

# PROGRESSIVE TRADITIONS IN AFRICAN AND ORIENTAL STUDIES

Edited by  
Siegmund Brauner (Leipzig)  
and Ekkehard Wolff (Hamburg)

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K. I. POZDNYAKOV (Leningrad)

Proto-Fula-Serer Noun Class System

Diachronic interpretation of class systems in Fula-Serer branch of Atlantic group is one of the most disputable problems in Atlantic studies. The continued interest in this problem is often dictated not only by the need of Atlantic comparative studies but also by the claim of one or another scholar to find in linguistic analysis direct evidences for the latest hypothesis about the genesis of the mysterious Fulbe people. Linguistic arguments advanced in support of ethnogenetic theories are not always acceptable by experts in Atlantic languages. Atlantic linguistics, however, have no forceful counter-arguments against the wishful treatment of language facts, since up to now there is no non-contradictory concept of Fula-Serer grammar divergences. On the one hand, it is established today that Fula is most closely related to Serer forming with it a separate sub-group (Wolof aside). On the other hand, the noun classes of these two languages look at the first glance uncomparable.

For the explanation of class markers divergence the fundamental research of J. Doneux (Doneux 1975) is of paramount importance. J. Doneux put forward an idea of extended morphemes which modify a structure of class markers in Atlantic languages, Fula and Serer being first and foremost. This concept allowed him to declare the common origin for two types of class markers with two different structures: Serer - a)-C, b)-VC; Fula - a)-CV, b)-CVC.

By this hypothesis:

*-CV >	Fula -CV	*V'-CV >	Fula -VC	-CVC
	Serer -C		Serer -VC	

Despite the disputable character of many cognates (only the treatment of cl. II looks convincing), the general approach of J. Doneux seems to be fruitful.

For Fula-Serer proto-language the class markers of 2 types are to be reconstructed:

1. suffixed class markers of -CV structure, -N-CV being a variant (N looks a morpheme, which appears with a simultaneous change of the initial consonant alternative grade of a stem (NC-, grade III);
2. class markers of confix structure with extending morpheme: \*(C)V'-stem-V'-CV > \*(C)V'-stem -V'-C, where the quality of V' is determined by class marker vowel (V). The variant with N is also to be reconstructed.

ted: \*\* (C) V' - N - stem - V' - N - CV.

The proto-language class markers of the first type and its regular reflexes in both languages are given in table 1: Roman numerals denote the stem consonant grade of alternation, appropriate to the class in question; the class numbers correspond to the Niger-Congo class numeration and are given on the basis of a common reconstruction of proto-atlantic and proto-mel class systems; the classes with a stroke, such as 5', are to be considered as derived from basic classes in question, i. e. \*\*cl. 5 > \*cl. 5': \*\*I...le with nasal morpheme gives \*III...N-le > \*III...N-li.

According to the given reconstruction, in Fula:

1. \*ε > e; \*ʔ > d; \*l > r, being a regular process, which could be shown in diachronic change of an alternation series: \*nd/d/l > nd/d/r. As a result of this change the grade I consonants of two distinct series coincided: \*t/t/r and \*nd/d/r. It led to the transformation \*r > t in the series of voiceless, i. e. to the excluding of /t/ from the alternation system: \*t/t/r > Fula t/t/t (described in Pozdnyakov, 1987);
2. class marker's consonants formed an alternation grades, - the process, which neutralized the opposition NC-~C-; class markers consonant alternation resembling those of stem consonant - compare the allomorphes of cl. 5: nde/de/re/e;

Table 1

class number	reconstruction	Fula	Serer
4, 8	II...ʔi	II...di	II...k
10(8')	II...n-ʔi	II...di	III...n
6	II...ʔe	II...de	II...k
1	II...ʔo	II...do	cl. 1A
1'?	II...p-ʔum	II...dum	?
12	I...ge	I...nge	I...l
12'	III...n-ga	III...nga	III...n
15	I...fo	I...ngo	I...l?
3	III...n-gu	III...ngu	III...n
10N	III...nu	III...ngu?	III...n
15'?	III...n-ʔu?	I...ndu?	III...n
5	I...le	I...nde	I...l
5'	III...n-li	III...ndi	III...n
11	I...lu	I...ndu	I...l
2	I...fe	I...fe	I...w
6N	III...ma	III...mba?	III...n?

