	másá		

Commentary: The data are somewhat scattered as Beromic, Alumic and Ndunic have innovated. The root has been borrowed into Chadic. Gerhardt (1983:131) reconstructs ***mar/mas** for PP4. The Jukunoid roots appear to be unrelated.

23. Sharpen		
Language	S.	pl.
Cara	loga	
Berom	lð	
Ndun	la	
Jijili	da	
Tarok	lwà	

Commentary: Not widespread enough to certainly attribute to proto-Plateau. However, no cognates are attested in Jukunoid sources, although not listed by Shimizu.

Existing literature has questioned the separateness of Plateau and Jukunoid and argued for the merger of parts of Plateau with Jukunoid. Even where the proposal is to retain the divisions proposed by Greenberg, linguistic support for this has not been forthcoming. This paper presents evidence, from noun-classes, verbal extensions and from a series of lexical items, to suggest that the distinction is valid, and that proto-Plateau and proto-Jukunoid were real groupings that had very different chacteristics. The comparative data from Jukunoid is essentially forty years old and although a considerable amount of new material is available, it has yet to be compiled. When this is undertaken, it can be more effectively compared the Plateau data.

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