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## A QUESTION IN OROMO MORPHOPHONOLOGY

### INTRODUCTION

The purpose of this paper is to consider a set of morphophonemic phenomena which occur regularly in Oromo verb stems of certain definable types. The phenomena have been noted by most previous writers and have been given an interpretation which, one presumes, has been generally accepted insofar as no alternative has, to the writer's knowledge, been proposed. Here, however, an alternative and, it is believed, more plausible interpretation of the facts is advanced.

### I

In at least two grammars of Oromo<sup>1</sup> the shapes of the so-called causative and double causative stem extension suffixes<sup>2</sup> are given as -s and -s-is respectively. Eg. M. *čab-s-* 'break', H. & W. *bō-s-is-* 'cause to mourn'. Moreover, both grammars refer to 'triple' or

<sup>1</sup> Moreno (1939), p. 91; Hodson and Walker, p. 64. Moreno's grammar is based on the Tulāmā (Showa) dialect. In many respects the language described by Hodson and Walker seems to be not too dissimilar, although the authors nowhere state their commitment to any one particular dialect, which may mean that the treatment attempts to be multidialectal. In this paper any forms cited from these grammars will be preceded by the initial letters of the author's name. Forms not so marked were collected during my own field research near Batie (Wollo Province). The transcription used here corresponds with that employed by Moreno in his grammar, with the exception that the voiced palato-alveolar affricate [dʒ] is represented by j rather than ġ. Accent marks are omitted except in cited forms.

<sup>2</sup> Ie. derivational suffix or stirpes.

'treble' causatives<sup>3</sup>. An examination of the verbs recorded suggests that the terms causative, double causative etc. are labels relating to the number of distinct *s* elements present (or presumed to be present) in a form rather than to syntactically or semantically defined categories of verbs. Neither grammar attempts to state any rules for relating the number of *s* elements found in a form to any particular syntactic properties of the form. In the following discussion the three forms will simply be referred to as IS, IIS and IIIS forms. Similarly the three suffixes, both simple and composite (morphologically complex) will be referred to as IS, IIS and IIIS suffixes. The various *s* elements will be distinguished from left to right as *s*<sup>1</sup>, *s*<sup>2</sup> (and *s*<sup>3</sup>).

Whenever IS, IIS or IIIS suffixes occur with certain simple verb stems<sup>4</sup> coalescence appears to take place, affecting *s*<sup>1</sup> and the outermost consonant of the simple stem. Thus:

- |                |                |                 |                  |
|----------------|----------------|-----------------|------------------|
| 1. <i>bīt-</i> | buy,           | <i>bīčīsīs-</i> | cause to buy     |
| 2. <i>fīt-</i> | finish,        | <i>fīčīsīs-</i> | cause to finish  |
| 3. <i>wād-</i> | fry,           | <i>wāčīsīs-</i> | cause to fry     |
| 4. <i>ñād-</i> | eat,           | <i>ñāčīs-</i>   | feed             |
| 5. <i>fig</i>  | run,           | <i>fīgs-</i>    | cause to run     |
| 6. <i>ḏīb-</i> | be worried,    | <i>ḏībīsīs-</i> | trouble, oppress |
| 7. <i>ḏām-</i> | go out (fire), | <i>ḏāms-</i>    | extinguish       |

Comparison of the pairs of verb stems in 1—4 with those in 5—7 shows that this coalescence takes place when the simple stem terminates in a coronal stop (*t*, *t*, *d*, *ḏ*). In the second set of examples the same phenomenon occurs, and in a phonologically identical environment. In this case, however, the stem-final element is itself a stem extension, an *-aḏ* or a *-saḏ* suffix. There are three alternants of both these suffixes, having a final *ḏ* (with 1Sg subject marker and with Sg and Pl imperatives), a final *n* (with 1Pl subject marker) and a *t* (with all other subject markers). The following verb forms are listed with the alternant appropriate for 1Sg etc.

<sup>3</sup> Moreno, p. 94; Hodson and Walker, p. 154

<sup>4</sup> In simple verb stems the stem is co-extensive with the root.

