

Describing syncretism: Rules of referral after fifteen years
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1. two quotations: (a) Monty Python; (b) Jim McCawley
2. pervasiveness of identities in inflectional paradigms (Zwicky 1985; Carstairs 1987)
 - 2.1. different person-number values in English finite verbs:
 - no distinctions for modal verbs (*can, would*)
 - no distinctions in past (*jumped, saw*), except for BE
 - no distinctions in pres (*jump, see*), except for marked 3sg (*jumps, sees*), except for BE
 - 2.2. English past and psp:
 - identical for all regular verbs (*jumped*)
 - identical for many irregulars (*fought, thought*)
 - distinguished for some ablaut verbs (*sang-sung*), for *-en* verbs (*rode-ridden*), for BE
 - 2.3. German 1 and 3 (vs. 2)
 - identical in plural (pres indic *singen, wollen*)
 - identical for modal verbs (pres indic, sg *will*, pl *wollen*)
 - identical in subjunctive (pres subj, sg *singe*, pl *singen*)
 - identical in past (impf indic, sg *sang*, pl *sangen*; sg *holte*, pl *holten*)
 - distinguished in pres indic sg for non-modals (1 *singe* vs. 3 *singt*)
3. development of Z85 ideas by Stump (1993; In press:ch. 7): four different mechanisms for describing systematic identities in inflectional paradigms
 - 3.1. **unstipulated syncretisms**, involving generalizations over natural classes ('joint realization' of Z85)

(a) Rumanian pres indic of A SUFLA 'to breathe' (1st conj) vs. A TĂCEA 'to be silent' (2nd conj) (whole-form syncretism); natural class 3 = 3sg \cup 3pl

		'breathe'	'be silent'
sg	2	sufl-i	tač-i
	3	sufl-@	tač-e
pl	2	sufla-ci	t@če-ci
	3	sufl-@	tak

[@ represents a schwa]

3sg and 3pl forms of Rumanian 1st-conj verbs in the pres indic are identical by virtue of a generalization over the category 3 (without regard to number).

- (b) defaults: person-number marking in English; person marking in German
- (c) further natural classes? past and psp? 1 and 3 in German, dat and abl in Latin, acc and gen in Russian? Where does it end? Semantic basis for the classes?

3.2. **symmetric syncretisms**, involving generalizations are over sets of categories that don't make a natural class

- (c) Hua non-future interrogative forms for DO 'eat' (affix syncretism); note (default) unstipulated affix syncretism as well, and unstipulated stem syncretisms (3sg; 1; otherwise); $H = 2sg \cup 1pl$

	sg	du	pl
1	do-ve	do-'-ve	do- pe
2	da- pe	da-'-ve	da-ve
3	de-ve	da-'-ve	da-ve

[' represents a glottal stop]

in each of a dozen moods, Hua verbs have one suffix in the 2sg and 1pl (and another, default, suffix in the du and elsewhere in the sg and pl)

3.3. **unidirectional syncretism**, where there is a seeming directionality

- (d) Latin case forms for HORT- 'garden' (2nd decl masc) and FAK- 'torch' (3rd decl fem) (whole-form syncretism)

		HORT-	FAK-
sg	nom	hort-u-s	fak-s
	voc	hort-e	fak-s
pl	nom	hort-i:	fak-e:-s
	voc	hort-i:	fak-e:-s

Latin nom and voc case forms are identical, except for 2nd decl masc nouns, which have voc sg *-e*; otherwise the form characteristic of nom 'takes over' (Carstairs (1987:sec. 4.2.6)) voc, i.e. voc is 'referred to' (à la Z/S) nom. *-s* 'is the mark of' \neg neut nom sg, *-e* of voc sg, and *-s* appears in positions of neutralization, hence voc \rightarrow nom.

- (e) English psp 'referred to' past (whole-form syncretism); ?German 3 'referred to' 1?

