Prepositional Dative Marking in Upper German: A Case of Syntactic Microvariation*

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§ ABSTRACT

In several Upper German dialects, a dative NP can optionally be introduced by a preposition-like morpheme ('an' or 'in'):

'er hat's an (or: in) der Mutter gesagt'
he has it AN IN the:Dsf mother told

In the present paper I will pursue the following questions:
- In which dialect areas is prepositional dative marking (PDM) attested?
- What type of morpheme are the dative markers 'an' and 'in'?
- Under which conditions does PDM occur?
- What are possible explanations for the emergence of PDM?

I will show that the occurrence of PDM is influenced by morphological, syntactic, discourse-functional and phonological factors, the relevance of which varies between the different dialect areas.

1 § INTRODUCTION

In several Alemannic and Bavarian dialects, it is possible to introduce a dative NP1 by a preposition-like morpheme that is homophonous with the prepositions an ('at, beside of') and in ('in, into'). Schematically:

(1) \[ NP_{\text{DAT}} \] ==> \[ an / in + NP_{\text{DAT}} \]

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* I am grateful to Anna Dale, Paris, for improving my English.
1 Although the arguments for a DP analysis of nominal constituents in German are striking, I use the term 'NP' since it is more widely established cross-theoretically.
I will call this construction prepositional dative marking (PDM), the morphemes *an* or *in* dative markers. On the surface, PDM exactly looks like a PP; however, the syntactic behavior of the dative markers *in* or *an* is clearly distinct from that of the homophonous true prepositions (see below, section 4). Used as dative markers, *in* and *an* are functionally equivalent; their distribution is geographically determined (see below, Section 2).

In (2)-(5) PDM is exemplified by *in* and *an* as dative markers in Bavarian or Alemannic, respectively:

(2) Bavarian, AN: du muasst es a deinà frau vaschraiòn lássn
you must:2s it AN your:Dsf wife transfer let:Inf
‘you have to transfer it [=the money] to your wife’
Malching; Ströbl 1970:66

(3) Bavarian, IN: såg’s in der frau
say it IN the:Dsf woman
‘say it to the woman’
Upper Inn Valley; Schöpf 1866:286

(4) Alemannic, AN: er git dr Öpfel a mir, statt a dir
he gives the apple AN me:D instead AN you:D
‘he gives the apple to me, not to you’
Glarus; Bäbler 1949:31
(5) Alemannic, IN:  
Di isch uf d´ alt´ Eed´mburg ufpau´,
\begin{quote}
\textit{this is on the: old: [a castle] built}
\end{quote}
\begin{quote}
di wòòrschinlich i d´ Edl\_ vo Jeeschtet´
\end{quote}
\begin{quote}
\textit{which: probably IN the: noble: from [a village] belonged has}
\end{quote}
\begin{quote}
khöört hät.
\end{quote}
\begin{quote}
\textit{This [chapel] is built on the old Edenburg which probably belonged to the nobles of Jestetten'}
\end{quote}
(Jestetten; Keller 1970:57)

Note that PDM makes use of dative case morphology. It doesn’t replace the dative case, but dative case morphology is ‘recycled’, i.e. used again in this prepositional construction. In other words, PDM is more a reinforcement than a substitution of the dative case.

It is generally assumed that the emergence of similar analytic constructions in modern Romance or Germanic languages (à ma mère, to my mother) is connected with the loss of distinctive case morphology: whether the erosion of dative case endings causes the grammaticalization of directional prepositions into indirect object markers, or whether it is the grammaticalization of prepositions that forces the loss of case inflection: in both views, the causality between the absence of case morphology and the presence of prepositional encoding strategies seems to be beyond any doubt.

In Upper German, however, we can observe prepositional encodings of the IO although dative case morphology is fairly intact. Thus, an explanation of PDM as a compensatory strategy for eroded case morphology clearly fails. Nevertheless, the geographical spread, the synchronic distribution and the diachronic development of this prepositional construction are very instructive of the conditions under which it is possible for prepositional encodings of the IO to emerge and to be preferred over non-prepositional ones.

In the present paper I will first give a short overview of the geographical spread of PDM (section 2). Section 3 deals with the paradigmatic status of dative case
morphology in Bavarian and Alemannic. I will then consider the syntactic behavior of
the dative marker (section 4), in order to determine what type morpheme the dative
marker is. Section 5 is about the distributional properties of PDM; it presents the
environment factors governing the insertion of the dative marker as well as
geographical differences in the occurrence of PDM. Section 6 proposes an explanation
of the diachronic emergence of PDM. I will conclude with a few remarks about
possible generalizations we can extract from PDM with regard to a theory of
grammatical change (section 7).

This paper deals with the topic of my doctoral thesis that I will submit at Zurich
University. It presents some of my findings – those I think are among the most
interesting –, but it is clear that it is not possible to present all the relevant data and
generalizations detected so far. On the other hand, insofar as the work is still in
progress, many of the observations I am presenting here have a preliminary character
and will be completed and refined in my doctoral thesis (Seiler (forthcoming)).