- |                                  |                     |                   |                                                |
|----------------------------------|---------------------|-------------------|------------------------------------------------|
| 8. <i>ḏamoḏ-</i>                 | become cold,        | <i>ḏamočīs-</i>   | cause to become cold                           |
| 9. <i>salfad-</i>                | feel ashamed,       | <i>salfāčīs-</i>  | shame                                          |
| 10. <i>miyefad-</i> <sup>5</sup> | sweeten for oneself | <i>miyefačīs-</i> | cause someone to sweeten something for oneself |

In the dialect described by Moreno there is a phenomenon directly comparable to that already described, although perhaps it could not be called a coalescence, since, from the point of view of the number of segments involved, there is no reduction.

- |                |             |                             |                             |
|----------------|-------------|-----------------------------|-----------------------------|
| M. <i>gat-</i> | throw away, | <i>gāččīs-</i>              | cause someone to throw away |
| <i>fiṭ-</i>    | finish,     | <i>fiččīs-</i> <sup>6</sup> | cause someone to finish     |
| <i>barbād-</i> | seek, want, | <i>barbāččīs-</i>           | cause to seek, need         |

The occurrence of the above-mentioned phenomena is almost entirely predictable. The only exceptions are certain verbs with a final *ḏ*, such as *mīḏ-* 'hurt, injure, oppress' and *goḏ-* 'do'. In IS and IIS forms derived from these verbs there is total elision of the *ḏ*. Thus we find *mīsīs-* 'cause to hurt etc.' and *gosīs-* 'cause

<sup>5</sup> In forms such as *miyefad-* the *f* has resulted from the (synchronic) of an underlying *s*. This point was appreciated by Moreno (p. 96) but missed by Hodson and Walker, who suspect *-faḏ* of being an obsolete verb (p. 40). Oromo *-faḏ* is therefore analogous, if not cognate, with 'Afar *-sit* (and *-sut*). Such suffixes are found in forms such as *nakka-sit-* 'drink milk for oneself' and *muddu-sut-* 'pierce for oneself'. These forms are more fully discussed in my forthcoming article "'Middle voice' verb forms in Eastern Cushitic".

<sup>6</sup> In this and comparable forms deriving from a simple stem with final *t*, Moreno always records *č*, rather than *č̣*. H. & W. usually have *č̣*; and this is what I hear. It is relevant to note that the native Oromo grammarian Ato Haile Fida in his *Hirmaatatadubbii Afaan Oromoo*, spells such forms with *č̣č̣*.

<sup>7</sup> These verbs have a root-final *ḏ* ~ *n* ~ *t* alternation with a distribution identical to that found in *-aḏ* and *-saḏ* extended stem verbs.

to do', but not \**ñāsīs*- (< *ñād*- 'eat'). Perhaps this may be explained in terms of an analogical development whereby some verbs with final *ḍ* have come to be treated like de-adjectival -*aḍ* suffix verbs such as *jabaḍ*- 'become strong, hard' (cf. *jaba* 'strong'), *ulfaḍ*- 'become heavy or respected etc.'. Such verbs have IS forms in which there is no *ḍ*. Or perhaps it is better to say that the transitive (IS) counterparts of the intransitive (-*aḍ* suffix) verbs are formed directly and independently from the adjectival root. So that we find *jabēs*- 'strengthen' alongside *jabaḍ*- and *ulfēs*- 'respect' alongside *ulfaḍ*- etc. Hodson and Walker (p. 47) have pointed out a similar analogical recategorization in the case of the so-called infinitive.

The question is, how does one account for the phenomenon? Moreno states his interpretation very clearly: 'Nei temi terminanti in *t*, *ḍ* e *ḍ* (che non hanno causativo semplice) il doppio causativo termina in -*ččīs-u* da \**tsīs-u*, *ṭsīs-u*, *ḍsīs-u*, *ḍsīs-u*' (p. 93). For the Batie dialect and that described by Hodson and Walker a rule such as A would account for the facts along a line of interpretation similar to that of Moreno.

