

1 Opening Remarks

- To reiterate the point of yesterday's discussion, it would be desirable to do away with fission, but positing independent terminals for the fissioned features requires some care as there is often a tendency for "nonredundancy". The bare participant node approach I mentioned can actually be considered with a bit more seriousness, not in terms of such a node being inherently noncountable, but on the grounds that as it instantiates one node rather than three (participant, author, and group) it is to be preferred on grounds of equivalent meaning with less nodes.
- I have been breezing interchangeably between the features I use in discussions. On conceptual grounds I advocate the use of only the monovalent features we have discussed and will continue to use that wherever possible; however we have seen that there are tradeoffs in the ease of expressing the range of heterogeneous environments an affix appears in once we allow negative values. It is worth thinking about whether there is any straightforward translation of -1 into a statement about a geometry. Today we will focus more on the necessity of negative values, and as we did yesterday, note a point at which the desire for restrictive elegance in a theory is hard-pressed to deal with certain facts.

2 Mam

- | | | |
|-----|------------|---------------|
| (1) | n-wi:xh-a | my cat |
| | t-wi:xh-a | your(sg) cat |
| | t-wi:xh-0 | his/her cat |
| | q-wi:xh-a | our(excl) cat |
| | q-wi:xh-0 | our(incl) cat |
| | ky-wi:xh-a | y'all's cat |
| | ky-wi:xh-0 | their cat |

When does the enclitic appear? What are the features that govern its insertion? First let's consider the VI list for the prefixes. Let's assume that the prefixes only spell out number, sensitive to person:

- | | |
|-----|---------------------------------|
| (2) | /q/ ↔[Grp] in the env of [Auth] |
| | /ky/ ↔[Grp] |
| | /n/ ↔[Min] in the env of [Auth] |
| | /t/ ↔[Min] |

Assume that incl we includes Auth, Addr, and Grp. Now consider the distribution of the enclitic given the following VIs:

- (3) $0 \leftrightarrow [\text{Auth}][\text{Addr}]$
 $/a/ \leftrightarrow [\text{Auth}]$
 $/a/ \leftrightarrow [\text{Addr}]$
 $0 \leftrightarrow \text{elsewhere}$

The accidental homophony seems to be missing a generalization. Noyer (1992) proposes to use alpha notation (X here, given known font problems with printers):

- (4) $/a/ \leftrightarrow [X \ 1], [-X \ 2] /0/ \text{ elsewhere}$

On this view, anytime the values of 1 and 2 match, zero will be inserted. Thus in the inclusive we (both +) and in the third person (both -).

Suppose however there is an impoverishment rule that delinks the entire person branch of the tree when there is both author and addressee. In this case *incl.we* and third person become identical in geometry. */a/* realizes anything under the [Participant] node, and zero elsewhere.

Note the function of the participant node becomes relevant here and in many cases in which 1st and 2nd person are homophonous and 3rd is distinct.

The solution, however, seems at initial odds with the contextual allomorphy required for spellout of the number prefixes. There are two possibilities to consider, both informed by the syntax of these sorts of enclitics (historically derived from politeness markers). One is that they occupy a distinct syntactic terminal with copied phi features of the agreement prefix; in this case the delinking at one node does not affect the other. However; suppose that the phi complex is literally shared by the two terminals; how could the delinking of person occur, if those features are needed to condition the number realization? Here the cyclic spellout hypothesis becomes crucial. Noyer, based on England (1983) presumably due to stress assumes that the enclitic is spelled out after the number prefix. If this is the case we would place it higher in the tree, only to be delinked and realized after the prefix is spelled out already.

3 A Sidenote on CA and Clitics vs. Agr

I have outlined a solution to the delinking paradox of Mam relying on a distinction between clitics and agreement affixes. Let's turn briefly to Turkish. At first blush, the two sets of forms in (5) appear to exhibit contextual allomorphy (CA) for agreement based on tense:

<i>gel-</i> ('come')	Aorist	Past
1sg	gel-ir-im	gel-di-m
2sg	gel-ir-sin	gel-di-n
3sg	gel-ir-0	gel-di-0
1pl	gel-ir-iz	gel-di-k
2pl	gel-ir-siniz	gel-di-niz
3pl	gel-ir-ler	gel-di-ler

(5) Here, *ir* spells out aorist and *di* spells out past. Look at the agreement affixes, though: the divergences seem to go beyond the phonological facts that one tense affix is consonant final while the other is vowel final; compare the 1pl agreement affixes *iz* and *k*, which look nothing alike. The question is, are these sets of affixes on the same terminal, conditioned by tense? Yu & Good argue that the set on the left are clitics, while those on the right are true agreement affixes. Evidence comes from three places: 1) the agreement affixes are used with non-verbal predicates while the clitics are not, 2) the agreement affixes escape word-final stress, while the clitics bear the verb's stress, 3) the clitics may occur outside of a coordination, and the agreement affixes may not:

- (6) ev-e gel-ir sana yardimed-er-iz
 home-dat come-aor you help-aor-1pl
 "we will come home and help you"
- (7) ev-e gel-di-*(k) sana yardimet-ti-k
 home-dat come-past-*(1pl) you help-past-1pl "we came home and helped you"

Finally they note that there is optionality in ordering of the agreement affixes relative to other suffixes while the clitics are rigidly word final. While the syntactic factors legislating between clitics and agreement call for further analysis, it seems clear that this is not a case of allomorphy at the same terminal. My point here is to illustrate that each example must be handled with care, considering extra-"paradigmatic" factors such as stress placement and behavior in more complicated syntactic structures.