2 • GEOGRAPHICAL SPREAD OF PDM

PDM is widespread in Bavarian and Alemannic, although it doesn't occur over the
entire Upper German dialect area. In order to get a picture of the geographical
distribution of PDM I have evaluated different source types2:
- Dialect dictionaries
- Grammatical descriptions
- Transcripts of records
- Dialect literature
- Spontaneous utterances
- Informant consultations
- Unpublished language atlas materials3: German-speaking Switzerland (SDS), South-
West Germany (SSA), Vorarlberg (VALTS), Bavarian Swebia (SBS), Upper Bavaria
(SOB), Low Bavaria (SNIB), Upper Austria (SAO).

2 These sources are not exhaustively quoted in section 9, References.
3 I thank Rudolf Trüb, Zürich, Renate Schrambke, Freiburg/Breisgau, Eugen Gabriel, Wangen/Allgäu,
Werner König, Augsburg, Cordula Maivald, Passau, Rosemarie Spannbauer-Pollmann, Passau, Hans-
Werner Eroms, Passau, Hermann Scheuringer, Linz, Stephan Gaisbauer, Linz.
In Alemannic, PDM is found in (from North-West to South-East): Middle Alsace; South Baden; North Switzerland (Cantons of Aargau, Solothurn and Schaffhausen); Central Switzerland (Cantons of Lucerne, Zug, Schwyz, Unterwalden, Uri, Glarus); geographically separated in Fribourg at the German-French language boundary; only sporadically in the environments of Berne and Zurich. The dative markers _an_ and _in_ occupy distinct areas: _an_ in the eastern parts of Central Switzerland (Uri, Glarus, partly Schwyz), _in_ throughout the rest. In the transition zone around the eastern part of the Lake of Lucerne, _in_ and _an_ coexist; they do so in Fribourg, too.\(^4\)

In Bavarian, PDM occurs in South Bavarian up to Southeastern Middle Bavarian. The _in_-type perhaps covers the entire South Bavarian dialect area, although PDM is attested only punctually here (the low density of PDM-instances reflects the lack of useful language atlas materials in this area and thus must not be misinterpreted). _An_ dominates the Middle Bavarian PDM-zone, but is attested sporadically also in South Bavarian.

PDM occurs in Bavarian language islands in Northern Italy, too (Luserna and Fersina Valley).\(^5\) The dative marker is _in_, in Fersina Valley in free variation with _an_ (\(= [a]\), probably imported from Trentinian).

Surprisingly, PDM is not attested in Vorarlberg and Bavarian Suebia. Thus, the Alemannic and Bavarian PDM areas are not adjacent, i.e., they don't form one coherent zone, and there is no evidence that they ever did.

In German-speaking Switzerland, the geographical picture gained from the protocols of the SDS (Language Atlas of German-speaking Switzerland) and the preliminary

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4 The isolated occurrence of PDM and the coexistence of _an_ and _in_ in Fribourg are striking. Perhaps PDM has been imported here from the dialects of Central Switzerland, the area with the highest PDM-prominence in Switzerland. This assumption is not completely unlikely, due to the fact that Fribourg and Central Switzerland are traditionally closely related in religion and culture (both are Catholic). For instance, students from Central Switzerland tended to study at Fribourg University more than in Zurich, Basel or Berne (which are Protestant), even in the 20th century. On the other hand, some influence from the neighbouring romance languages (Standard French and, earlier, Franco-Provençal) is not excluded, either. However, Romance language contact does not provide an explanation for the existence of the dative marker _in_ in Fribourg.

results of the Syntactic Atlas of Swiss German Dialects (cf. Bucheli & Glaser in this volume) completely coincide. This is remarkable in two respects. First, the geographical extent of PDM has been stable over the last 50 years (the material for the SDS was explored in the 1940-1950s), that is, no levelling of the areal contrasts can be observed with respect to PDM in Switzerland. Second, the SDS and the Syntactic Atlas of Swiss German Dialects are based on different exploration techniques: the material for the former was explored in direct interviews, whereas the latter makes use of written questionnaires.

3 • CASE MORPHOLOGY IN BAVARIAN ALEMANNIC

It is widely recognized that case morphology in Upper German is reduced in comparison with earlier stages (Old and Middle High German) and Modern Standard German. Special attention has been paid to the nearly complete loss of the genitive case. Since morphological distinctiveness is not guaranteed in Upper German with its dramatically simplified case inflection, the insertion of dative markers seems to be plausibly motivated: PDM enables speakers to encode the IO distinctly.

