

THE CLASSIFICATION OF VERBAL SUFFIXES IN EKPEYE

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1. INTRODUCTION AND PURPOSE

Ekpeye is a language spoken by a group inhabiting part of the eastern section of the Niger Delta area of Nigeria. The territory they occupy is bounded on the west by the Orashi River and on the east by the Sambreiro River. The town of Ahoada, which is their main centre, is situated on the west bank of the Sambreiro. The data on which this description is based was collected between September 1965 and September 1966, when the writer lived in the village of Orupata, two miles west of Ahoada.¹

The purpose of the present paper is to highlight the verbal suffixes of Ekpeye,² of which there are over sixty. The following sections contain: (a) a brief account of the theoretical framework of the description; (b) an outline of the higher grammatical ranks; (c) an explanation of the method employed in ordering the verbal suffixes; (d) a statement of the results obtained by the use of this method on the available data. These results provide a more detailed and systematic picture of the distribution of verbal suffixes in Ekpeye than has hitherto been given for those of Igbo, which is of comparable structure, and has been studied for a longer period.

2. THE THEORETICAL FRAMEWORK

The theory underlying this description is derived from the 'Structure-Function' model of J. T. Bendor-Samuel, with additional influence from the 'Scale and Category' model of M. A. K. Halliday. A hierarchy is established, in which, for Ekpeye, there are six ranks, labelled in descending order Sentence, Clause, Phrase, Word, Stem and Morpheme. At each rank, linguistic units may be grouped according to their internal structure into types, and according to their external function into classes. The grouping into classes takes precedence over that into types, though there is often a high degree of congruence between the two groupings. Where necessary, more detailed grouping into subtypes and subclasses is made.

Each type is said to consist of a number of places, which may or may not all co-occur; and each place is manifested by one or more classes of units, normally, but not necessarily, of the rank next below. Units functioning below their "normal" rank are said to have a downward rank-shifted function, and units functioning above their "normal" rank are said to have an upward rank-shifted function. For the sentence, as the highest ranking unit, no grammatical function can be stated, and for the morpheme, as the lowest ranking

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² A full description of the grammar of Ekpeye is contained in the writer's doctoral thesis, for details of which see bibliography.

unit, no grammatical structure can be stated. Supplementary units, termed complexes, are set up to handle linear recursion; that is, where two or more units of the same rank are in paratactic relationship to each other, and together manifest only one place in the structure of another unit.

Those items which are not conveniently analysed as part of the structure of any other unit, but rather mark the function of one unit at some particular place in the structure of another unit, are termed syntactic markers. Syntactic markers are usually themselves units at word or morpheme rank.

In addition to the class and type groupings, certain verb affixes are also grouped into orders. An order is a grouping made within a class or subclass on the basis of co-occurrence potential. Its aim is to display the sequence in which the members may co-occur, and the restrictions on co-occurrence. Ordering is of maximum value in handling (sub)classes with closed, but fairly large membership. With such classes, the co-occurrence possibilities are finite, but by no means obvious, and are most economically set out in a diagram of orders. Ekpeye verb suffixes afford a good example of the utility of this means of display. Orders and (sub)classes constitute a cross-classification; in the case of Ekpeye verb suffixes, they are mutually reinforcing, and to some extent mutually dependent, as shown in the discussion below, especially section 5.6.

3. AN OUTLINE OF THE HIGHER GRAMMATICAL RANKS

At sentence rank, all units are referable to one structural type. On the basis of function in the sentence, four clause classes are set up, one of which is subdivided into two subclasses. Structurally, five clause types are established, each of which corresponds to a class or subclass. Three of the clause types are subdivided into three subtypes each on the basis of transitivity. A clause complex is also set up.

At phrase rank, three classes are recognised, labelled nominal, verbal and adverbial. In the nominal phrase class, five subclasses are set up, each corresponding to one of the five structural types. In the verbal phrase class, again five subclasses are set up, and again each corresponds to a separate structural type. In the adverbial phrase class, two subclasses are set up, but in this case, both correspond to a single structural type. A nominal phrase complex and an adverbial phrase complex are also established, in the former of which three structural types are recognised.

At word rank, four classes are set up, labelled the nominal, verbal, adverbial and particle classes; the particle class consists entirely of words functioning as syntactic markers. Within the nominal word class, nine subclasses are established, four being further subdivided. Two subclasses are further described in terms of one structural type. Of the nine subclasses, only one (the Noun) is of open membership. Within the verbal word class, three subclasses are established, one being further subdivided into three sub-subclasses, to each of which a separate structural type corresponds. This subclass (the Verb) is of open membership, while the other two are closed. Within the adverbial word class, three subclasses are established, all being further subdivided, and all of closed membership. Within the particle word class, eight subclasses are established, all of closed membership. None is further subdivided.

At stem rank, which is relevant only in the structure of the verbal word class, all stems are referable to one class and one type. A stem complex is also set up.

At morpheme rank, those morphemes which function in the structure of words of the nominal class are termed substantive. Three substantive classes are recognised, none being further subdivided. Two are of closed membership, and the third is the Noun root class. Those morphemes which function in the structure of words of the Verb subclass are termed predicative, and it is upon these that this article is focussed. Three predicative classes are recognised, labelled the Verb Prefix, Verb Root and Verb Suffix classes respectively. The Verb Root class is of open membership and is not further subdivided. The Prefix and Suffix classes are of closed membership, and are each subdivided into four subclasses. Further details as relevant are given in the following sections.

4. THE METHOD OF ORDERING

Of the four subclasses of Prefix, one constitutes (in notional terms) a personal pronoun set, one an infinitive marker, and one a participle³ marker. These are of no further concern in the present article. The fourth subclass is a closed set of five formal items, which are further subdivided into two sub-subclasses. The three formal items which are attested only in finite verb forms constitute one sub-subclass, and the two other formal items which may also occur in participial verb forms constitute the other. These items are listed and glossed below.

