Defectiveness and morphosyntactic deviance

Gaps in inflectional paradigms present an obvious challenge to formal description, since they represent a breakdown in the very system that we as linguists are attempting to construct. Typologically, defective paradigms are of two kinds, with distinct implications for formal architecture. The first kind involves the rejection of the MORPHOLOGICAL FORM (i.e. an alternation), and accounts for most examples that current work on paradigm gaps is concerned with (e.g. Albright 2003, Bonami & Boyé 2006, Daland & Sims 2007, Pertsova 2005, Rice 2006, Törkenczy 2002). The other kind, less well understood, involves disturbances to the MAPPING BETWEEN MORPHOSYNTACTIC MEANING AND MORPHOLOGICAL FORM, involving back-and-forth interactions between morphosyntax and morphology. We focus on examples that illustrate the inherent tension between structural motivation and arbitrary stipulation.

Tamashek (fig. 1) offers an example ANTI-SYNCRETISM, in which what is defective is not the form, but its morphosyntactic interpretation. Subject inflection on verbs is typically realized through a combination of prefixes and suffixes. One class of verbs, though, takes suffixes alone (for the perfect stem); as a consequence, the normally suffixless 3SG and 1PL should be homophonous. But speakers reject the 1PL interpretation of this form, instead resorting to an unsystematic array of paraphrases. Homophony avoidance, which we can take as broadly applicable structural constraint, is an obvious explanation, but it is also clear that that its application is language specific, as 3SG/1PL syncretism is tolerated in other languages (Diola Fogny, Misantla Totonac). In Chiquihuitlan Mazatec (fig. 2), anti-syncretism appears to be sensitive to properties of the paradigm as a whole. Verb inflection involves affixation, stem alternations and tonal alternations, with each subsystem divided into a number of arbitrary inflection classes. The verb 'carry' is missing all its incompletive negative forms except for the 1SG. The inflectional rules predict that, through a combination of morphological and phonological conditions unique to this verb, the missing forms should be homophonous with the incompletive *non*-negative. The defectiveness appears to be motivated by to anti-syncretism, but this simple interpretation is belied by the fact that neutralization of the negation contrast regularly occurs for certain forms of many other verbs. We suggest that the crucial difference is *where* the neutralization occurs: only in this verb is the (morphologically basic) 3rd person affected. The rejection of this homophony appears to have triggered a domino effect, knocking down an entire block of morphologically related forms.

In Chickasaw (fig. 3), defectiveness is a by-product of DEPONENCY (a morphological mismatch). Transitive verbs mark both subjects (with 'set I' affixes) and objects (with 'set II' affixes). In one small class of verbs the normal argument linkage is mismatched: set II affixes mark the subject rather than the object. These verbs are consequently able only to mark 3rd person objects (since all 3rd person arguments are zero marked), while 1st and 2nd person objects are left with no viable realization. Though deponency provides the motivation for defectiveness, the full explanation still requires stipulation, as the closely-related Choctaw has filled out the paradigm.

The gaps we describe can be attributed to design features of the morphosyntax-morphology interface, yet the sensitivity of a particular language to these features must be arbitrarily stipulated. This supports a view in which the formal representation of morphology has a valuable role to play in description and analysis, but at best a weak role in predicting or constraining linguistic behavior.

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Examples

(1) Anti-syncretism #1: Tamashek 'adjectival' verbs (Heath 2005)

	normal affixal system			adjectival verb 'be black' (perfective)
	prefix		suffix	
	V-init.	C-init.		
1SG	Ø		-æɣ	kæwɑl-æɣ
1PL	n-		Ø	*kæwɑl
2SG	t-	Ø	-æd	kæwɑl-æd
2PL.M			-æm	kæwɑl-æm
2PL.F			-mæt	kæwɑl-mæt
3SG.M	Ø	i-	Ø	kæwɑl
3SG.F	t-			
3PL.M	Ø		-æn	kæwɑl-æn
3PL.F			-ænt	kæwɑl-ænt

(2) Anti-syncretism #2: Chiquihuitlan Mazatec 'carry' (Jamieson 1982)

	neutral positive		neutral negative	
	singular	plural	singular	plural
1INCL		$ča^{3}nẽh^{31}$		$ča^{2}nẽh^{21}$
1	$ba^{3}nẽh^{31}$	$ča^{3}nĩh^{314}$	$ba^{2}nẽh^{21}$	$ča^{2}nĩh^{214}$
2	$ča^{3}nĩh^{31}$	$ča^{3}nũh^{31}$	$ča^{2}nĩh^{21}$	$ča^{2}nũh^{21}$
3	$ba^{3}nĩh^{31}$		$ba^{2}nĩh^{21}$	

	incompletive positive		incompletive negative	
	singular	plural	singular	plural
1INCL		$ča^{4}nẽh^{41}$		$*ča^{4}nẽh^{41}$
1	$kua^{3}nẽh^{31}$	$ča^{4}nĩh^{414}$	$kua^{2}nẽh^{21}$	$*ča^{4}nĩh^{414}$
2	$ča^{4}nĩh^{41}$	$ča^{4}nũh^{41}$	$*ča^{4}nĩh^{41}$	$*ča^{4}nũh^{41}$
3	$kua^{4}nĩh^{41}$		$*kua^{4}nĩh^{41}$	

(3) Deponency-conditioned defectiveness (Munro 2005, Broadwell 2006)

	Chickasaw (defective)		Choctaw (gaps resoved)
	normal verb 'look for'	deponent verb 'want'	deponent verb 'want'
1SG > 3	hoyo-li look.for-1SG.I 'I look for him'	sa-banna 1SG.II-want 'I want him'	sa-bannah 1SG.II-want 'I want him'
3 > 1SG	sa-hoyo 1SG.II-look.for 'he looks for me'	*no form*	sa-bannah 1SG.II-want 'he wants me'
1SG > 2SG	chi-hoyo-li 2SG.II-look.for-1SG.I 'I look for you'	*no form*	chi-sa-bannah 2sg.II-1sg.II-want 'I want you'