3. Class marker loN coincided with phonetically similar class marker 3: \*III...nu > III...ngu. At the same time it is possible to assume an analogical process \*III...ma > III...mba (western dialects) and III...nga (eastern dialects) have the same archetype: \*n-wa (variant of \*n-ga, cl. 12') - compare the grade I coincidence in the series mb/b/w and ng/g/w < y>.

In Serer:

1. \*ʔ > k; \*ɓ > w;

2. In all classes with primary nasal element the stem initial consonant received the prenasal alternative grade - grade III (it is possible to postulate this trait for the proto-language). Simultaneously the class marker's structure got simplified: N-C > N. As a result in Serer the stem consonant and class marker consonant became correlated:

CM consonant	stem consonant
nasal (N)	prenasal grade - III
stop (k)	stop grade - II
oral sonorous (l, w)	fricative grade - I;

This process explains the reflexes of CM \*12 and \*15 (in Serer) given in table 1: In proto-language, while \*N + \*CV > NCV, all primary vowels of CV resulted in the nearest cardinal vowel (one of the three "extreme" vowels - /i/, /u/, /a/) of NCV: \*o > u (\*n + go > ngu), \*e > i (\*n + le > nli), \*ɛ > a (\*n + ge > nga).

A reconstruction of the class markers with the extending vocal morpheme and their regular reflexes in Fula and Serer are given in table 2.

According to the reconstruction, in Fula:

1. Class prefixes were lost, alternative grade III being retained in class markers with nasal consonant (loN - \*nu, 6N - \*ma); grade II ("neutral" grade) being fixed to all other classes except class-homonyms koI/koIII, i. e. \*I > II, \*II > II, \*III > II;
2. The proto-language distinction of nasal/non-nasal class markers retains in classes with vocal-extending morphemes: \*in > in, with dialect variant \*in > ii (class marker ngii with compensating vowel length); \*uy > um, with nasal consonant labialisation after a labial vowel;
3. The distinction of nasal/non-nasal class markers is lost in classes with extending morphemes of CV...CV type (compare \*n-ga > ga/nga/wa; \*go > go/ngo/wo); the evolution of 6NA class marker in Fula will be discussed separately.

In Serer:

1. \*ʔ > k, \*h > f;

2. In vocal extending morphemes the labial vowels resulted in /o/ - \*u > o, \*o > o and non-labial vowels - in /a/: \*i > a, \*e > a, \*a > a.

Table 2

class number	reconstruction	Fula	Serer
4A, 8A	i-II...i-?	II...i/ki	a- II...ak
9 (10A?)	i-n-III...i-n-?	II...in/ngin	a-III...an?
1A	o-II...o-?	II...o/ko	o-II...ok/ox
12'A	ha-n-III...ha-n-g	II...a/ka	fa-III...(fa)n
15A	ho-I...o-?	I...o/ko	fo-I...ol
3A	ho-n-III...ho-n-g	III,II...o/ko	fo-III...n?
10NA	ho-III...o-n	III...on/kon II...oy/koy	fo-III...n
15'A	u-n-III...u-g-?	II...um/ngum II...um/kum	o-III...on
5A	e-I...e-l	II...el/ngel II...el/kel	a-I...al
11A	o-I...o-l	II...ol/ngol II...ol/kol	o-I...ol
11B	a-II...a-l	II...al/ngal II...al/kal	a-II...al
6NA	a-III...a-m	III...*am	cl. 15A

In proto-language:

1. The stem initial consonant after nasal morpheme (N-) received alternative grade III;
2. In extended forms: \*Cu > o-Cu > oC (e. g. \*lu > o-lu > ol), but not before /ŋ/, remaining \*u, i. e. \*gu > u-gu > ug; it is possible (according to the reconstruction) to consider cl. 9 as derived from cl. 10 (via extending vocal morpheme). In its turn, according to table 1, it is possible to consider cl. 10 as derived from cl. 8 (via nasal morpheme). It is interesting that on the most archaic stage of proto-bantu, cl. 10 seems to be derived from cl. 8 via just the same model: \*N + vi/zi (8) > \*ni (10).