Sub-subclass (i)

ḡā- come

!V- go

Sub-subclass (ii)

ḡā- temporal, when

kā- not yet

kā- polite request, please

(The symbol V summarises a five-way vowel harmony system.)

In finite verb forms, up to two of these prefixes are attested to co-occur, and the known co-occurrences are shown in the following examples, where the items under consideration are underlined and marked off by hyphens from the rest of the word.

- | | |
|------------------------------------|--------------------------|
| 1. mā-kā-ḡā-jāññ | I wouldn't have come |
| I-not-yet-would-come-negative | |
| 2. w-ḡā-lā-kwáf | When he went and cried |
| he-when-went-cried | |
| 3. f-kā-ló-kpógàlányá | Please go and get for me |
| you-please-go-fetch-bring-for-self | |
| 4. kà-ḡā-wéj! | Please come and see |
| please-come-see | |

³ The word "participle" is used here simply as a convenient label. It does not imply that the words so labelled are similar in function to participles in English or any other language.

The technique used for ordering affixes is as taught in the British school (and perhaps others) of the Summer Institute of Linguistics.⁴

First, the prefixes are written across the top of a squared chart in the order in which they are identified, and then they are written down the side of the chart in the same order. Then a cross is put in the row of each prefix in the column of every prefix before which it occurs.⁵ When all the co-occurrences of the present examples are marked in this way, the chart is as shown below.

	ká-	ḡá-	lŭ-	kà-	ḡà-
ká-		x			
ḡá-			x		
lŭ-					
kà-			x		x
ḡà-					

Any prefix with no crosses in its column is never preceded by any other prefix, and is therefore allotted to order 1. A 1 is put at the head of its column, and its row is deleted. Any prefix now left with no cross in its column is allotted to order 2. A 2 is put at the head of its column, and its row in turn deleted. This procedure is repeated until every prefix is allotted to an order. With the present data, the following result is obtained.

Order 1

ká-
kà-

Order 2

ḡá-
ḡà-

Order 3

lŭ-

The above procedures must now be worked in reverse. Any prefix with no cross in its row never precedes any other prefix, and therefore belongs to the last numbered order; so a 3 is put at the end of its row, and its column is deleted. Any other prefixes now having no crosses in their rows are allotted to order 2. A 2 is put at the end of their rows and again their columns are deleted. The procedure is complete when all the prefixes are accounted for, and with the present data, the result is as follows.

Order 1

ká-

Order 2

ḡá-
kà-

Order 3

lŭ-
ḡà-

If the results of both operations of the chart are identical, there is no further problem. Where, as here, they differ, this reveals that some prefix(es) are of indeterminate order membership. Any decision to allot them to one rather than another of the possible orders, therefore, must depend on such other evidence as is available.

⁴ A similar technique may be found in printed form in Longacre's 'Grammar Discovery Procedures' pp. 107-114 (Mouton 1964). I understand that it was developed into the present form by Mr Frank Lister and Dr John Bender-Samuel.

⁵ For suffixes, put a cross in the row of each suffix, in the column of every suffix after which it occurs. The corresponding reversal of procedure must also be made at each stage in the ordering technique.

In the present case, *kâ-* and *ḡâ-* are of doubtful membership. *kâ-* is attested only before order 3, and therefore could belong either to order 2 or order 1. *ḡâ-* is attested only to follow *kâ-*, and therefore may belong either to order 2 or order 3 if *kâ-* belongs to order 1, but must belong to order 3 if *kâ-* belongs to order 2. *kâ-* is in fact placed in order 1 rather than order 2 because it shows a complementary distribution with *kâ-* in terms of the tenses with which they may occur. *ḡâ-* is placed in order 3 rather than order 2 because it has a semantically complementary relationship with *IV-*, and cannot be linked in any way with *ḡâ-*. This arrangement has the added advantage that it keeps the two members of sub-class (f) in the same order. It is clearly desirable that wherever possible, the results of classification by different criteria should be mutually reinforcing, and this principle will be seen also to influence decisions in the ordering of suffixes where the other evidence is indeterminate.

The final display of the prefixes in their orders, then, is as follows, with the horizontal and diagonal lines indicating the attested co-occurrence sequences.

Order 1	Order 2	Order 3
<i>kâ-</i>	<i>ḡâ-</i>	<i>IV-</i>
<i>kâ-</i>		<i>ḡâ-</i>

This may seem an unduly cumbersome means of handling a small amount of data which could easily be analysed on the back of an envelope, but as the following section will show, it is an invaluable tool where the data exceeds the grasp of the mind.

Before passing on it is worth remarking that in the use of the chart, a point may come when there is no column or row free of crosses. This may indicate that there is a mistake in the marking of the crosses on the chart, which is only too likely in handling large quantities of data. It may also be an indication, however, either that homophonous affixes have not been separated, or else that there is genuine variation in the co-occurrence sequence. In the analysis of the Ekpeye material, all three of these possibilities were encountered at different times.

5. THE VERBAL SUFFIXES

5.1. VERB STRUCTURE

The Verb Suffix class is defined as those morphemes which may function at any of the three Extension places in stem structure, or at any peripheral place in verb structure. A résumé of verb and stem structure is therefore necessary to set this definition in perspective.

As stated in section 3, three verb types are set up, which may conveniently be labelled finite, participial and infinitive. The three types are distinguished on the basis of their differing nuclear places, which are of no concern to the present study. The peripheral places are those which occur in more than one verb type, and whose occurrence, though not diagnostic of any type, shows restrictions which vary from type to type. There are eight peripheral places, and within these, three layers are recognised, labelled inner, medial and outer. The inner periphery consists of places 1, 2 and 3, the medial periphery

of places 4 and 5, and the outer periphery of places 6, 7 and 8. The maximum number of places within any layer is found only in the finite verb type. In the participial verb type, up to two inner peripheral places may occur, but no medial or outer ones. In the infinitive verb type, all three inner peripheral places may occur, but only one medial place, and only two outer places. These distributional features are summarised in the diagram below, in which the superscript numerals indicate the number of places within any one layer which may co-occur in each type.