A.

$$\left[ \begin{array}{c} t \\ d \\ d \\ t \end{array} \right] + s \rightarrow \left[ \begin{array}{c} \text{č} \\ \text{č} \end{array} \right]$$

This means that one regards a verb stem such as *gačīs*- (M. *gáččīs*-) 'cause to throw away' as having a IIS suffix, and a verb stem such as *fīčīsīs*- 'cause to bring' as having a IIIS suffix.

The following objections to this interpretation must be considered:

- (a) There appears to be no natural phonetic motivation for such rules. Such phenomena may rightly be termed instances of palatalization. But *s* does not belong to the class of sounds usually associated with palatalization.
- (b) Such an account would violate the distribution pattern of IS and IIS suffixes. Above it was pointed out that earlier grammars had not attempted to correlate the number of *s* elements found in a form with its syntactic properties. There

is, however, a fairly regular pattern<sup>8</sup> and a brief account of this is relevant to the present discussion.

From the point of view of causative formation simple stem verbs fall into three types:

*Type 1*: Those that function as predicator in a clause, the nucleus of which contains only one noun phrase, which has a non-agentive<sup>9</sup> head noun. Eg. *ḍām*- 'go out (of a fire or light)'.

*Type 2*: Those that function as predicator in a clause, the nucleus of which contains only one noun phrase, which has an agentive head noun. Eg. *adēm*- 'go'.

*Type 3*: Those that function as predicator in a clause, the nucleus of which contains two noun phrases which have agentive and non-agentive head nouns respectively. Eg. *ban*- 'open'. The agentive noun phrase is necessarily interpreted, and marked morphologically, as subject of the clause. (In Types 1 and 2 there is, of course, no choice in the matter).

The structure of the three types may be represented as follows:

- |          |          |              |
|----------|----------|--------------|
| 1. N + V | 2. N + V | 3. N + N + V |
| [—Ag]    | [+Ag]    | [+Ag] [—Ag]  |

All three clause types may undergo a causative transformation. This may be described as an operation in the deep structure of the grammar which embeds the clause as a goal of a superordinate clause proposition containing an agentive noun phrase head and an abstract element 'cause' as its predicator (Fig. 1). In the case of Type 1 clauses a second cycle causative transformation may

<sup>8</sup> This pattern first came to my attention when investigating causative verbs of the Suffix conjugation of 'Afar. It appears to hold very well for Oromo. Such exceptions as there are seem to occur in the first cycle causativized forms of verbs of Type 1. Eg. Hodson and Walker *ḍulōmsīs*- 'cause to grow' (< *ḍulōm*- 'grow old'), *damaqsīs*- 'cause to wake up from sleep' (*damaq*- 'wake up from sleep') etc. This may be due to the fact that an outside investigator may impose the notions of agentivity of this own language system on the Oromo system on the strength of what are, at best, only translations of Oromo verb concepts.

<sup>9</sup> Agentivity implies that the referent is animate (or imagined as animate) and intends the action denoted by the verb. It is not always a simple matter to ascertain the latter (see previous note).

operate to embed a causativized structure in a further superior-clause (Fig. 2).

Fig. 1. First cycle causativization

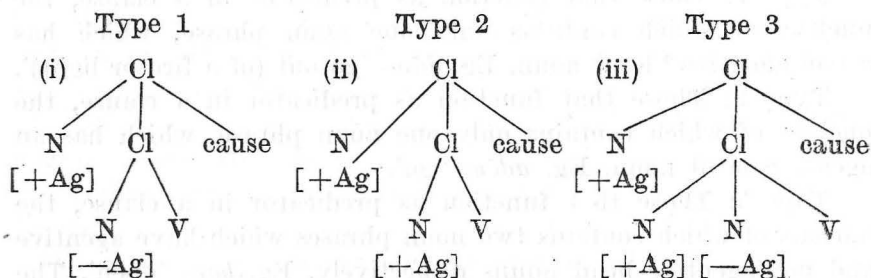
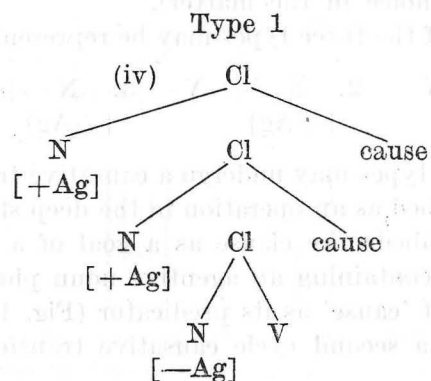


Fig. 2. Second cycle causativization.