The majority of correspondences listed above can be illustrated by lexical cognates:

Classes 1 - 1A (personal classes of sg.). In Fula studies the classes II...do (do/jo/o) and II...ko (ko/wo/o) are traditionally treated as allomorphs of the only one class - II...do/o with non-standard class marker alternative grades. The reconstruction of 2 types of class markers allows for the explanation of these unusual forms: do reflects naturally the proto-language \*-ʔo (nef-do "person") while class marker -ko comes from extended form \*o-ʔ and so does marker o-...ok/o-...ox in Serer. Examples: Fula gor-ko - Serer o koor ox "man".

Class 2 (personal class of pl.): Fula yim-be (dial. him-be) - Serer wiin w "persons".

Class 3 - 3A and loN - loNA. The regular correspondence Fula -ngu - Serer Ø...n can be shown by many cognate lexical items, most of which denoting animals: F(ula) puccu - S(erer) "horse", F. moo'u - S. max n "termite", F. liingu - S. lif n "fish" etc. At the same time a number of F. ngu-class nominals denoting the "extensive", long objects (especially time denominations) could be compared with the nominals of Atlantic loN class, e. h. F. ndunngu (dial.) - S. ndiig n "rainy season", F. ceedu - S. fiid/iid n "dry season" and other.

The extended forms of cl. 3 in both languages have specialized in size-marking function: in S. - fo-III...n is the diminutive pl. class; in F. - III...ko - the augmentative pl. class and III...kon - the diminutive pl. class. The size-marking function of Atlantic noun classes is based on the individualizing function (compare the forming of augmentative meaning on the basis of individualizing meaning in Bantu cl. 5).

Classes 4 - 4A and 8 - 8A. The correspondence of Fula pl. cl. di and Serer pl. cl. Ø...k, a...ak has a great number of examples which can hardly be aduced to the cl. 8 - in particular, it is to explain a great share of animal denotations in cl. di (see Kóval, 1979), that differs cl. di from cl. de. This fact can reflect the homonymity of proto-markers \*8 and \*4, which seems to be a feature of proto-language level. Class ki, including the tree names, in Fula is a sg. class, but the external comparison data allows for tracing the initial collective meaning (for the "active" nouns) characterizing cl. 4 on the whole.

Classes 5 - 5A, 5'. The majority of F. I...nde - S. I...l (dial. gi-I...l) examples consist of body-parts words: F. nyiindere - B. nyiiñ l "tooth", F. xoore - S. xook l "head", F. 'aynaare - S. gaynaak l "belly", F. wofoonde (dial.) - S. boof l "egg", F. heyre/xeyre - S. xeeñ l "liver" etc. The specialized meaning associated with the idea of solitariness being developed from the individualizing meaning of cl. marker 5.

The correspondence F. nde - S. a...al (regular extended form): F. yi-tere - S. a ngid al "eye" etc.

The Fula regular extended forms of cl. 5 (ngel, kel) have a diminutive meaning, as well as the extended forms in cl. 3, loN.

The examples of lexical cognates in 5' cl.: F. gawri - S. ngaaf n "corn", F. maaroori - S. maalo n "rice", F. aawdi - S. ax n "seed", F. njamndi - S. njelem n "piece of iron", F. mboddi - S. bood n "snake".

Class 6. It is a collective pl. class with a great deal of lexical cognates such as F. nyiiye - S. nyiiñ k "teeth".