My claim, however, is that the insertion of the dative marker cannot be triggered by the lack of case inflection in Upper German. An analysis of Upper German case morphology has to take into account that case morphology is not realized in inflectional endings of nouns, but in determiners and quantifiers.\(^6\) Therefore, these items need to be considered in case paradigms as well. Bavarian obviously reflects this fact:

\(^6\) This analysis is argued for in Dal 1960.
In Bavarian, only personal pronouns (column 7) show a triple case distinction, nominative vs. accusative vs. dative. In all other instances we observe syncretism, either N=A (3, 4, 5), or A=D (1, 2), or even N=A=D (5a, 6). The question is now whether the occurrence of PDM depends on the ±distinctiveness of the dative case. If there were a correlation between dative morphology and PDM, the prediction would be: that the dative marker is not inserted when dative case is marked overtly (by means of determiner inflection), but it appears when overt dative morphology is missing.

Example (6) is in fact covered by this prediction, since the IO is marked solely by the dative marker but not by any case morphology:

(6) in di Schwain ge:m

\( \text{IN thep pigs give} \)

'to give to the pigs'

(St. Georg, Carinthia; Hilzensauer 1995:141)

However, PDM is far from obligatory in such cases, as is illustrated in (7):

* 5a: South-Bavarian (Carinthia; Pichler-Stainern 1999:56)
On the other hand, PDM also occurs with morphologically clearly distinguished datives such as *a dainà frau* (D), *(vs. dai frau* (N=A), see above example 2). Thus, Bavarian lacks any correlation between PDM and the ±distinctiveness of dative case in both directions.

Let us turn now to Alemannic:

**Table 2 • Alemannic (Alsation, Rünneburger 1989):**

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<td><strong>de ante</strong></td>
<td><strong>minne ante</strong></td>
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As in Bavarian, the three cases, nominative, accusative and dative, are morphologically distinguished only in personal pronouns (column 7). Unlike in Bavarian, all other Alemannic case paradigms (1-6) are uniform: nominative and accusative merge, whereas the dative is kept distinct by determiner inflection. However, although the dative forms are explicit in all instances, Alemannic too shows PDM as Bavarian does. Even more evidently than in Bavarian, PDM in Alemannic can by no means be explained as a compensatory strategy for the lack of dative case morphology: not only is the dative the best conserved case, it is the only case that is distinguished from the others morphologically.

To sum up, no correlation between the lack of overt dative morphology and the occurrence of PDM has been found; this holds strikingly for Alemannic, but – though less evidently – for Bavarian as well. Thus, a functional explanation of PDM in terms
of possible case-distinctions does not hold; PDM is redundant with regard to the structure of case paradigms.

4 • SYNTACTIC BEHAVIOR OF THE DATIVE MARKER

Is the dative marker a preposition, or something else? Not only its material realization, but also its syntactic behavior is for the most part in accordance with that of prototypical prepositions; nevertheless, in some respects its behavior deviates from that of prepositions, as will be shown in this section.

a) The dative marker behaves like a preposition

The dative marker seems to occupy the same structural position as true prepositions do. No dative marker can be inserted if the dative NP is embedded in a PP:

(8) *[mit [i de frau]]
    with IN the:Dsf woman
    'with the woman' (informant consultations)

In Upper German, there are clitic forms of personal pronouns. Prepositions cannot be integrated into a clitic cluster. Thus, if a dative clitic is involved, it cannot be prepositionally introduced; PDM is possible only if the full form of the pronoun appears outside the clitic cluster:

(9) hëd-mer-em -s gsëid? vs. *hëd-mer-i-em-s gsëid? vs. hëd-mer-s i ímm gsëid?
    has one him(clit):D it told IN him:D
    'did they tell it to him?'
    (Lucerne; Fischer 1960:250f)

Finally, the dative marker surfaces in fused morphemes <dative marker + determiner>, in parallel with fused morphemes <preposition + determiner>: am 'AN_theDsm' like am 'at_the:Dsm' or zum 'to_the:Dsm'.
b) The dative marker behaves unlike a preposition

Unlike prepositions (10c), the dative marker cannot be omitted in coordination (10b):

(10) a. bringsch de Chueche [i de Susi] oder [i de Muetter]?
    bring:2s the cake IN the:Dsf (name) or IN the:Dsf mother
    'do you bring the cake to Susi or to the mother?'
    (informant consultations)

   b. *bringsch de Chueche i [de Susi oder de Muetter]?

   c. mit [de Susi und de Muetter]
    with

Unlike prepositions (11c), the dative marker must not be separated from determiners or quantifiers by nume 'only' (11a):

(11) a. *daas schicke mer i nume zwöi Lüüt
    that send:1p we IN only two persons
    'that we'll send to only two persons' (informant consultations)

   b. daas schicke mer nume i zwöi Lüüt (=ok.)

   c. i nume zwöi Minuute
    in only two minutes
    'in only two minutes (...it was ready)'

Unlike prepositions (12b), the dative marker cannot be a host for clitics (12a):

(12) a. *í-mer (only: i mír) (informant consultations)
    IN-me:D(clit)
b. zúe-mer
to-me:D(clit)
(Lucerne; Fischer 1960:246f)

The dative marker does not form so-called pronominal adverbs, but prepositions do:

(13) *demit 'there-with', drin 'there-in'; but: *drin 'there-IN' (IN = dative marker)