Each of the bracketed linear strings which follow corresponds to the tree diagram above having the same number.

- (i) N + (N + V) + cause  
[+Ag] [Ag]
- (ii) N + (N + V) + cause  
[+Ag] [+Ag]
- (iii) N + (N + N + V) + cause  
[+Ag] [+Ag] [-Ag]
- (iv) N + (N + N + V) + cause) + cause  
[+Ag] [+Ag] [-Ag]

Subsequent rules will ensure that *s* affixes are introduced into the verb stem structure of any string containing one or more occurrences of 'cause'. The number of *s* affixes introduced will correspond to the number of agentive noun phrases appearing in the string. This means that the verb stem of strings (ii), (iii) and (iv) will contain the same number of *s* affixes although they have both different underlying structures and the potentiality for occurrence in different surface structure clause types. Thus verbs with a derivational history such as *ḍāmsīs*- 'cause someone to extinguish something' and those such as *adēmsīs*- 'cause someone to go' both appear as IIS forms, while *ḍāms*- 'extinguish (= 'cause something to go out') appears as only a IS form, in spite of the fact that in terms of the traditional transitive *vs* intransitive (one-place *vs* two-place) verb taxonomy the simple stems *adēm*- and *ḍām* would be grouped together as intransitives.

When we return to our original argument it now becomes clear that to regard verbs such as *hādočīs*- 'cause to become numb or paralysed' or *iranfačīs*- 'cause someone to forget' as IIS forms would violate the rule which assigns *s* suffixes according to the number of agentive noun phrases associated with the verb.

(c) The analysis of *-čīs* as a IIS suffix leads inevitably to the analysis of *-čīsīs* as IIIS suffix. Thus the grammars speak of 'triple' or 'treble' causatives. Yet when we examine verbs with *-čīsīs* (and Hodson and Walker list a great many) we find that they never have triple causative meanings<sup>10</sup>. That is to say, they do not mean either A [+Ag] causes B [+Ag] to cause C [+Ag] to act (ie. a cycle 2 causative of a Type 2 nucleus) or A [+Ag] causes B [+Ag] to cause C [+Ag] to do something to D [-Ag] (ie. a cycle 3 causative of a Type 1 nucleus, or a cycle 2 causative of a Type 3 nucleus). From a semantic point of view *-čīsīs* verbs are IIS forms.

<sup>10</sup> This is not say that there are no triple causatives [as defined in (c)]. From the example sentences supplied by my informants, however, it appears quite definite that *-čīsīs* verbs are not triple causatives. The introduction of a third agentive noun phrase into the clause is quite possible but involves a periphrastic construction; stem extensions alone are inadequate for the expression of such complex concepts.

In view of these not inconsiderable problems an alternative analysis is proposed. This is to interpret the *i* vowel in *-čis* and in *-čisis* as part of the causative formative rather than as an epenthetic element. This leads us to posit a rule such as A'.

$$A'. \left[ \begin{array}{c} \left[ \begin{array}{c} t \\ d \\ \dot{a} \\ t \end{array} \right] \right] \rightarrow \left[ \begin{array}{c} \check{c} \\ \check{c} \end{array} \right] \text{ — } is$$

The advantages of such an analysis are obvious:

- (a) The palatalization of a coronal stop by a following high vowel is an eminently natural phenomenon.
- (b) The analysis does not lead to a violation of the distributional rules for IS and IIS suffixes; *-čis* is IS and *-čisis* is IIS.
- (c) Analysis of *-čisis* verbs as IIS forms rids us of the anomaly of so-called 'triple' causatives with no genuinely 'triple' causative meaning.