Class 6NA. Fula class III...dam ("class of liquids") that doesn't have a correspondence in Serer, is undoubtedly connected with class \*ma (6N) of Niger-Congo. Nevertheless, it is difficult to explain the Fula marker,

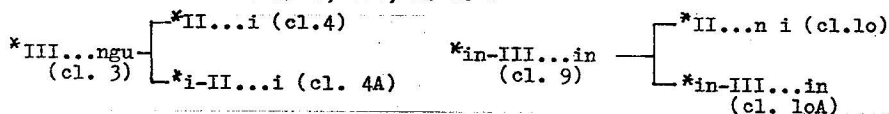
presupposing initial \*P. However, it is quite possible to assume the initial form \*-a-ma (> \*-am, see table 2) while supposing the following way of its transformation: 1) marker \*-am combines with the lexical base \*ji "water" which is borrowed from ancient Mande (\*ji can be easily reconstructed in Proto-Mande having regular reflexes in all Mande languages, except Bisa and Samo): \*nji-am (III). Despite the presence of \*ji "water" in many Niger-Congo languages (Bantu in particular) in Fula it must be treated as a borrowing because there are no traces of this root in any Atlantic or Mel language; 2) in names for liquids assigned to \*am, the shortened lexical form \*(n)jam (< \*nji-am) receives a function of class marker, being included in the alternation system:  $\delta/j/\emptyset$  - a standard marker alternation.

Class 7. It is the only Atlantic class which doesn't probably have traces in sub-group Fula-Serer. It might be connected with a particular status of cl. 7 in the class systems: it is the only completely unmarked class, that doesn't have any positive classifying or quantitative meaning (if we treat pl. cl. 8 as marked member of quantitative opposition). The distinctive position of cl. 7 is accentuated in certain languages by its class marker structure: so in Lingala only marker 7 has the non-standard structure V- in contrast to all other markers with CV-structure.

Classes 10 (8'?) and 9 (10A?). It is quite evident that any rapprochement of classes can not be restricted in phonetic analysis if we have an essential difference of meanings in the compared class markers (just that very case for Fula - Serer cl. markers 9/10 and 3/4) - it is necessary to dispose of more or less very similar picture of semantic divergence of classes and to reveal the factors which caused this divergence. The character of hypothetical structural transformations in class semantics can be described as following:

For proto-language state it should be reconstructed the meanings:

- a) "active" object names, tree names in particular - cl. 3/4, 4A;  
b) animal names - cl. 9/10, 10A, i. e. :



In opposition 4~4A, 10~10A, classes A present the marked members adding to unmarked forms the meaning of attitude.

In Serer the class meanings are nearly the same as those of proto-language: the tree names are in cl. 3 (III...n) and plural forms - in cl. 4 (II...k). The formal coincidence of markers \*9 (< \*10?) and \*10A (< \*8') led to a disappearance of one of them: in Serer class marker 3 supplanted marker \*9 (\*9/10), 10A>\*3/10, 10A), resulting in the parallel change among the plural classes (\*3/10, 10A>3/4, 4A). In the end Serer tree na-

mes and animal ones are both in cl. 3 and their plural forms - in cl. 4 or 4A:  $*3/4(A)$ ,  $*9/10(A) > 3/4(A)$ .

In Fula: 1) the formal coincidence of markers  $*9$  and  $*10A$  led to the treatment of cl.  $*10A$  as singular class (9,  $10A/10$ ). This transformation resulting in the parallel change of cl.  $*4A$  ( $*3/4(A) > *3$ ,  $4A/4$ ); 2) class 4A (II...ki) supplanted the initial cl. 3 (3,  $4A/4 > 4A/4$ , i.e. ki/di - plant names); as for cl. 3 (III...ngu) in all dialects except the Futa-Jalon one, it includes the animal names; in the Futa-Jalon dialect the animal names are in cl. 9,  $10A$  (II...ngin) as before. In the end:  $*3/4(A) > 4A/4$ ;  $*9/10(A) > 9$ ,  $10A/10$  (Futa-Jalon);  $*9/10(A) > 3/10$  (other dialects).