	Inner	Medial	Outer
Finite type	x^2	x^2	x^3
Participial type	x^2		
Infinitive type	x^3	x^1	x^2

The reasons for distinguishing between the inner, medial and outer peripheral places will be discussed later (section 5.6). In verbs of the finite type, up to six of the eight peripheral places are attested to co-occur, and it seems probable that this is a statistical accident rather than a structural limitation. There is no known reason why longer forms should not occur, but as with the structure of any unit, length and frequency are in inverse proportion.

Stems function at one of the nuclear places in verb structure, and all stems are described in terms of one type. In this type, four places are recognised; an obligatory Core place is followed by up to three optional Extension places. The core place is manifested by the Verb Root class, and the extension places by one of the Suffix subclasses. Where two or (rarely) three stems in paratactic relationship to each other are together manifesting only one nuclear place in verb structure, a stem complex is set up. (In notional terms, this corresponds to a "compound verb".) In just a few examples, the first stem in such a complex contains an extension place, and it is these examples which are crucial to the establishment of stem rank. Without them, it would be possible to analyse all suffixes as functioning in the Verb at word rank, and to analyse a cluster of two or three roots as a morpheme complex.

5.2. VERB SUFFIX SUBCLASSES

Within the Verb Suffix class, four subclasses are set up on the basis of function at specific places among those listed as possible.

Subclass (a) is defined as those members of the suffix class which may function at one of the extension places in Stem structure. It consists of sixteen formal items, which are listed below without glosses. (The meanings of these and the other suffixes are discussed in section 5.5.) Tones are shown only where they prevent homophony. The upper case symbols I, E, A, I U and O represent vowel harmony systems which are not described in this article.⁶

Subclass (a) suffixes:

-bye, -dI, -dU, -ga, -jI, -lá, -lI, -má, -nU, -gwu, -pI, -pya, -pye, -sa, -fI, -yl.

⁶ See Clark (1971).

Subclass (b) is defined as those members of the suffix class which may function at one of the inner peripheral places in Verb structure. It consists of seventeen formal items which are listed below without glosses.

Subclass (b) suffixes:

-fɛtɛ, -dɪga, -do, -dye, -gbɛɛ, -kata, -ke, -kefi, -kpo, -kwa, -laga, -má, -ní, -ta, -te, -tU, -wɛ.

Subclass (c) is defined as those suffixes which may function at either of the medial peripheral places in Verb structure. It consists of ten formal items, which are listed below without glosses. Those items marked with an asterisk are identical in form with items occurring as free words as members of the subclass of Adverbs termed Marginals. It is possible that further data would reveal this link with the Marginals to be characteristic of all members of suffix subclass (c). For a discussion of the classificatory significance of this link, see section 5.6.

Subclass (c) suffixes:

-dɪ, -dihwu*, -gedɛ*, -gili, -gba, -gbo, -hwo*, -hwu, -hwutɔ*, -jɪ*.

Subclass (d) is defined as those suffixes which may function at one of the outer peripheral places in Verb structure. It consists of nineteen formal items, which are listed below without glosses.

Subclass (d) suffixes:

-a, -ɛ́ɛ́, -ɛ́ɛ́, -ɛ́ɛ́, -lâ, -lâ, -lê, -lê, -m, -mâ, -mâ, -mɛ, -nɛ, -ní, -O, -ya, -ye, -yo, -yɔni.

5.3. VERB SUFFIX TONE PATTERNS

On the basis of their tone patterns, the members of the suffix class can be divided into three groups. This division cuts right across both the division into subclasses and the division into orders. Since it is phonological rather than distributional in character, it is not taken into account in the grammatical classification, and its results are given the neutral label "group", which is not a technical term of the grammatical description.

In two of the three tonal groups, the tone carried by the suffix varies with the tense of the verb. In the third group, each member has a basic tone, which, with one minor exception unrelated to the tense, is invariable.

Group 1 has thirty-two members, five dissyllabic, and the rest monosyllabic. Each has an inherent high tone, which is realised as high on monosyllables and high high on dissyllables. Since the tense system is outside the scope of this study, details of the tense-conditioned changes in suffixes of groups 1 and 2 are omitted. The members of group 1 are listed below, with subclass membership added where necessary to distinguish homophonous suffixes.

Tone group 1 suffixes:

-bye, -ɛɛ, -dɪ (a), -dɪ (c), -dɪga, -dihwu, -do, -dU, -ga, -gedɛ, -gili, -gbo, -hwu, -jɪ (a), -jɪ (c), -ke, -kpo, -la (a), -laga, -lɪ, -ma (a), -ma (b), -ní (b), -nU, -ɲwu, -pyɛ, -fɪ, -ta, tU, -wɛ, -ya, -yi.

Group 2 has twelve members, four dissyllabic and eight monosyllabic. Each has an inherent low tone, which is realised as low on monosyllables and low low on dissyllables. The members are listed below.

Tone group 2 suffixes:

-bete, -dye, -gba, -gbede, -hwo, -kata, -kefi, -kwa, -pi, -pya, -sa, -te.

Group 3, the invariable group, has eighteen members, two dissyllabic and the rest monosyllabic. According to their tone, they are subdivided into four subgroups, as follows. (Order membership is added where necessary to avoid confusion.) Subgroup (i) consists of the two dissyllabic suffixes, with the tone pattern high low, namely -hwutɔ, -yɔni. Subgroup (ii) consists of two suffixes with a high tone, namely -bɛ, -lɛ. Subgroup (iii) consists of seven suffixes with a low tone, namely -a, -bɛ, -lɛ (order 18), -lɛ (order 21), -m, -mɛ (order 17), -nɪ (order 17). Subgroup (iv) consists of seven suffixes with a high-to-low falling tone, namely -lɛ, -ɔ, -mɛ (order 18), -mɛ, -nɛ, -yɔ, -yɔ. When two or more members of subgroup four follow each other within one word, all except the last will have a high tone instead of the high-to-low fall. This change takes place irrespective of the tense.