Before considering some evidence in support of the claim that the *i* is part of the formative, a possible objection to the foregoing needs to be considered. This objection arises from the fact that there are quite a few *-čis* verbs which appear to have one or other of the sets of syntactic properties assigned to IIS verbs in (b) above. Hodson and Walker, for instance, record *bīčis*- 'cause to be bought' (cf. *bīt*- 'buy') alongside *bīčisis*- 'cause to be bought' and *fīčis*- 'cause to be brought' (cf. *fīd*- 'bring') alongside *fīčisis*- 'cause to be brought' etc.<sup>11</sup> How are these to be explained, since, in view of the account of the rules presented in (b) forms such as *bīčis*- and *fīčis*- are IS forms and should, therefore, have a meaning

<sup>11</sup> Hodson and Walker frequently translate the meaning of IIS forms with the formula 'cause to be + past participle'. Such a translation would only be appropriate if the inner agent (inner in terms of our bracketed strings) were not able to appear in the clause structure. As it is, the translation implies a passive interpretation of the inner clause. That this is not the case is abundantly attested by examples such as *Haylen Makonnanin ibsa dāmsise*. 'Hayle caused Makonnan to extinguish the lamp.' etc. Optionally, of course, in a discourse situation where the roles of the various participants are understood, the inner agent — like any other noun phrase in Oromo — may undergo ellipsis.

'A [+Ag] does something to B [—Ag]'? Firstly, let it be noted, *bīčis*- and *fīčis*- are in free variation with the forms predicted by the rules. The dual entries in Hodson and Walker are supported by the reaction of my own informants, who were often hesitant or contradictory when questioned about *-čisis* verbs. The hesitation was not experienced in the case of forms to which the rules would assign only the IS suffix (ie. *-čis*) — these were never formed with *-čisis*. The confusion appears when the rules would assign the IIS suffix (ie. *-čisis*), for, in addition to the 'correct' or 'expected' forms *-čis* forms were occasionally given. Similar confusion was not experienced in the case of causative verbs without the palatalization phenomenon.

There is, I believe, a ready explanation for these facts. There is another regular palatalization phenomenon involving *s*<sup>1</sup> in Oromo. *s*<sup>1</sup> is replaced by *č* following simple stems with a final *l*. Thus:

|         |              |                  |               |                          |
|---------|--------------|------------------|---------------|--------------------------|
| H. & W. | <i>tol</i> - | become suitable, | <i>tolč</i> - | make suitable            |
|         | <i>gal</i> - | enter            | <i>galč</i> - | put inside <sup>12</sup> |

In this case *s*<sup>1</sup> is replaced by *č* so that the stem extension of IIS forms of such verbs is *-čis*. It is suggested that the confusion occurs because there is a *-čis* extension which is IIS and a *-čisis* extension which is IIS. In the Batie dialect, in the case of verbs with stem-final *l*, there is coalescence of *l* and *s*<sup>1</sup>, so that, in place of forms such as *tolč*- and *galč*- we find *toš*- and *gaš*- ∞ *geš*-. Here *s*<sup>1</sup> has no one for one segmental replacement and again uncertainty results. I have recorded 'genuine' IIS forms such as *bušisis*- 'cause someone to carry someone off (Eg. a bride)'. After all, difficulties of this sort are not unknown in English, where speakers will hesitate before producing, say, 'That cat belongs to the Miss Joneses'.

It is now appropriate to consider what evidence there is for interpreting *i* as part of the causative suffix. Such evidence is not lacking.

