Gap Morphology and the Theory of Case Borrowing

Many modern morphological theories try to analyse inflectional syncretism as identity of the lexicon entry. Although there are big differences between these theories resemble in one major assumption that I want to investigate in the following:

The lexicon provides an affix for all possible combinations of feature values.

This thesis must, in my opinion, not be seen as a given thing. Within a theory that presupposes the existance of abstract features defining certain contexts, there are several other possibilities how a feature-form-relation can come about. To point out some of its advantages, I will adopt one of the theories ('i. e. the framework of Distributed Morphology) and propose a new mechanism that is based on the theses (1), (2) and (3):

1. Not all combinations of feature values are provided a phonological form by the lexicon.

2. Paradigms¹ can still have gaps after vocabulary insertion has occured.

It is clear that language speakers can also name a marker for those contexts, where the lexicon has not provided an inflectional form. Thus, there must be a mechanism that obtains a form when such a context is given. The mechanism I assume is closely related to a well-known algorithm in informatics, the so-called Nearest Neighbour Principle. Transferred to this case it says that:

3. If syntax is in need of a missing form, the closest form will be 'borrowed'.

Intuitively, the mechanism says that the the term closeness refers to minimal morphological difference in given case hierarchy. It is assumed that these case hierarchies, that have been worked out for many languages, are taken as a basis for the process of case borrowing. The hierarchy in (1), which is mainly based on Wiese (2003), assigns every terminal node a nearest neighbour. If some terminal node is not provided a phonological marker, it borrows the one from its nearest neighbour. So, for example, (1) would predict that the ablative borrows the dative form, if it does not receive its own form from the lexicon.

Just to give a simplified overview what advantages one gains when following this theory, I will explain how bidirectional shifting patterns (terminology: Baerman et al.) like the Latin one in (2) can be derived. Most morphological theories cannot, without great theoretical effort, derive the syncretisms within the structural cases. Making use of GM and CB it becomes much more easy. If the analysis ensures that both 'cells' that complicate a straightforward analysis (nominative class I and accusative class III) stay empty, i.e. they are not assigned a marker. The rest is done by the inflectional case hierarchy in (1).

¹It is to point out that this approach does not presuppose paradigms as relevant entities. It is also perfectly compatible with theories that deny the existance of paradigms since it only refers to independently substantiated case hierarchies

It assures that both cells obtain the cases from their nearest neighbour in the hierarchy. The nominative of class I borrows the accusative marker of class I (under the assumption that there is no vocative for inanimate nouns) and the accusative of class III borrows the nominative of that class)

The same way one could analyse split systems and three-way systems. Looking at the structural cases of the Pama-nyungan language Diari(3), one can quickly imagine the inflection classes, where case borrowing has occured. All classes that show no three-way alignment (class 1, 3, 8) can be easily analysed as results of case borrowing, whereas other theories can not come up to these paradigms with such adequacy.

(1) Latin Case hierarchy (cf. Wiese (2003))



(2)Latin (Baerman, Brown, Corbett (2005))

	Class 1	Class 2	Class 3
	bellum	servus	vulgus
	'war'	'slave'	'people'
Nominative	-um	-us	-us
Accusative	-um	-um	-us
Genitive	-i	-i	-i
Dative	-0	-0	-0
Ablative	-0	-0	-0

(3)Diari structural cases (Bierkandt (2006)

	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8
	Nouns	Nouns	Names	Names	Pronoun	Pronoun	Pronoun	Pronoun
	SG	nSG	Male	Female	1,2,3(F)	3(nF)	1,2 nSG	3 nSG
Erg	-li	-li	-li	-ndu	-ndu	-li	-Ø	-li
Nom	-Ø	-Ø	-na	-ni	-ni	-Ø	-Ø	-Ø
Acc	-Ø	-na	-na	-na	-na	-na	-na	-na

(3)Literature

- Baerman, Matthew, Dunstan Brown and Greville Corbett (2005): The Syntax- Morphology Interface. A Study of Syncretism. Cambridge University Press, Cambridge.
- Bierkandt, Lennart (2006): Kasusmorphologie des Diyari Ein Ansatz im Rahmen der Distribuierten Morphologie. In: G. Müller and J. Trommer, eds., Subanalysis of Argument Encoding in Distributed Morphology. Vol. 84 of Linguistische Arbeitsberichte, Universit¨at Leipzig.
- Halle, Morris and Alec Marantz (1994): Some Key Features of Distributed Morphology. In: A. Carnie, H. Harley and T. Bures, eds., Papers on Phonology and Morphology. Vol. 21 of MIT Working Papers in Linguistics, MITWPL, Cambridge, Mass., pp. 275
- Stump, Gregory (2001): Inflectional Morphology. Cambridge University Press, Cambridge.
- Wiese, Bernd (2003): Zur lateinischen Nominalflexion: Die Form-Funktions-Beziehung. Ms., IDS Mannheim.
- Wiese, Bernd (2004): Categories and Paradigms. On Underspecification in Russian Declension. In: Müller, Gereon/Gunkel, Lutz/Zifonun, Gisela (eds.) (2004). S. 321-372.