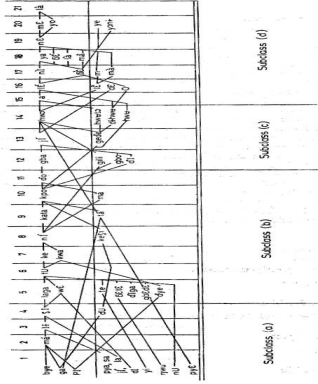
5.4 VERB SUFFIX CO-OCCURRENCE POTENTIAL

The Verb suffix class contains a (not necessarily exhaustive) total of sixty-two members, up to six of which are attested to co-occur (section 5.1). The range of possible combinations is therefore enormous, and in order to state the attested sequences of co-occurrence, twenty-one orders are set up. The division into orders is mutually supporting and mutually consistent with the division into subclasses presented in section 5.2. The orders are shown in the accompanying chart (p. 95).

In this chart, the orders are given ascending numbers outwards from the root. A single horizontal line cuts across each order, and those suffixes which are shown above this line are necessarily members of the order to which they are allotted. In every case, they are attested to occur both before suffixes shown above the line in the next higher numbered order, and after suffixes shown above the line in the next lower numbered order, as indicated by the linking lines. It is of course on the basis of such examples that the twenty-one orders are recognised.

Those suffixes which are shown below the horizontal line cannot be conclusively allotted to any one order on the available evidence. The limits of their possible order membership are shown by the linking lines to their left and/or right. Each suffix must belong to an order higher in number than that of the suffix to which it is linked on the left, and to an order lower in number than that of the suffix to which it is linked on the right. Wherever the data allows, suffixes below the horizontal line are linked to suffixes above the line. Sometimes, however, as with -hwutɔ and -dihwu of order 14, their range of possible membership is delimited more precisely by their collocation with other suffixes below the line (in this case, with -gede of order 13). In other cases, a link with other suffixes shown below the line represents the only available evidence.

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Within their limits of possible membership, the suffixes below the line are allotted to the order to which on the basis of subclass membership, or if relevant, semantics, they are deemed most likely to belong. Thus -m and -mà are allotted to order 17 rather than order 18 because like the necessary members of order 17, they are semantically related to the subject of their clause, whereas the members of order 18 are semantically related to the object of their clause. The vertical sequence in which the suffixes are arranged within an order is not grammatically significant. It was chosen simply to afford maximum convenience in drawing the linking lines.

The congruence of the two divisions into orders and subclasses is seen in the fact that all members of suffix subclass (a) fall into orders 1-4, all members of subclass (b) into orders 5-11, all members of subclass (c) into orders 12-14, and all members of subclass (d) into orders 15-21. Section 5.6. discusses the way in which evidence from each scheme of classification has been used to influence marginal decisions in the other scheme. This chart is of course subject to modification in the light of further evidence, and therefore does not purport to be a definitive statement on Ekpeye verb suffixes. However, it does present the mass of available data in a form which, though certainly complex, is both concise and consistent.

The examples on which the establishment of the orders is based are shown below in two groups. The first group (nos. 5-37) gives the co-occurrences of the suffixes shown above the horizontal line in the chart, and constitutes the evidence on which the orders are recognised. The second group (nos. 38-83) gives the evidence which delimits the range of possible order membership of the suffixes shown below the line. The remaining examples (nos. 84-86) give the few cases where suffixes occur in other than the regular sequence. All these examples are taken from uncited text material, and in each one, all suffixes are separated by hyphens and the crucial ones are underlined. The symbol á' represents a vowel with a high-to-mid falling tone. Mid (or downstep) is unmarked, and other tone marks are self-explanatory.

Group (i)

5. Order 1 before Order 2
 ɔwà-byè-mà-mà-hwà-à
 he-split-sever-off-completely-at-last-her
 Finally he chopped her (head) right off
6. Order 1 before Order 3
 ɔlɪ-gá-má-hwut-à
 she-drew-out-when-for-him
 When she drew out (the nail) for him
7. Order 1 before Order 2, and Order 2 before Order 3
 ɔgba-pì-má-lí-ɔ
 it-squeezed-out-itself-past
 It was squeezed out
8. Order 3 before Order 4
 ɔ́gbe-lí-í-è-là
 it-darkened-itself-on-him
 He was benighted.

- | | | |
|-----|--|---|
| 9. | Order 4 before Order 5
<u>uz3-fi-làgà-mà-yà</u>
she-is-beautiful-passing-completely-self | (That) she attracted him very much |
| 10. | Order 4 before Order 5
<u>uḅábú15-fi-wé-3-ḅè</u>
they-when-carry-go-out-past-group | When they carried (him) out |
| 11. | Order 5 before Order 6
<u>fgá-làgá-tu</u>
you-pass-by | You may pass by |
| 12. | Order 5 before Order 6
<u>ḅu yá' lé-mé-wé-tu-géḁé</u>
that self go-do-with-first | That he would go at once and use (it) |
| 13. | Order 6 before Order 7
<u>uɣ3-tu-ké-kpó</u>
he-dressed-up-finish | He dressed right up |
| 14. | Order 6 before Order 7
<u>uci-mà-tu-kwà-kpó</u>
he-cut-off-thoroughly-finish | He thoroughly cleared (the bush) |
| 15. | Order 7 before Order 8
<u>uci-kwà-nf-kpó-yá</u>
he-cleared-thoroughly-for-finish-self | He completely finished the clearing for me |
| 16. | Order 7 before Order 8
<u>è-mé-ké-ni-jí-lè-yá-nè</u>
he-make-completely-for-also-have-self | He has also thoroughly prepared for me |
| 17. | Order 8 before Order 9
<u>mógóyá-nf-kàtá-ḅé</u>
I-buy-bring-for-as-well-them | (That) I should buy and bring back for them as well |
| 18. | Order 9 before Order 10
<u>uḥw3-kàtá-kpó</u>
he-ground-as-well-finish | He ground (them) up with the rest |
| 19. | Order 10 before Order 11
<u>uz3-kpó-ḁó-o</u>
it-be-beautiful-finish-could-negative | It couldn't be very beautiful |
| 20. | Order 11 before Order 12
<u>àzé-ḁó-gbà-á</u>
I-go-could-again-not | I shall not be able to go again |
| 21. | Order 12 before Order 13
<u>mógó-nù-gbà-jí-nè</u>
I-took-again-also | I took again next |