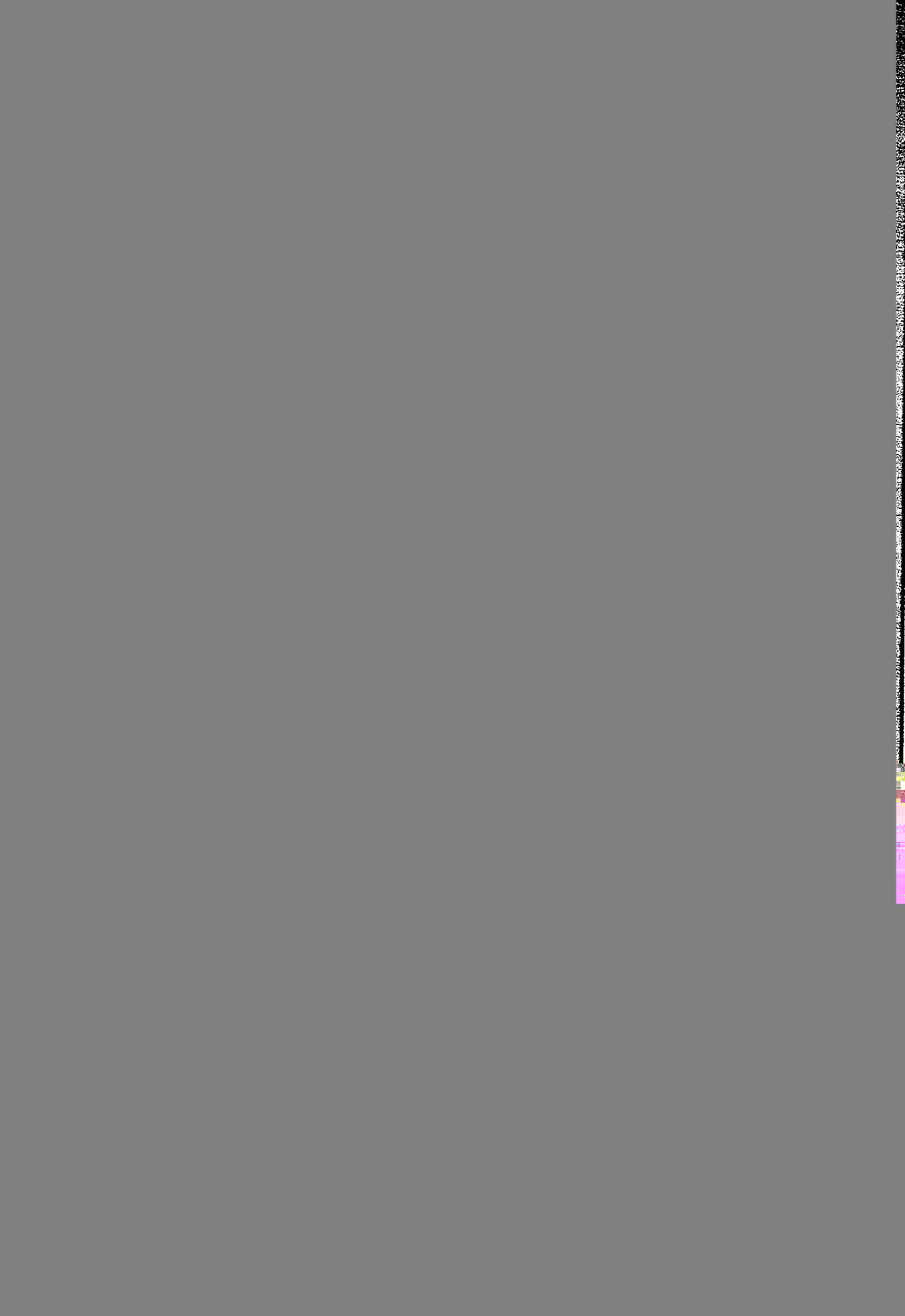
As a result the proto-language plant name classes (sg. and pl.) have been retained in Serer, and the noun classes of animal names (sg. and pl.) have been retained in one of Fula dialects.

Classes 11 - 11A. Examples of correspondence F. 11 - S. 11: F. jaafuuru - S. daɓ 1 "navel", "umbilical cord", F. enndu - S. (h)and 1 "(female) breast", "udder"; F. 11 - S. 11A: F. faandu - S. o fal ol "small-bottle gourd or other container for carrying water", F. ɓoosaru - S. o ɓox ol "dog", F. bonooru - S. o moon ol "hyena"; F. 11A - S. 11: F. calalol (dial.) - S. calaali 1 "chain", "caterpillar"; F. 11A - S. 11A: F. ɓakkol/ɓoggol - S. o baak ol "twisted rope" ("baobab": F. ɓokki - S. ɓaak n).