Firstly, from a comparative point of view there is an abundance of evidence for the presence of a palatal element in the causative formatives in Eastern Cushitic languages. In Somali there are

<sup>12</sup> See also Moreno p. 93.

causative suffixes which contain only a palatal element (*-i*) and there are causative suffixes which contain both palatal and sibilant features (*-si*). Thus:

|                |              |                  |                       |
|----------------|--------------|------------------|-----------------------|
| M. <i>jab-</i> | break,       | <i>jeb-i-</i>    | break something       |
| <i>jog-</i>    | stop, stand, | <i>jōj-i-</i>    | stop something        |
| <i>'ab-</i>    | drink,       | <i>'ab-si-</i>   | cause to drink, water |
| <i>qosol-</i>  | laugh,       | <i>qosol-si-</i> | cause to laugh        |

Similarly in the Prefix verbs of 'Afar and Saho we find causative prefixes *y-*, *ys-* and *s-*, and in the suffix verbs we find *-is* and *-ys*.

|                    |                  |                     |                 |
|--------------------|------------------|---------------------|-----------------|
| <i>-u-tulluk-</i>  | become spoiled,  | <i>-u-y-tulluk-</i> | spoil           |
| <i>-e-de'</i>      | become pregnant, | <i>-i-ys-i-di'</i>  | make pregnant   |
| <i>-i-t-tikiy-</i> | gird on oneself, | <i>-i-s-kitiy-</i>  | gird someone    |
| <i>habbāl</i>      | forget,          | <i>habbāl-is-</i>   | cause to forget |
| <i>'ilo</i>        | advice n.,       | <i>'ilo-ys-</i>     | advise          |

Elsewhere, in Konso, for example, the basic causative suffix is *-š* or *-iš*; and in Sidamo we find *-s*, *-is* and *-š*.

Within Oromo itself, the following may be taken as clear indication of a palatal element in the causative suffix:

1. There is a class of verbs to which reference has already been made. These are the transitive (or IS) de-adjectival verbs. In such verbs we often observe that the vowel preceding *s*<sup>1</sup> has a quality which may be described as raised or fronted when it is compared to the vowel appearing finally in the adjective.

|                 |         |               |                          |
|-----------------|---------|---------------|--------------------------|
| Eg. <i>diho</i> | near,   | <i>dihēs-</i> | offer, cause to approach |
| <i>jaba</i>     | strong, | <i>jabēs-</i> | strengthen               |
| <i>tinno</i>    | small,  | <i>tinēs-</i> | diminish                 |

2. We find regular instances of vowel raising before *s*<sup>1</sup> in the transitive (IS) counterparts of the attributive verbs having a final *ā* (Conjugation III of Hodson and Walker, p. 58).

|                  |               |               |                              |
|------------------|---------------|---------------|------------------------------|
| Eg. <i>qopā-</i> | be prepared,  | <i>qopēs-</i> | prepare                      |
| <i>miyā-</i>     | become sweet, | <i>miyēs-</i> | sweeten                      |
| <i>itā-</i>      | swell,        | <i>itēs-</i>  | cause to swell <sup>13</sup> |

<sup>13</sup> There are a number of verb roots appearing to have stem-final vowels, and bearing no trace of the palatal element in terms of raising or fronting. In some of these cases where it does not occur we have

3. Another piece of evidence may be adduced from a consideration of the vocalic element which separates *s*<sup>1</sup> and *s*<sup>2</sup> in IIS verbs. As may be seen, these always have a close front quality. What is the status of such vowels? Are they part of the suffix or are they epenthetic? Oromo phonology does not permit consonant clusters of more than two members, and epenthetic vowels (always with an *i* quality) are common enough. Thus:

|             |                |                        |
|-------------|----------------|------------------------|
| 1Sg / 3Sg M | <i>ke'na</i>   | I give / He gives      |
| 2Sg / 3Sg F | <i>ke'nita</i> | You give / She gives   |
| 1Sg / 3Sg M | <i>kolfa</i>   | I laugh / He laughs    |
| 2Sg / 3Sg F | <i>kolfita</i> | You laugh / She laughs |

These should be compared with:

|             |              |                    |
|-------------|--------------|--------------------|
| 1Sg / 3Sg M | <i>kuta</i>  | I cut / He cuts    |
| 2Sg / 3Sg F | <i>kutta</i> | You cut / She cuts |

In the light of this, how is one to interpret this vowel? One thing is different, however, in the case of the vocalic element found between *s*<sup>1</sup> and *s*<sup>2</sup>. It is almost always quantitatively long<sup>14</sup>, and this is very uncharacteristic of epenthetic vowels in general. It is submitted that this vowel is best interpreted as an intrinsic palatal element accompanying *s*<sup>2</sup>. So that IIS verbs are formed by means of two {-*is*} stem extensions.