22. Order 13 before Order 14
 átkp5-du-jí-hw3-lé-né
 he-become-thin-also-at-last-have
 In the end, he had also become very thin
23. Order 14 before Order 15
 uwá-byè-mà-mà-hw3-á
 he-split-sever-off-completely-at-last-her
 Finally he chopped her (head) right off
24. Order 15 before Order 16
 údú-fi-à-lé
 it-reached-her-when
 When it reached her turn
25. Order 16 before Order 17
 íl3-lé-ní
 you-go-out-if-group
 If you people go out
26. Order 16 before Order 17, and Order 17 before Order 18
 úmé-lé-5é-yá
 he-do-if-group-self
 If they do (it) to me
27. Order 17 before Order 18
 íné-ní-yá
 you-gave-group-self
 You people gave me
28. Order 17 before Order 18
 uhwu-5é-5é
 they-pay-group-them
 They pay them
29. Order 17 before Order 18
 é5é-ní-kpó-lé-5é-má
 she-hate-to-finish-have-group-her
 They have hatched a plot against her
30. Order 17 before Order 18, and Order 18 before Order 19
 uhw3-kpó-5é-là-né
 he-bale-not-finish-group-it-even
 They won't even finish baling it
31. Order 18 before Order 19
 umá-fi-é-yá-né
 it-appeal-not-to-self-even
 (That) it didn't appeal to him at all
32. Order 18 before Order 19
 máká-ní-jí-5é-né
 I-said-to-also-them
 I told them next
33. Order 18 before Order 19
 émé-jí-lé-má-né
 it-do-also-have-him
 It has also happened to him
34. Order 19 before Order 20
 úlówúwé-jí-ní-jí-lé-né-mé
 he-went-search-look-for-also-me
 He then went and searched on my behalf

35. Order 19 before Order 20
 ɪŋwe ɡwu- ʝi-né-yɔ̃
 hunger seized-also-you
 Did you get hungry?
36. Order 20 before Order 21
 né-m-là
 give-me-then
 Give me (some) then
37. Order 20 before Order 21
 bú yá' ɡbù-mà-dò-hwɔ̃-è-là
 that self kill-finish-can-at-last-you-then
 That I can kill you off at last then
- Group (ii)
38. -pya (Order 1) before Order 3
 úgba-pyà-lf-kpó
 it-split-small-itself-finish
 It was broken up into tiny bits
39. -sà (Order 1) before Order 3
 úwo-sà-lf-ɔ̃
 it-spill-overturn-itself-past
 It was all upset and spilt
40. -ʝl (Order 1) before Order 4
 ulɔ̃-ʝl-lf-è-ʃé
 he-went-out-to-them
 He went out to them
41. -la (Order 1) before Order 4
 údɔ̃ká-là-ʝl-è
 he-told-spoke-out
 He related (the story)
42. -dɪ (Order 1) before Order 5
 ùlù-dɪ-wè-à-ʃé
 he-use-it-group
 They make use of it
43. -yl (Order 1) before -te (Order 5) before Order 6
 úkpò-yl-tè-tù
 he-filled-right-up
 He filled right up
44. -ɔ̃wu (Order 1) before -ʃetɛ (Order 5)
 úsú-ɔ̃wú-ʃètɛ-hwútɔ̃
 he-stuck-upright-down-when
 When he stuck (the paddle) upright in the ground
45. -nU (Order 1) before Order 6
 ɡò-nú-tù-hwɔ̃
 take-at-last
 Take at last
46. -pye (Order 1) before Order 14
 úze-pyé-hwɔ̃
 he-went-to-see-at-last
 He finally went to see

47. -dU (Order 4) following Order 1
 údá-gà-dú-mà-gbà
 he-fell-inside-completely-again
 He fell right back in again
48. -dU (Order 4) before -kefi (Order 8)
 úkpu-dú-kèfi
 he-went-in-with
 He entered with (them)
49. -bete (Order 5) before Order 6
 úwu-bètè-tu
 he-poured-down
 He poured down
50. -dIga (Order 5) before Order 6
 bú yá' lówú-dígá-tú
 that self go-search-around
 That he would go and search round
51. -gbede (Order 5) before Order 6
 úlótú-gbèdè-tu-kpò
 he-went-gathered-together-finish
 He went and laid (a fire)
52. -dye (Order 5) after Order 1 and before Order 7
 úcitè-pi-dyè-kwà
 she-locked-turned-thoroughly
 She locked (it) fast
53. -kefi (Order 8) before Order 10
 úwa-kèfi-kpò-à-bè
 he-chopped-with-finish-him-group
 They helped him finish chopping
54. -ta (Order 9) after Order 1
 ukpà-gà-tà-bè
 he-went-about-together-group
 They were inseparable
55. -ta (Order 9) before Order 10
 ùlù-tà-kpò-bè
 he-threw-together-finish-group
 They both finished throwing
56. -ma (Order 10) after Order 8
 égbú-ni-má-yà
 you-not-kill-for-finish-self
 Don't kill (the child) for me
57. -ma (Order 10) before Order 11
 úbì-tú-má-dó-hwútò
 he-took-completely-could-when
 When he was able to finish taking (food)
58. -gill (Order 12) after Order 8
 ukà-ni-gill-à-bè
 he-said-to-often-him-group
 They kept telling him
59. -gill (Order 12) before Order 14
 ùwú-dígá-gill-hwò
 he-looked-round-often-at-last
 He eventually searched and searched

