# How structure acquires function: On the evolution of (un)useful case markers in Upper German

## 1. Introduction

Dialectal grammatical systems are a promising field for the empirical study of diachronic change in progress. Dialects differ not only in their inventories of formal devices but also in the functional properties of these devices. One such case is prepositional dative marking (PDM) in Upper German (Bavarian and Alemannic). Upper German distinguishes three morphological cases: nominative, accusative, and dative. In several dialects dative DPs are preceded by a prepositional marker (*an* or *in*), cf. data set I. Thus, the dative case is expressed twice: by inflectional morphology and by the dative marker.

## 2. Dative marker insertion and realizational morphology

The dative marker shares many structural properties with other prepositions. In some respects, however, its syntactic behaviour clearly deviates from that of typical prepositions in Upper German (see data set II). Referring to a realization-morphological approach to analytic constructions (as outlined by Spencer 2001), I will argue that dative marker insertion is due to a mapping rule that connects abstract morphosyntactic case features with overt morphological realizations. The dative marker can be analysed as an expletive element satisfying an environment restriction on dative forms of determiners.

# 3. Distributional asymmetries

However, whereas only in a few dialects dative marker insertion is obligatory, it is optional in most other dialects. There are more or less preferred environments for PDM. The factors constraining PDM are syntax-external, and their relevance varies across the different dialect areas. I will focus on three distinct distributional patterns (see data set III): (i) Dative marker insertion depends on morphological factors (South Bavarian). (ii) Dative marker insertion depends on information structure (Schaffhausen, Northern Switzerland). (iii) Dative marker insertion depends on metrical stress patterns (Lucerne, Central Switzerland).

These area-specific occurrence asymmetries favour a constraint interaction approach with stochastic evaluation (Boersma 1997, Bresnan/Deo 2001).

## 4. Consequences for a theory of language change

These facts allow interesting generalizations with regard to evolutionary theories of language change. Change in grammar passes through periods of variation but it also spreads through space. Therefore, diatopic contrasts provide the rare chance to uncover the guiding mechanisms during change in progress. PDM emerged due to a historical accident, namely the phonological development and reanalysis of article forms which made it possible to generalize the (highly frequent) post-prepositional occurrence of the dative case over all instances. However, the result of this process is just a new encoding option for dative objects (PDM) that coexists with bare datives. In consequence, different dialects develop different functional arrangements between the two options.

In evolutionary approaches to language change – as proposed by Croft (2000) or Haspelmath (1999) – the key mechanisms of change are variation and selection: New variants emerge and are, over time, more and more selected by the speakers under certain circumstances. Croft's and Haspelmath's approaches differ in the kind of circumstances that are relevant for selection. Croft claims that selection in speakers' use is guided exclusively by social factors whereas functional factors are relevant only for the emergence of the new option as such. In Haspelmath's approach, an option is favoured in selection due to its functionality. My data provide arguments for the latter approach: PDM first emerges via reanalysis as an additional structural option. However, its functional contours evolve only after in speakers' use. Evidence for this can be found in the fact that the functional arrangements between bare datives and PDM differ across different dialects. In some dialects, however, dative marker insertion has been implemented to its maximal extent, i.e. it is now completely obligatory. Here, functional (i.e. syntax-external) motivations for dative marker insertion do not hold any more: PDM is a purely structurally triggered mechanism. I conclude from these facts that functional motivations are most relevant for the periods of the gradual diachronic implementation of a pattern (i.e. the phases of variation) but not necessarily so for the results of the implementation process.

**<u>Data set I</u>** (DM = dative marker, D = dative, s = singular, f = feminine)

- (1) sàg's in der frau say-it DM the:Dsf woman 'say it to the woman' (South Bavarian: Upper Inn Valley; Schöpf 1866:286)
- (2) *er git dr Öpfel a mir, statt a dir* he gives the apple DM me:D instead DM you:D 'he gives the apple to me, not to you' (Alemannic: Glarus; Bäbler 1949:31)

#### <u>Data set II</u>

The behaviour of the dative marker deviates from that of other Upper German prepositions in the following respects (among others):

In contrast to other prepositions, the dative marker cannot be omitted in coordination:

gsäit (3)ich ha=s i der Kathi \*(i) der Hanna und the:Dsf (name) have-itDM and DM the:Dsf (name) said Ι 'I said it to Kathi and Hanna'

In contrast to other prepositions (4a), the dative marker (4b) cannot be a host for clitics:

(4)	a.	zúe=mer	b.	*í=mer	
		to-me:D		DM-me:D	

#### <u>Data set III</u>

In South Bavarian, underspecified morphological exponents are prepositionally marked:

(5)		Feminine Singular:			Plural:
	NOM	<b>d</b> frau			<b>di</b> fraun
	ACC	<b>d</b> frau			di fraun
	DAT	da frau	in	+	di fraun
		'the woman'			'the women'

In Northern Switzerland, dative marker insertion depends on information structure:

(6a)	<i>dasn</i> this_ 'this	<i>nal</i> _time s time, ]	<i>ha</i> ha I ga	<i>n ici</i> ve I ve Mar	<i>h etz</i> now tha a B	<i>dr</i> the:Dsf BOOK'	Marte (name)	es a	<i>BUECH</i> book	gschänkt given
(6b)	ich I 'Iga	<i>han</i> have ave the	s the boo	<i>buech</i> e book k to M	a DM ARTH	<i>dr</i> the:Dsf A'	MARTE (name)	gg gi	<i>yëë</i> ven	

In Central Switzerland, the dative marker is not inserted if the insertion causes a sequence of more than one unstressed syllables:

(7a)	<i>ich</i> I 'I ga	<i>ha</i> have we this	<i>das</i> this book to	<i>buech</i> book ball of	<i>i</i> DM them'	<i>allne</i> all:Dp	ggä given	x x buech	x i	x x all	x ne	
(7b)	<i>ich</i> I 'I ga	<i>ha</i> have we thes	<i>die</i> these e books	<i>büeche</i> books s to all o	er (*i) DN of them	) <i>alli</i> A all:	<i>ne ggä</i> Dp given	x x büe	x cher	x (*i)	x x all	x ne

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