In sum, the observations made (10-11) indicate that, informally speaking, the dative marker is 'closer', more coalescent to the head noun than prepositions are. (12-13) suggest that the dative marker is a structural dummy element that is inserted by syntax. This diagnosis can fairly well be formalized in terms of the KP hypothesis presented by Löbel (1992) or Bader et al. (2000:51), in which it is assumed that NP is dominated not only by DP, but also by a functional projection KP bearing case features. The syntactic behavior of the dative marker suggests that its structural position is lower than Pº but higher than Dº. However, the KP hypothesis does not, as far as I can see, provide an explanation for the distributional properties of PDM discussed in section 5.3 below; I will show that the occurrence of PDM is for the most part governed by discourse-functional and phonological factors, i.e., that its occurrence is not fully predictable from syntactic or semantic structure. Thus, although the KP hypothesis provides an assumption about the structural position of the dative marker that is perhaps correct, it does not solve the distributional problems in a satisfying way.7

7 Cardinaletti & Starke 1995:28-29, 36 propose two functional projections above DP, namely C_N P and Σ P. C_Nº is the structural position of dummy IO markers such as a in Italian; thus, C_N P corresponds to, as far as I see, what is called KP in other notations. Σº bears prosody-related features and is called elsewhere FocusP. Interestingly, the occurrence of PDM is in fact closely related to focus and sentence stress, as will be shown in section 5.3.2. Although the place for a dummy case marker would be (following Cardinaletti & Starke), C_Nº rather than Σº, ΣP could possibly have some importance for PDM.
The insertion of the dative marker is subject to cross-dialectal and internal variation.

Cross-dialectal variation concerns not only the fact that PDM is attested only in some parts of the Upper German dialect area. Even within the PDM-zones the use of the dative marker is not uniform, but underlies stronger or weaker restrictions in one or another area (see below, subsection 5.3).

Internal variation has been recognized but not explained by some dialect grammarians:

(14) "Der wem-Fall-Artikel dr wird gerne durch in verstärkt [...]. Ebenso können auch Fürwörter durch in verstärkt werden" (The dative article dr is often reinforced by in; in the same way pronouns can be reinforced by in).
(Kaiserstuhl, Baden; Noth 1993:368; emphasis GS).

(15) "Neben dem einfachen dat. besitzt die ma. eine mit der präp. 'in' umschriebene form" (The dative article dr is often reinforced by in; in the same way pronouns can be reinforced by in.)
(Pernegg, Carinthia; Lessiak 1903:164; emphasis GS).

Thus, the dative marker seems to be used not consequently, i.e., not every dative NP undergoes PDM. This diagnosis is confirmed by corpus analysis, informant consultations and observations of spontaneous speech.

It has indeed never been considered in the dialectological literature whether prepositionally introduced dative NPs and bare datives are contrasting on some grammatical or semantic level, or whether they are morphological alternants, and if so, in what distribution. Hence, it must be asked what is the grammatical status of the coexistence of the two forms. This question will be considered in the following subsections. I will first discuss whether there is any semantic contrast between bare
and prepositionally marked datives (5.1). In 5.2 I will ask whether there are any syntactic slots where PDM is required. In 5.3, I will isolate environment factors influencing the more or less preferred insertion of the dative marker. In 5.4, I will sum up the observations and try to translate some of them into an OT notation.

5.1 • No semantic effects
PDM is not sensitive to different semantic roles, and PDM does not encode different information than does a bare dative NP.

PDM is found in all the semantic roles that a dative NP can bear in Upper German as well as in Standard German. Some relevant examples are given below.

RECIPIENT:
(16) er git dr Öpfel a mir, statt a dir
    he gives the apple AN me:D instead AN you:D
    'he gives the apple to me, not to you'
    (Glarus; Bäbler 1949:31)

BENEFACTIVE:
(17) häbed a dem Fuerme ds Ross
    hold:ipv2p AN this:Dsm driver the:n horse
    'hold the horse for this driver'
    (Glarus; Bäbler 1949:31)

POSSESSOR, [+alienable]:
(18) däs is än wen sei Haus?
    that:Nsn is IN who:A/D his:Nsm house
    'Whose house is that?'
    (Carinthia; Pichler-Steinern 1999:55)
POSSESSOR, [-alienable]:

(19) hed Eine’ öppis z’sägen, se soll-er’s hérzhaft sägen.

has someone something to say so should-he-it courageous say

Ich wo’t g’wüss a” Niemerem es Schlössli a”s Redhûs hänken.

I want certainly AN nobody:Ds a lock at-the mouth hang

'If someone has something to say, he should say it courageously. I certainly don't want to hang someone a lock at the mouth.'