60. -gbo (Order 12) after Order 8
 úgwa-lí-n í-gbò-hwò-là
 it-remained-to-only-at-last-her
 In the end she only had (one) left
61. -gbo (Order 12) before Order 13
 umu-gbò-jí-n è
 she-bore-only-even
 She in turn bore only (one)
62. -dí (Order 12) after Order 10
 ùgò-nù-kpò-dí
 he-take-finish-continuous
 He was finishing taking
63. -dí (Order 12) before Order 13
 ugi-ní-dí-jí-à-n è
 it-was-to-continuous-also-him
 He usually had (six)
64. -gede (Order 13) after Order 10
 ùmè-kè-ní-kpò-gèdè-à
 he-made-completely-for-finish-first-her
 At first, he prepared thoroughly for her
65. -gede (Order 13) before Order 14
 íhwúdá-wé-gédé-hwò-là
 you-eat-suck-with-first-then
 Just eat some with (this spoon) then
66. -hwutò (Order 14) after -gede (Order 13)
 úkpú-dú-gédé-hwútò
 he-entered-first-when
 When he first entered
67. -hwutò (Order 14) before Order 15
 úlí-gá-má-hwútò-à
 she-drew-out-when-for-him
 When she drew out (the nail) for him
68. -díhwu (Order 14) after -gede (Order 13)
 òhwú-gédé-díhwú
 he-will-call-first-likewise
 In the same way, he will first call
69. -díhwu (Order 14) before Order 16
 bú yá' té-kpò-díhwú-lé
 that self dance-finish-likewise-when
 That when she finished dancing in that way
70. -hwu (Order 14) after Order 10
 údí-kpò-hwú
 he-eat-finish-somehow
 He should somehow eat up
71. -hwu (Order 14) before Order 16
 á kpú úká-dí-tú-hwú-lé-è
 that how he-speak-somehow-group
 That is roughly how they talk
72. -lè (Order 16) after Order 14
 bú yá' wé-jí-hwò-lè-mà
 that self seen-at-last-had
 That he had seen at last

73. -lɛ̃ (Order 16) before Order 17
 ɛ̃sɛ̃-ni-kpɔ̃-lɛ̃-ɛ̃-mā
 she-hate-to-finish-have-group-her
 They have hatched a plot against her
74. -dɛ̃ (Order 16) after Order 13
 usá-jí-ɛ̃-dɛ̃-nɛ̃
 it-was-ripe-not-even-after-all
 (The -ɛ̃- in this example is an additional vowel, not a Suffix. See section 5.6.)
 It wasn't even ripe after all
75. -dɛ̃ (Order 16) before Order 17
 uɛ̃t-jí-ɛ̃-dɛ̃-ɛ̃t
 he-threw-not-again-group
 They didn't get another throw
76. -O (Order 16) after -dɛ̃hwɛ̃ (Order 14)
 úkwo-má-dɛ̃hwɛ̃-ɔ̃
 she-dried-likewise-past
 She dried (it) in the same way
77. -O (Order 16) before Order 17
 úbádú-m-ɔ̃-ɛ̃t
 he-when-reached-past-group
 When they reached
78. -m (Order 17) after -lɛ̃ (Order 16)
 méwɛ̃-jí-gíll-lɛ̃-rh
 I-see-often-have
 I have often seen
79. -má (Order 17) after -lɛ̃ (Order 16)
 ɛ̃ú yá' wɛ̃-jí-hwɔ̃-lɛ̃-má
 that self seen-at-last-had
 That he had seen at last
80. -m (Order 17) before Order 19
 mógbú-jí-ɛ̃-rh-nɛ̃-ɛ̃
 I-killed-not-even-negative
 I didn't even catch any (fish)
81. -má (Order 17) before Order 19
 ɛ̃ú yá' wú-dígá-dɛ̃hwɛ̃-ɔ̃-má-nɛ̃
 that self wanted-likewise-not-even
 That he didn't even want
82. -ye (Order 20) after Order 17
 áwánà-tú-ɛ̃t-yɛ̃
 he-seize-remove-group-us
 They will snatch (it) away from us
83. -yɔ̃nɛ̃ (Order 20) after Order 17
 ákpà-jí-lɛ̃-ɛ̃t-yɔ̃nɛ̃
 he-receive-have-group-you-people
 They have treated you people well
- Group (iii)
84. -nɛ̃ (Order 8) before -ke (Order 7)
 íkàkò-pyá-nɛ̃-ké-gbá-nɛ̃
 you-please-beat-small-for-well-again-group
 Please break (it) well up for (me) again

- ma — Often means "off" or "out". It is homophonous with -ma of order 10, but is attested to co-occur with it, as in example 5.

Order 3

Order 3 is not attested to co-occur with orders 5 or 6.

- lɪ — Reflexive. The ɪ vowel harmony system is unique to this morpheme.

Order 4

- ɟɪ — No convenient gloss; this suffix is usually found in transitive verbs, and may imply transitivity. Very common.
- ɟU — Inside.

5.5.2 ORDERS 5-11

Orders 5-11 correspond with subclass (b).

Order 5

The members of this order mostly have meanings connected with the idea of motion; they do not co-occur with orders 2 or 3.

- laga — Direction past.
- we — With (instrumental).
- te — No convenient gloss.
- ɟete — Down.
- ɟɪga — Around
- ɟbede — Together, into one place.
- ɟye — With a circular motion.

Order 6

Order 6 is not attested to co-occur with order 3.

- tU — No convenient gloss. Very common.

Order 7

- ke — With effort, well.
- kwa — Thoroughly.

Order 8

- nɪ — To, for. This suffix implies ditransitivity, and is very common.
- keɟɪ — With (accompaniment). There is an alternative form -keɟi.