4 No Need for Negative Person?

The participant node allows us to express syncretisms between 1 and 2, which occurs for example in pronominal systems (*nee* for 1/2 vs. *?ee* in Winnebago) and in agreement systems as well. Anytime we see a syncretism between first and third person need not necessarily mean we need to run to postulation of -2. Similarly, anytime we see a syncretism between 2 and 3 does not mean we need to run towards -1. The specified VI would be marked for [Auth] or [Addr] and an elsewhere VI would step in. Moreover some apparent cases of syncretism are the result of phonological opacity. In Ket past tense verbs there seems to be homophony between 1 and 3:

- (8) d-il'-l'oqn 'I shook'
 k-il'-l'oqn 'you shook'
 d-il'-l'oqn 'he shook'

However, this apparent homophony is the result of vowel deletion in the presence of the past-tense formative -il' (-i with redup). The present tense shows this:

- (9) di-l'oqn 'I shake'
 ku-l'oqn 'You shake'
 du-l'oqn 'He shakes'

5 Negative Number?

Noyer (1998) has expressed the dual neutralization that occurs in Nimboran via deletion followed by redundancy rules. Without a geometry, most people have odd ways of representing dual; for him, Dual is represented as [-sg,-pl]. An impoverishment rule deletes -pl. Now, there is need for a redundancy rule:

- (10) -sg → +pl. (implies)

Now the feature structure is [-sg,+pl]: resulting in plural (not dual). Mikael Vinka (the reading that was supposed to be for last night, though I neglected to mention that in class!) was the first I know of to show that such redundancy rules (which insert features) are not needed if one assumes the H&R geometry. The data comes from Sámi, which shows dual agreement for definite, animate subjects:

- (11) Dat guotke mánat boahtiba deike.
 those two children.nom come.prs.du here.
- (12) *Dat guokte mánat bohte deike. *those two children.nom come.prs.pl
 here

If the subject is indefinite, however, dual marking is impossible. The plural marked verb, however, is ambiguous (and a dual reading can be forced by the numeral quantifier):

- (13) (Guotke) mánat bohte/*boahtiba deike.

Another interesting fact comes from the Lule Sámi forms for 'to eat', where dual is neutralized in 1st and 2nd person but not 3rd.

Exercise: State the Delinking Rule for Dual Neutralization

(14)

person	sg	du	pl
1	barriv	barajma	barajma
2	barri	barajda	barajda
3	baraj	barrajga	barrin

6 Ojibwa

(Other Algonquian languages: Potawatomi, Menomini, Fox, and Cree.) The prefix and suffix seem to "dis"-agree: the p

- (15) **n**-win:nizi
I am dirty
- (16) **g**-wi:nizi-**mw**-abani
You were dirty
- (17) **g**-wi:nizi-**min**-abani
We (incl) were dirty
- (18) **n**-wi:nizi-**min**-abani
We (excl) were dirty

VIs for the suffixes:

- (19) /min/ ↔[Grp] in env of [Auth]
/mw/ ↔[Grp] in strict env of [Addr]

As for the prefix: Do we need to state the condition as follows with negative values for 2 present?

- (20) ni ↔{+1 -2}
g ↔+2

Or does a hierarchy decide, but it's 2 > 1 only in Algonquian? That would contravene apparently universal generalizations made in Corbett, and have no external support.

Suppose the suffix is a person-sensitive number spellout, while the clitic prefix, strictly person, is impoverished of [Auth] in the environment of [Addr]. The cyclic hypothesis comes up again, this time with additional evidence that the prefixes are very high in the tree; syntactic arguments come from Jelinek and phonological arguments that is is outside the stem-domain for processes like epenthesis and stress assignment come from Dechaine. Notice both cases involve delinking in the inclusive we; simplification of this quite marked category might be a way of understanding this.

7 Exercise: twists on "se lo"

In Mexican and Uruguayan Spanish, interesting things happen in dative accusative clitic clusters, beyond the facts we mentioned on Monday. Recall that

the delinking rule deleted case on a dative in the environment of a neighboring accusative. What's happening in addition here?

- (21) El libro, a ellos, quien se los prestó?
The book, to them, who ??? ??? loaned?
"who lent the book to them"
- (22) Si ella me quiere comprar el caballo, yo se la venderé
if she dat-1sg wants buy the horse, I ??? ??? will-sell
"If she wants to buy my horse, I will sell it to her"

Reading for tonight: Harris 1991: "The exponence of gender in Spanish"