The unique Serer dictionary of R. Cretois (Cretois, 1972-1977) convinces one that in modern Serer there is a tendency to treat marker a-II...al and o-I...ol as combinatoric variants of one common class: in particular, a...al combines with lexical bases containing /a/ and o...ol - with bases, containing /o/. This tendency becomes apparent in the class markers correspondences: so, lexeme  $*o$  las ol (11A) "tail" resulted in Fula lac-ol/lac-c-ol and Serer a las al. Within the correspondence F. 11 - S. 11A many similar examples could be listed, such as F. salndu - S. a can(d) al (<  $*o$ ...ol) "rope".

The common (invariant) meaning of classes 11 and 11A is revealed rather clearly - "a single extensive (lengthy), rope-like object" (compare with the invariant meaning of Bantu cl. 11). Several examples of animal names in cl. 11(A) can be interpreted within the indicated meaning: some "key-words" of this group, such as the words for "dog", "hyena", "panther" seem to be derived from the words for "tail": for example, compare Wolof bukki b "hyena" - Fula bukkol/pl. bukki (Futa-Jalon) "tail", ɓokkordu (eastern dialects, Niger) "tail" (further to compare with ɓakkol/ɓoggol "rope" and after all with the related words for "baobab" - at eastern Niger ɓokke).

It is possible to assume that markers 11A and 11B are combinatory variants of one class. This assumption is based not only on their semantic resemblance but also on the similar phonetic context of their usage: the most part of cl. 11B lexemes contain /a/ or /ā/: F. catal - S. a can(d)



a collective class, mainly containing liquids names. This Serer class substitutes the proto-class \*6NA. The examples of correspondence 15' - 15A can also be noted: F. *bandu* - S. *fo baal* ol "body".

Finally one could notice that the reconstruction presented above fairly well conforms to external comparative data. This can be specifically shown in comparison of the Fula-Serer class reconstruction with the related class systems of the Proto-Bantu and Proto-Mel (Pozdnyakov, in print), see table 3.

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Table 3

Class number	Proto-Bantu	Proto-Mel	Proto-Fula-Serer	Class number
1	*mu- (< * * N - P u)	*o-...-o	*II...-P <sub>o</sub> II...-g <sup>-</sup> um?	*o-II...-o-? 1 - 1A 1, ?
3	*mu- (< * * N - w u)	*kũ- / yu...-u	*III...-n-gu	*ho-n-III...-ho-n-g 3 - 3A
5	*li- / i-	*wi-...-lẽ	*I...-le *III...-n-li	*e-l...-e-l 5 - 5A 5, ?
7	*ki-	*kv-...-θ?	-	-
9	*ni- (< * * N - k i N - P i ?)	*wi-...-o	ol, lo	ol, loA 9
11	*lu-	*li-...-lẽ	*I...-lu *a-II...-a-l	*o-I...-o-l 11 - 11A 11B
12	*ka-	*ka-...-a	*I...-gẽ *III...-n-ga	*ha-n-III...-ha-n-g 12 - 12A 12, ?
15	*ku-	*ku-...-u	*I...-fo *III...-n-fu?	*ho-l...-o-f 15 - 15A *u-n-III...-u-g-? 15, ? - 15A
2	*va-	*a-...-ẽ	*I...-be	2
4	*mi	*nyl-...-ĩ	*II...-P <sub>i</sub>	*i-II...-i-? 4 - 4A
6	*ol. 6N	*yi-...-ẽ?	*II...-P <sub>e</sub>	6
6N	*ma-	*ma-...-ma	*III...-ma	*a-III...-a-m 6N - 6NA
8	*vi-	*tsv-...-thv	*II...-P <sub>i</sub>	*i-II...-i-? 8 - 8A
10	*li- (< * * N - z i < * * N - v i)	*tyl-...-sẽ	*II...-n-P <sub>i</sub>	*i-n-III...-i-n-? 10 - 10A
10N	ol. 6N	*Nu...-ũ	*III...-nu	*ho-III...-o-n 10N - 10NA
13	*tu-	*thv-...-thv	-	-
14	*vu-	*wẽ-...-ẽ	-	-