Order 9

- kata — In addition to something already there.
- ta — In company with, mutually.

Order 10

- kpo — Finish, completed action. Very common.
- ma — Completely. There is an alternative form -cama, which belongs to tone group 2. Otherwise this suffix is homophonous with -ma of order 2, but is attested to co-occur with it, as in example 5.

Order 11

- do — To be able. This suffix is much more common with those tenses which are semantically negative.

5.5.3. ORDERS 12-14

Orders 12-14 correspond with subclass (c). Many members of this group have some semantic connection, albeit tenuous, with time.

Order 12

- gba — Again, more.
 -gill — Often, frequently.
 -gbo — Only, only once.
 -dI — Continuous action. This suffix occasionally has the reduplicated form -dIdI. It is otherwise homophonous with -dI of order 1.

Order 13

- jI — Also, again. This suffix very often co-occurs with -ne of order 19, with the combined meaning of "in turn" or "in contrast, on the other hand". It is homophonous with -jI of order 1, but is attested to co-occur with it, as in example 34.
 -gede — First, at first.

Order 14

- hwo — At last, finally.
 -hwuto — When, whenever, only, just. Very common.
 -dihwu — Likewise, in the same way.
 -hwu — Somehow.

5.5.4. ORDERS 15-21

Orders 15-21 correspond with subclass (d). They are mainly inflectional in meaning, and their members are often linked with the categories of person or tense. Orders 15, 18 and 20 are mutually exclusive; the members of all three orders denote clause objects. In clauses with more than one object, only one may be manifested by an object suffix.

Order 15

- a — Referent⁷ person object, him, her, it. This suffix occurs only with certain tenses, and never causes elision of the preceding vowel.

Order 16

The members of this order are all distributionally linked with particular tenses, though in no case are they a diagnostic feature of any tense.

⁷ See footnote 8 on Order 17.

- lé — If, when.
- lê — Perfect, have.
- de — After all, contrary to expectation. This suffix occurs only with the semantically negative tenses, but does not carry the negation.
- o — Past time. This suffix causes the elision of the preceding vowel and the tone it bears, unless that vowel is close (i, i, u or u).

Order 17

The members of this order are all distributionally linked with one of the four terms in the person system⁸ and thus with the subject of the clause.

- nI — Co-occurs only with the Speaker's Group (SG) and Hearer (H) terms in the person system. In semantic terms, this suffix makes first person plural exclusive into inclusive, or second person singular into plural. As an abstraction from this, it may be said to mark the group of which the hearer is a member as subject.
- ê — Co-occurs only with the Referent (R) term in the person system. In semantic terms, this suffix makes third person singular into plural.
- m — Occurs obligatorily with the Speaker (Sp) term in the person system in certain tenses.
- mâ — Occurs obligatorily with the R term in the person system in certain tenses when the subject is the reflexive pronoun.

Order 18

- ya — Reflexive object, self. This suffix is used only in indirect speech.
- ê — R person group object, them.
- lâ — R person object, him, her, it. This suffix occurs only with certain tenses, but is not completely in mutually exclusive distribution with -a (order 15) with respect to tense.
- mâ — R person object, him, her, it. This suffix occurs with only one tense, and in this respect is in mutually exclusive distribution with both the preceding item -lâ and -a (order 15).

Order 19

- nê — Even. This suffix very often occurs with -I of order 13, with the combined meaning of "in turn" or "in contrast, on the other hand".

Order 20

- me — Sp person object, me. This suffix occasionally has an alternative form -m, as in no. 36.
- yo — H person object, you. This suffix may optionally coalesce with a preceding suffix. The attested forms are shown below in examples 87-92.
- ye — SG person object, us.
- yont — H person group object, you people.

⁸ In this system, the four terms are labelled Speaker, Hearer, Referent and Speaker's Group, and correspond notionally to the first, second and third persons singular and the first person plural respectively of European languages; the category of number is not relevant formally anywhere in Ekpeye grammar.

allotted to an order not higher than 4. To allot it to, say, order 5 would involve the projection of the typical subclass (*a*) function to the seven members of that order; for this there is no evidence. With the exception of -nU and -pye, all the other members of orders 1 to 4 are attested to precede order 5, so that the projection of the subclass (*a*) function to them is not unreasonable. With -nU and -pye, further data might well necessitate an alteration in their subclass and/or order membership. -dU is allotted to order 4 rather than orders 3 or 2 on the admittedly tenuous ground of its semantically complementary relationship with -fI, noted in section 5.5.1. There is nothing to suggest that any link exists with the members of orders 2 or 3 (or with those of orders 5, 6 or 7).

Within subclass (*a*), it may be asked why all the suffixes except -dU which are indeterminate in order membership are allotted to order 1. There is indeed no very strong reason, and further data might well necessitate changes. In the absence of conclusive distributional evidence, the very close semantic link which all these suffixes have with the preceding root has been taken as the balancing factor. This is so even in the case of -pye, which could be a member of any order up to 13. Perhaps the influence of Sprachgefühl must be confessed at this point!

So much then for the division between subclasses (*a*) and (*b*). Subclass (*b*) is defined in section 5.2. as those items which may function at one of the inner peripheral places in Verb structure. The distinction between the inner and medial peripheries in Verb structure, and therefore also the distinction between suffix subclasses (*b*) and (*c*) is that the former may occur in the participial verb type, whereas the latter may not. In terms of orders, this break must come between orders 11 and 12; -dO, the sole member of order 11, is attested to occur in a participial form, and -gba, the sole necessary member of order 12, is attested not to be capable of occurrence in a participial form.⁹ The membership of subclass (*b*) therefore corresponds to the membership of orders 5-11. Within this range, most of the suffixes are attested in participial forms, but for seven (-fete, -gbede, -dye, -we, -ke, -kefi and -kata) there is no evidence, since they do not happen to have occurred in finite forms which are followed by participles. But as these seven are all members of orders not higher in number than 9, the projection of the characteristic subclass (*b*) function to them seems very reasonable.