(Einsiedeln SZ)₈

EXPERIENCER:

(20) s isch i allne glychlig gange

it is IN all:Dp alike gone

'it was the same for everybody' (literally: 'it went alike to everybody') (Lucerne)

SOURCE:

(21) es klima, wo a de wüsseschafter de mumm nimmt

a climate REL AN the:Dp scientists the:m power takes_away

'a climate taking away the power from the scientists'

(sp.; Zurich)

Although dative NPs are prototypically high in animacy, inanimate ones undergo PDM as well:

(22) en schii, wo a däm standard entspricht

a ski REL AN this:DSm standard agrees

'a ski which agrees with this standard'

(Andermatt, Uri; Bernhard Russi, TV-interview)

PDM can be attested with indefinites as well:

(23) Geb daas e öpperem ander aa

give:ipv2s this IN someone:Ds else (preverb)

ᵦ IDIOTIKON IX, 728.
'tell this to someone else'
(Lucerne; Fischer 1960:238)

So far, PDM seems to be completely independent from the semantic role the dative NP bears as well as its inherent semantic properties such as animacy, definiteness, or inalienable possession. In short: PDM has nothing to do with semantics.

However, one consultant postulates a slight semantic difference between prepositionally introduced datives and bare ones. PDM should be preferred when directionality is involved (RECIPIENT), but not with non-directional datives like POSSESSOR:

(24) «Some older speakers translated the example 'he says it to the mother' spontaneously with a bare dative. However, they told me that the prepositional construction means rather that something 'moves towards' the dative object. They also accepted ich sägs a der Muäter [PDM]. But: Ås gheerd der Muäter [no PDM], it belongs to the mother» (p.c. Karl Imfeld, priest in Kerns, Obwalden).

These observations have not been confirmed by my own investigations and will not be considered any more in the present paper; nevertheless, a possible preference for directional datives will be subject to further research.

5.2 • Syntactic slots
It is possible to isolate some syntactic slots where PDM is strictly excluded, namely true PPs and clitic clusters, as has already been shown in section 4.

About other positions, however, where PDM is allowed, no strong prediction can be made, i.e., the insertion or the lack of the dative marker does not result in any grammaticality contrast.

PDM is highly preferred but not obligatorily required in right-dislocated datives:

(25) die händ immer no nüüt zalt [a de Jude]
these have:3p always still nothing paid AN the:Dp jews
'these have still nothing paid to the jews'
(sp., Zurich; informant consultations)

In this point, PDM-datives exactly behave like prototypical PPs which can be right-dislocated, too. However, many speakers accept a right-dislocated dative NP without PDM.\textsuperscript{9}

The relative order of direct and indirect object in the middle field doesn't cause any asymmetry in the acceptance of PDM.\textsuperscript{10} Likewise, it is irrelevant whether the dative is a complement of a verb (see above 4), whether it is adnominal (18), or whether it is a so-called free dative (17). Three- vs. two-place predicates (22) pattern alike with respect to PDM.

To sum up, the occurrence of PDM is not predictable from the syntactic position the dative NP takes. With the exception of clitic clusters and PPs, every dative NP is a possible candidate for PDM.

5.3 \textit{Asymmetries in occurrence}
The occurrence of PDM is, though variable with respect to semantic contrasts and syntactic positions, not completely unstructured; variability does not mean that there is no regularity at all. It is indeed possible to identify preferred environments for PDM. The preference for PDM depends on whether the NP is lexically filled or pronominalized, on information structure, and on phonological factors such as sentence stress and rhythm.

\textsuperscript{9} Many speakers of Alemannic, at least. I have not yet tested this point with speakers of Bavarian. Moreover, it is nearly impossible to elicit right-dislocation. Informants usually reject it, although they use it constantly.

\textsuperscript{10} And if it does, this is rather due to information structure, see below, section 5.3.2. What is certain is that no grammaticality contrast is involved here.
5.3.1 • NP >> personal pronoun
There is a clear asymmetry between lexically filled NPs and personal pronouns. The former are the preferred environment of PDM.

This implicative hierarchy is reflected in the geographical distribution of PDM with personal pronouns: the places allowing PDM with personal pronouns are a subset of the entire PDM zone. In Alemannic, they form clusters in Middle Alsace (in contrast to the adjacent northern and southern areas), South-East Black Forest, and parts of Central Switzerland.

There is no evidence for PDM with personal pronouns from Middle Bavarian; in South Bavarian, it is occurring at least in Carinthia and the Tyrol.

Even in the dialects allowing PDM with personal pronouns, PDM doesn't occur consequently. At some places, however, PDM seems in fact to be consequently used and therefore obligatory. This can be the case in:
- some areas of Central Switzerland, above all Lucerne and its environs, but also the valleys of Muotathal and Melchtal; moreover some places in the Canton of Aargau;
- Middle Alsace;
- Carinthia (basilectal speakers);
- Fersina Valley (Bavarian language island in Trentino, Italy): PDM is obligatory with lexically filled NPs and highly preferred but not strictly required with pronouns.