Why has this *i* not been generally recognised? Doubtless the reason for this is that with most verb roots having final consonants which are non-coronal<sup>15</sup> there is no trace of the palatal element.

evidence that at some earlier stage a laryngeal or pharyngeal consonant followed the unaffected final vowel. Thus *malās-* 'force out pus' (cf. *malā* 'pus'), *bās-* 'put out etc.' (cf. *bā-* 'go out etc.') and H. & W. *qufāsīs-* 'cause to cough' (cf. *qufā* 'cough n.'). But *malā* is cognate with 'Afar *malah* 'pus', *bā-* is cognate with Somali and 'Afar *bah-* 'produce etc.', while *qufā* is cognate with Somali *qufa-* 'to cough'. Interestingly enough, in the Batie dialect *bah-* still occurs in some persons of the paradigm of *bā-*, and there is a verb *malah-* 'suppurate'.

<sup>14</sup> The length of this vowel is almost certainly determined by the accentual pattern of the verb.

<sup>15</sup> The liquids (*l*, *r*, *n*), although coronals, pattern with root-final non-coronal consonants in the elision of *i*. In the case of *l*, however, we must postulate the palatalization of the following *s* prior to this elision.

Thus: *sīgs*- 'move something' (< *sīq*-), *jigs*- 'destroy something' (< *jig*-), *hīmsīs*- 'cause someone to tell something' (< *hīm*-), *dabs*- 'bend something' (< *dab*-) etc.

Are we to set up another, phonologically unrelated, stem extension allomorph *-s* for such forms as these? It seems preferable not to. The distribution of *-is* is a phonologically determined matter, ie. (i) with all verbs in which the preceding stem-final is a non-liquid coronal consonant (*t*, *t̪*, *d*, *d̪*, *j*, *č*, *y*), and (ii) with all transitive de-adjectival and causativized attributive verbs — both of which groups of verbs appear to have a vowel stem-finally<sup>16</sup>. In view of this predictability and of the basic shared sibilant feature in *-s* and *-is*, it seems more plausible to set up one underlying causative stem extension in Oromo, {*-is*}, and to account for the *-s* by means of a rule of elision.

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<sup>16</sup> Note however, that the morphophonology of the attributive verbs which often appear to have a final *ā* can only be accounted for by postulating the presence of a stem extension with a final *w*. I hope to consider this question in a future study.

LOREN F. BLIESE

#### PROPORTIONAL RELATIONS AND SYNCHRONIC DEVELOPMENTS IN 'AFAR MORPHOLOGY

The intent of this paper is to analyze proportional relations in synchronic 'Afar morphology and try to relate the results to the processes of historical change hypothesized by Jerzy Kuryłowicz in *La Nature de Procès dits „Analogiques”* (Acta Linguistica V, 1945—9), and in *Inflectional Categories in Indo-European*, Chap. 1: General Prerequisites (1964).

#### 'AFAR NOUN PROPORTIONS

'Afar case markings are extant in the masculine noun class which has a suffix *-i* in vowel-final forms for the Nominative-Genitive case as over against the Class form which is found in clitic positions and citation form. Class is predictable as *i*, *u* or *a* according to rules of vowel harmony for consonant-final forms<sup>1</sup>.

A comparison of these two forms of the masculine noun class shows a relation of „constellation” according to Hjelmslev's terminology in that the Class form is only predictable from the Nominative-Genitive in consonant-final forms while the Nom-Gen marker *i* is only predictable from the Class forms in vowel-final nouns. This lack of predictability on the basis of functional classes can be illustrated by the following examples:

<sup>1</sup> Loren F. Bliese, *Selected Problems in Noun Morphology in the Aussa Dialect of 'Afar* (unpublished MA Thesis, The University of Texas, Austin, 1967), pp. 31—34.