Within subclass (*b*), there are again a number of suffixes which are indeterminate in membership, and whose allocation to the particular orders where they are shown on the chart should be justified as far as possible. The five optional members of order 5 must all belong to an order lower than 6, and all except -dIga must belong to an order higher than 1. As has already been hinted, their placement in order 5 limits the projection of the diagnostic subclass (*a*) function; furthermore, the resultant group is fairly homogeneous semantically, with a general reference to direction. In order 8, -kefi shows a high proportion of occurrences in ditransitive clauses, and though unlike -nI it does not imply ditransitivity, the link is taken to be sufficiently strong to warrant common order membership. In order 9, -ta shares a similarity of both form and meaning with the obligatory member,

⁹ Participles always follow a finite form of the same lexical item, repeating its suffixes up to Order 11. Thus it is possible to speak of the attested non-occurrence in participles of suffixes of orders higher than 11.

-kata, and this was allowed to be decisive. Similarly in order 10, -má is closely akin semantically with -kpo, whereas it has nothing in common with order 9, the only other order to which it might be allotted.

Within subclass (c) there remains some indeterminacy. The three optional members of orders 12 (-gll), -gbo and -dI could on the available evidence all belong to lower numbered orders, and therefore to subclass (b). -dI is allotted to order 12 rather than order 11 because it is attested not to occur in participial verb forms, but with -gll and -gbo there is no evidence in this respect. They are allotted to order 12 rather than to a lower order partly to avoid projecting to them the subclass (b) function in participles, and partly because they are semantically more compatible with order 12 than with orders 9, 10 or 11; all the members of order 12 as at present constituted bear some kind of semantic reference to time. -gede of order 13 and -hwu of order 14 could also belong to order 11 on the available distributional evidence. Evidence is lacking as to their occurrence in participles, but since -gede shares what may tentatively be called a typical feature of subclass (c), namely occurrence as a free word as a member of the Marginal subclass of Adverbs (section 5.2.), it seems reasonable to allot it to order 13. This also has the effect of limiting the membership of -hwu to order 14. -hwu is not attested as a free word and indeed is very rare as a suffix. It is allotted to order 14 on no stronger ground than that it has some similarity of form with the other members of that order. With the exception of -hwu, all the members of orders 13 and 14 are attested as free words. Since this function is not on present evidence attested for the members of order 12, it might be better to use it as a basis for the establishment of sub-subclasses within subclass (c) than to project it as a feature of the whole subclass.

The division between the medial and outer peripheries in Verb structure, and therefore between subclasses (c) and (d) cannot be made on such clearly functional grounds as the divisions between subclasses (a) and (b), and (b) and (c). On semantic grounds, a division is desirable between orders 14 and 15, because the members of orders 15-21 are, with the exception of -ne of order 19, all inflectional in meaning. On structural grounds, there are two lines of support for a break at this point, though neither is overwhelming in itself. The first is that it is only members of orders 13 and 14 which are known to occur as free words;¹⁰ this suggests that a break after order 14 might be appropriate. The second lies in the placement of a so-called Additional Vowel characteristic of certain tenses. This is attested both to precede -de of order 16 (examples 74 and 75) and to follow -dihwu (example 81). On the basis of its tense-linked distribution (section 5.5.4.) -de is fairly confidently allotted to order 16, so that any division made on the basis of the occurrence of the Additional Vowel depends on the order membership of -dihwu. Distributionally, -dihwu must precede order 16, and follow gede. When gede is accepted as a member of order 13, as argued in the previous paragraph, -dihwu can belong only to orders 14 or 15. It has nothing in common with order 15, but has both occurrence as a free word and a certain similarity of form in common with the other members of order 14. It seems therefore that -dihwu is most appropriately allotted to order 14, and that any break made

¹⁰ Except for the more distant members of orders 19 and 21. See further discussion below.

on the basis of the occurrence of the Additional Vowel should come between orders 14 and 15. Cumulatively, these various arguments seem adequate support for the present division between the medial and outer peripheries in Verb structure.

The grounds for the allocation of distributionally-indeterminate suffixes of subclass (d) are somewhat stronger. The optional members of order 16 are all where they are because of their tense-linked distribution, and those of order 17 because of their person-linked distribution. In order 20, -ye and -yɔni share with the obligatory members -mɛ and -yɔ the semantic role of objects. They also share this with the members of order 18, but since all those items are connected with the R person, it seemed better to unite the Sp, SG and H person objects in order 20.

Within subclass (d), it would be possible to set up sub-subclasses on various grounds, but any such sub-subclasses would be sequentially discontinuous in that they would not consist of members of adjacent orders, and their establishment would be more complicated than useful. The criteria on which they could be based would include upward rank-shifted function, and occurrence as free words. If upward rank-shifted function were taken as the basis for further subdivision, the members of orders 15, 18 and 20 would constitute one sub-subclass, as manifesting an object place in clause structure, -lé of order 16 would constitute a second sub-subclass, as functioning as a syntactic marker of the clause, and the remaining suffixes would constitute a third sub-subclass, as having no upward rank-shifted function. If occurrence as a free word were taken as the basis for further subdivision, then the members of orders 19 and 21 would constitute one sub-subclass, and all the remaining suffixes a second sub-subclass. Again, if greater weight were attached to the feature of occurrence as free words, then -nɛ of order 19, which is semantically incongruous in subclass (d), and -la of order 21, which is less so, could be made members of subclass (c). This arrangement would again have the disadvantage of yielding subclasses which were not composed of members of adjacent orders. Since these various criteria are not mutually reinforcing, no further division is in fact undertaken. Where such relatively insignificant factors have to be balanced against each other, the point has been reached in the cline of delicacy where decisions are becoming arbitrary, and depend as much on the predilections of the analyst as on the evidence of the data.

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