11 I.e., full forms of personal pronouns. Note that in Upper German there are full forms as well as clitics. In clitic clusters, PDM is excluded, see above section 5.2.
12 See Pichler-Stainern 1999:57 for Carinthia, Schatz 1897:159 for Tyrol.
13 Evidence from the Syntactic Atlas of Swiss German Dialects (see Bucheli & Glaser in this volume) and my own informant consultations. Speakers from these areas reject bare datives even if suggested. As for the Muotathal Valley, my recent fieldwork (January 2001) unquestionably confirms that PDM is in fact obligatory here.
15 Pichler-Stainern 1999:57. However, Pohl (1989:63) notes that PDM is used only “occasionally”.
5.3.2 • Information structure and sentence stress

To a large extent, the insertion of the dative marker depends on information structure and sentence stress. Focussed and thus intonationally highlighted dative NPs show PDM with greater preference than unfocussed ones do. For illustration, compare examples (27-28), collected from the same text:

(26) diä Eifachheit isch nur nu i dr Alp hinnä z findä gsy, 
    this simplicity is only still in the upland behind to find:INF been 
wo ich ästags uf dr Gritt a dry Chindä us dr Geschneralp 
where I once on the (place name)AN three children:Dp from the (place name) 
    begägnet bi 
    met am 
'this simplicity was found only on the uplands, where I met once on the Grüt three children from the Göscheneralp'
(Göschenen, Uri)16

(27) Äs het si gheert, dass mä dennä Mannä im Fäld zum 
    it has REFPl be suitable that one this:Dp men in_the:Dsn field to_the:Dsm 
    Troscht äinisch Chabis unt Schaffleisch ufstellt 
    consolation once cabbage and mutton offers 
've it was suitable that one offers these men in the field cabbage and mutton as consolation'
(ibd.)

In (26), the dative NP a dry Chindä 'to three children' is the most salient piece of information in the sentence. In the context of the story told here, the encounter with the children is an unexpected event the elaboration of which will be continued in what follows; for our purposes, of course, the continuation itself is not of further interest. In (27), however, dennä Mannä 'to these men' is already well established as a discourse topic and thus minimally rhematic. The most salient information here is what food

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17 5.3.2 and 5.3.3 refer to observations made in Alemannic only. It is not clear whether they can be extended to Bavarian as well.
they were served, or, in other words: what is highlighted is rather another constituent than the dative NP.

In order to capture these differences less intuitively, let us work with the following basic assumptions\(^\text{19}\) about focus and sentence stress:

(i) **Focus**
   It is necessary to distinguish focus constituents from those to which no focus is assigned. Focus constituents are those bearing the information unit the speaker assumes to be the most relevant according to the knowledge and the interest of the hearer. Focus constituents are intonationally highlighted. They tend to be placed towards the right edge of the sentence rather than towards the left edge. A dative NP can be a focus or a non-focus constituent.\(^\text{20}\)

(ii) **Completive vs. contrastive focus**
   When we come to the discourse function of focus, we have to distinguish completive (information) from contrastive focus. Completive focus just adds new information to the hearer’s knowledge which the speaker assumes to be unknown so far. In contrastive focus, however, the information under focus is in contrast to the assumptions of the hearer. Given a restricted range of alternatives, it rejects all options except one. Contrastive focus is intonationally more highlighted than completive focus.

(iii) **Stress suppression of non-focus constituents**
   Non-focus constituents are suppressed intonationally. This stress suppression is stronger with contrastive focus than with completive focus.\(^\text{21}\)

\(^{19}\) These assumptions are partly adopted from Siewierska 1991:149 and Dik 1997:330-335, though simplified for our purposes.

\(^{20}\) In the most trivial cases, the IO tends to be a non-focus constituent; prototypically, it shares semantic and pragmatic properties with the subject (high in animacy, definiteness, and topicality). In this sense, a focussed IO is the marked case.
The distinctions made here form a hierarchy of increasing intonational prominence, indicated by the values 0-3:

- A non-focus dative NP cooccurs with contrastive focus: 0
- A non-focus dative NP cooccurs with completive focus: 1
- The dative NP bears completive focus: 2
- The dative NP bears contrastive focus: 3

If PDM really correlates with intonational prominence, then an increasing preference for PDM is expected, following the hierarchy proposed here.

I tested sentences from all the four degrees with PDM speakers. The results were striking, as they exactly followed the prediction: the more a dative NP is intonationally highlighted (due to its discourse function), the higher is the preference for the insertion of the dative marker. It is necessary to say that I observed a great deal of variation from speaker to speaker and from one dialect to another. For instance, some speakers spontaneously inserted the dative marker only on degree 3 of intonational prominence, but accepted it for all degrees if it was suggested, others only accepted PDM on degrees 2-3 but nowhere else etc. Nevertheless, all individual informant consultations were covered by the hierarchy proposed here. What is constant is not a concrete position cutting the hierarchy into two pieces, 'always PDM' and 'never PDM', but the preference direction as such.

