

1 Yesterday??

The paradigm...(epiphenomenal of course!)

Imperfect for "dawa" (cure)

As a first try, we write down all the VIs (with any accidental homophony) for:

	singular	plural
1	dawa-G	n-dawa
2m	t-dawa-d	t-dawa-m
2f	t-dawa-d	t-dawa-m-t
3m	i-dawa	dawa-n
3f	t-dawa	dawa-n-t

- No gender distinctions are made in the first person
- No gender distinctions are made in the second person singular
- t- appears in a heterogeneous range of places
- Sometimes there is one affix and sometimes there are three

Here is a first stab at the VI list:

- (1) /n-/ ↔ 1pl
 /-G/ ↔ 1
 /t-/ ↔ 2
 /-d/ ↔ sg in env 2
 /-m/ ↔ pl in env 2
 /-n/ ↔ pl in env 3
 /-t/ ↔ fem
 /i-/ ↔ 3 masc sg /t-/ ↔ 3 fem pl

This is of course not a unique solution:

- Accidental homophony is posited for the two instances of /t/
- There are some portmanteau affixes – how do we know that /i/ realizes all three features, for example, rather than just masc in the env of 3 sg? We may be missing the fact that both 3ms and 3fs both have only one affix.

An alternative might include the following:

- The binary features $\pm 1, \pm 2, \pm pl, \pm fem$
- Only one /t-/

- (2) /i-/ ↔ -1, -2, -pl, -fem
 /-n/ ↔ -1, -2, +pl
 /t-/ ↔ -1

The tradeoff (and there will turn out to be a few of these as we proceed) is that there is reference to negative values of features; it is an open issue if there are conceptual justifications. More on this tomorrow, perhaps. In particular, though phonological features may be thought of as instructions to the articulators to do or not do a particular action, the delimitation of qualities about a real world entity may not need to discuss the "absence" of properties. The geometry we have assumed is obviously incompatible at present with negative values.

2 Imperfection in Semitic

Halle's formulation of the subset principle said: "whenever two items match the features in a given terminal, the item matching the greatest number of features is chosen". Putting aside the issue of counting which can probably be dealt with otherwise, the question is what happens when there is a terminal with features [a b] and an item that only matches [a] and an item that only matches [b]. The formulation as given will have no way to arbitrate. The solution we will pursue in later discussion refers to the hierarchy in such cases.

The reading included two binary person features: PSE and Auth.:

- (3) 1 = +PSE, +Auth
 2 = +PSE, -Auth
 3 = -PSE, -Auth
 inclwe = +PSE, -Auth

This last one may strike you as a bit bizarre, but we will come back to it; the logic is that the inclusive is a person that includes discourse participants but not (strictly) just the author. Note then that Auth denotes something like "Only the Author is in the reference set", although this then raises questions about the representation of exclusive we!

Going Fission: a given VI is marked as generating a subsidiary terminal morpheme, not given by the syntax. All features that were not realized by the first VI are then copied to the subsidiary terminal, where another VI has the chance for insertion. Note that an elsewhere item should never be able to fission, as that would cause infinite fission! E.g. suppose the terminal has [x y] and the elsewhere VI marked to fission is inserted, realizing no features; it would then generate a subsidiary terminal, which would...!

- (4) Perfect conjugation for ZRQ 'throw':

	sg	pl
1	zaraqti	zaraqnu
2m	zaraqta	zaraqtem
2f	zaraqt	zaraqten
3m	zaraq	zarqu
3f	zarqa	zarqu

- (5) /ten/ ↔+PSE, -Auth, +Fem, +Pl
 /tem/ ↔+PSE, -Auth, +pl
 /t/ ↔+PSE, -Auth, +fem
 /ta/ ↔+PSE, -Auth
 /nu/ ↔+Auth, +Pl
 /ti/ ↔+Auth
 /u/ ↔+Pl
 /a/ ↔+Fem

What prevents insertion of both /u/ and /a/ in the case of 3fp? The postulation of a templatic one affix limit. Number > Gender however would do the same.

- (6) Imperfect conjugation for ZRQ 'throw':

	sg	pl
1	?ezroq	nizroq
2m	tizroq	tizrequ
2f	tizreqi	tizroqna
3m	yizroq	yizrequ
3f	tizroq	tizroqna

First, notice the irregular distribution of /t-/ we saw in Berber to a degree. In this case it appears in all of 2nd person and in 3 person feminine. It is thus an elsewhere:

- (7) /-i/ ↔+PSE, -Auth, +Fem, -Pl
 /-na/ ↔-Auth, +Fem, +Pl
 /-u/ ↔-Auth, +Pl
 /-n-/ ↔+Auth, +Pl
 /?-/ ↔+Auth
 /-y-/ ↔-PSE, -Fem
 /-t-/ ↔elsewhere

Fission comes in as follows:

- (8) 3mp = -PSE, -Auth, -Fem, +Pl is realized by /-u/ first, erasing -Auth and +Pl; it fisses, and the subsidiary morpheme has -PSE and -Fem, so it is realized by /-y-/.
 (9) 2fs = +PSE, -Auth, +Fem, -Pl is realized by entirely by /-i/; the fished morpheme realizes nothing and the elsewhere /-t-/ is inserted.

- (10) 2ms = +PSE, -Auth, -Fem, -Pl is matched by nothing, so the elsewhere /t-/ is inserted. It doesn't fission.
- (11) 1pl = +PSE, +Auth, +Pl is matched by /n-/. A one-prefix template prevents further insertion of the default.

Stepping back for a moment, notice that person is always a prefix and number and gender are always a suffix. There is nothing in the theory of fission to capture this generalization. Tourabi (2002) and others propose a syntactic account of fission, where person is an incorporated projection in the Mood head. Given fission as "the lack of fusion" and person and number/gender as totally separate terminals, the only thing left to explain is the lack of a number suffix in 1pl. The logical possibilities are nonredundancy (implemented set theoretically perhaps, since this is a deep property across e.g. Basque and Georgian too) or contextual allomorphy.

3 Exercise: Mam

The possessor morphology of Mam (a Mayan language) sometimes has an enclitic /-a/ and sometimes doesn't:

- | | | |
|------|------------|---------------|
| (12) | 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?