3.4. **bidirectional syncretism**, apparently exhibiting one direction in one context, the other direction in another context

(f) Rumanian pres indic of A SUFLA (1st conj), A UMPLEA (2nd conj) ‘to fill’, and A FI (4th conj) ‘to be’ (whole-form syncretism)

		‘breathe’	‘fill’	‘be’
sg	1	sufl-u	umpl-u	sint
	3	sufl-@	umpl-e	est-e
pl	1	sufl-@m	umple-m	sinte-m
	3	sufl-@	umpl-u	sint

[1 represents barred i]

Except in the 1st conj, Rumanian pres indic verbs are identical in the 1sg and 3pl, but the referral seems to go in one direction in some paradigms, in the opposite direction in others

4. Stump’s account within his framework of Paradigm Function Morphology: three special mechanisms for describing identities, in addition to the natural classes provided by a general theory of grammatical categories, which suffice for unstipulated syncretisms; one descriptive mechanism per type of phenomenon -- we should hope for something better

5. dimensions on which the identities differ (besides whole-form vs. affix vs. stem)

5.1. naturalness of **classes** involved; which classes of categories can rules can refer to?

5.2. **directionality** of the relationship (nondirectional, unidirectional, bidirectional); are some rules directional?

6. these dimensions are not necessarily matters of theory

7. re classes: morphological theory must allow semantically unnatural (essentially disjunctive, language-particular) classes as well as natural ones; if the facts of a language provide enough evidence, speakers will connect forms that are phonologically alike, despite their lack of semantic connection

7.1. Hua rules then can make reference to the ad hoc class $H = 2sg \cup 1pl$,

7.2. Rumanian rules to the ad hoc class $R = 1sg \cup 3pl$,

7.3. German rules (for some speakers) to the ad hoc class $3sg \cup 2pl$

(pres indic 3sg *er singt*, 2pl *ihr singt*)

8. re directionality

8.1. take unstipulated syncretisms and symmetric syncretisms as the touchstones for theory construction

8.2. directionality is an illusion, fostered by our inclination to identify the phonological content of units with the categories they signal – to see Latin /s/ as nom sg –neut (despite multiple functions for this bit of phonology and multiple exponents for this category set)

8.3. the 3-against-1 argument: German *-e/Ø* as ‘characteristic’ of 1sg, *-t* as ‘peculiar to’ 3sg; English *-ed* as ‘characteristic’ of past, *-en* as ‘peculiar to’ psp

8.4. appearance of directionality results from the exceptions to the rule that happen to occur in the language

9. back to classes: are we there yet? no; stipulating that Hua rules *can* make reference to H is a much weaker claim than the default identity stipulated by Z/S, where, in effect, rules *will* refer to H unless something else overrides

10. state this directly: for sets of categories Σ_1, Σ_2 , stipulating that $\Sigma_1 = \Sigma_2$ licenses reference to the class $\Sigma = \Sigma_1 \cup \Sigma_2$ and declares a **pattern** $\Sigma / \neg\Sigma$ for rules (so that Hua rules for finite forms will come in pairs for the special case H and for the general case $\neg H$)

11. declaring patterns is not intrinsically connected to stipulated identities; it arises even for utterly natural identities

(g) Shmua non-future interrogative forms for DO 'eat'

	sg	du	pl
1	do-ve	do-'-ve	do-pe
2	da-ve	da-'-ve	da-pe
3	de-ve	da-'-ve	da-pe

(verbal suffixes are just as in Hua, but occur in pl and \neg pl instead of H and $\neg H$; this is semiotically just as good as, and much less surprising than, Hua. But it's not enough to say that Shmua rules *can* refer to pl; we need to declare that the pattern pl / \neg pl *does* organize Shmua paradigms.)

12. paradigms are organized, not really by various sorts of identities (like Z/S referrals), but by language-particular patterns based on classes (natural or stipulated) of categories. This is a claim about concepts, not a formalism; PFM provides a system, in fact, in which such patterns can be declared.

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