How can this preference direction be explained? Why do discourse-functionally more salient IOs tend to appear as PDM rather than as a bare dative NP? I would propose that the asymmetry can be motivated by iconicity principles. PDM involves more structural complexity and more phonological material (namely: one syllable more) than a bare dative NP. If there are two possible encoding options, a more expensive one (PDM) and a less expensive one (bare NP), it is highly iconic when the more expensive one is used when more salient information is transported by it. On the other hand, less rhematic constituents tend, if iconicity holds, to involve less material.\textsuperscript{22}

\textsuperscript{21} Welke 1992:47.
Since information structure is connected with sentence stress, it is possible to formulate a purely phonological correlation between sentence stress and PDM: the encoding option of the IO involving a longer string of syllables (=PDM) is preferred when the IO bears main sentence stress.

Interestingly, a similar generalization has been made in prosodic phonology. The 'Weight-to-Stress-Principle' (WSP) has been suggested in the context of quantity-sensitive stress patterns. It accounts for «the close relation between syllable weight and [prosodic, GS] prominence» and can be translated as «Heavy syllables are stressed» (Kager 1999:155). If we adopt WSP for our purposes and extend its scope from word stress and syllable weight to sentence stress and 'constituent weight', the prediction would be: constituents bearing main sentence stress attempt to contain as much material as possible. Given two equivalent encoding options for the IO, the 'heavier' one (=PDM) is chosen when it bears main sentence stress.

5.3.3 • More on phonology
There are some asymmetries suggesting that the insertion of the dative marker possibly depends on factors that are rather phonological in nature, such as the principle of stress clash avoidance:

(28) *CLASH: Two adjacent stressed syllables are avoided.23

This principle is well known from stress patterns in German (or English) compounds, compare:

(29)  a. 

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<td>x</td>
<td>x</td>
</tr>
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</table>

  Marschall  vs.  Feldmarschall  (Ramers 1998:115)

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23 Kager 1999:165.
In (29a), the first syllable bears word stress. In (29b), main word stress is assigned to the first element of the compound. Secondary stress does not remain on the first syllable of Marschall, but is shifted to the second, due to *CLASH.

With respect to PDM, the prediction *CLASH provides is that PDM is more preferred if the insertion of the (always unstressed) dative marker separates two stressed syllables, and it is less likely to be chosen if the insertion of the dative marker does not contribute anything to an avoidance of a stress clash.

Example (30) is in fact in accordance with *CLASH:

(30) er hed das gält  i  all ne  ggëë

he  has this money IN  all:Dp  given
'h he gave this money to all of them'
(sp., Lucerne; informant consultations)

The dative marker is set here between two stressed syllables:

(30a) x  x

x  x  x  x

gäß  i  all  ne

In (31), however, the dative marker does not intervene between two stressed syllables:

(31) er hed die sach en i  all ne  ggëë

he  has this things  IN all:Dp  given
'h he gave these things to all of them'

(31a) x  x

x  x  x  x  x

sa  ch en  i  all  ne
Speakers I consulted agree in saying that, if there is an asymmetry between (30) and (31) with respect to PDM, it is (31) where the dative marker is "better", "more necessary".

5.3.4 • Restrictions on PDM: a case for Optimality Theory?
In this subsection I attempt to sketch how a regulation mechanism for PDM could be formulated, derived from the distributional properties of PDM presented above.

First, we have to decide (i) whether we are dealing with a PP subcategorized by, prototypically, a verb, with the dative marker as head, which then requires a dative NP as its complement, or (ii) whether it is the presence of a dative NP in the clause that triggers the insertion of the dative marker as a structural, dummy element. There is no doubt the the latter assumption is more likely than the former. Remember the non-preposition-like behavior of the dative marker discussed in section 4 above. A PP headed by a true preposition containing some lexical content can under no circumstances be replaced by a clitic, whereas this is possible with a dative NP, though introduced by the dative marker. Furthermore, it is possible for true prepositions but never for the dative marker to form pronominal adverbs. This suggests that the dative marker is not 'there from the beginning', but is inserted in some stage of the derivation.

In the few dialects\textsuperscript{24} where the dative marker is obligatorily inserted whenever a (non-clitic) dative NP is involved, the matter is rather simple: the presence of a dative NP in the clause automatically triggers PDM unless a true preposition is already there; the dative marker is just plugged in, without any consideration for the requirements of information structure or the phonological environment.\textsuperscript{25}

Much more interesting with regard to syntactic microvariation, however, are the dialects where PDM is optional. Here, syntax provides two options for the materialization of a case feature $\text{DATIVE}$: dative case morphology, or dative marker + dative case morphology. In other words: in Upper German syntax there is a

\textsuperscript{24} See section 5.3.1.

\textsuperscript{25} For instance, in Mir verchauffid i de Chunde nur Mère-Josephine-Poulets ‘we sell IN the:Dp clients only Mère-Josephine chicken’ (sp., Lucerne), PDM cannot be motivated by WSP or "CLASH."
mechanism guaranteeing that whenever a dative NP is involved, a dative marker can be inserted. Nothing else is regulated by syntax. Syntax provides the technique of dative marker insertion, without determining when it is applied; whether the insertion happens or not is not specified in syntax but by non-syntactic factors (such as information structure and prosodic phonology).

I think it is useful to separate the insertion mechanism as such from its (non-syntactic) restrictions. Thus, in the description of PDM, we have to account for an insertion process and, apart from it, for mechanisms governing and constraining this process.

Let us start with the restrictions. We have seen that the distribution of PDM is guided by preferences formulated in terms of different linguistic levels. Furthermore, the relevance of these preferences differs diatopically. Nevertheless, we would like to model this in one homogeneous notation. Such a notation has to satisfy the following requirements:

(i) **Explicitness**: All relevant factors are explicitly formulated.
(ii) **Coherence**: All relevant factors can be integrated into one coherent regulation mechanism.
(iii) **Flexibility**: Diatopic contrasts can be formulated by means of a recombination of the relevant factors.

Optimality Theory does in fact provide – by means of constraint ranking – an explicit, coherent and flexible notation. In OT, it is possible to describe the regulation of PDM as an interaction of ranked constraints, i.e. possibly conflicting but hierarchized principles. Diatopic differences can be accounted for by a re-ranking of these constraints. For illustrational purposes, two tableaux are presented here, involving two constraints with relevance for PDM.

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26 Only when I was revising the present paper, I came upon Vincent 1999. Vincent analyses the developments of PPs from Indo-European to modern Romance in the light of Lexical-Functional Grammar (LFG, see Bresnan 2001). As far as I see, the LFG framework exactly fits the requirements formulated here. In LFG, a[rgument] structure, f[unctional] structure and c[onstituent] structure are parallel levels of grammatical representation. These levels and the way they are related can be separately described. It is very likely that within the relational architecture of LFG PDM can be described as a matter of correspondence between abstract f-structure features and their overt expressions on c-structure. Moreover, it is possible to integrate into LFG OT-like constraints since the mapping between f-structure and c-structure «is determined by the interaction of rerankable constraints rather than in absolute terms» (Vincent 1999:1144).

27 Although I think that it is productive to adopt these phonological constraints for our purposes, this is, of course, not unproblematic methodologically.
WSP: Constituents bearing main sentence stress attempt to contain as much phonological material as possible (cf. section 5.3.2 above).

DEPIO: 'No epenthesis' (= 'No insertion'). This constraint has been developed in the context of segment epenthesis processes in phonology. Under the assumption that the insertion of the dative marker is also a sort of epenthesis but on the syntactic level, we extend the scope of DEPIO to syntax.

If DEPIO dominates WSP, no PDM is possible, for DEPIO is violated:

<table>
<thead>
<tr>
<th></th>
<th>DEPIO</th>
<th>WSP</th>
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<tbody>
<tr>
<td>dr Frau</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>i dr Frau</td>
<td>*!</td>
<td></td>
</tr>
</tbody>
</table>

This is the case in dialects where PDM does not occur at all. A re-ranking of DEPIO and WSP, however, lets the PDM candidate win, if the dative NP is focussed:

<table>
<thead>
<tr>
<th></th>
<th>WSP</th>
<th>DEPIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>dr Frau</td>
<td>*!</td>
<td></td>
</tr>
<tr>
<td>i dr Frau</td>
<td>*</td>
<td></td>
</tr>
</tbody>
</table>

This tableau covers dialects where PDM is possible but only if the dative NP bears main sentence stress. Note that we are dealing here with a classical conflict between a faithfulness constraint (DEPIO) and a markedness constraint (WSP), whereby the latter is contextually bound.

Other factors governing dative marker insertion can be translated into OT constraints as well. The purpose of the this section, however, is not to present a complete OT analysis; what I intend here is only to demonstrate that constraint (re-) ranking is a

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28 Kager 1999:68.
promising means for the description of dialect variation. For a more extensive
discussion of an OT approach, its advantages and problems, I refer to Seiler
(forthcoming).

Let us turn now to the insertion itself. In dialects where PDM is consequently used,
the mechanism triggering the insertion must not be dominated by constraints that
play a part in other dialects where the occurrence of PDM underlies variation.
Certainly, the effect of the insertion process is rather simple to describe:

(32) Postprepositional dative NPs are preferred over bare dative NPs.

If the dative NP is already embedded into a PP, nothing happens. If no preposition is
given, a dummy preposition (=the dative marker) is inserted, due to (32). Of course,
(32) is much too powerful for dialects where PDM does not occur consequently, but it
can easily be constrained by the principles involved in what I called above the
'regulation' of PDM. A more serious problem is how the existence of such an insertion
mechanism can be motivated at all: what is 'wrong' with Upper German dative NPs?

In order to find an answer it is necessary to consider the diachronic development. I
will argue in the following section that the insertion mechanism may be motivated by
the developments of Upper German case systems. It will be shown that PDM solves a
problem in the Upper German encoding systems of grammatical relations. The way
the dative marker itself emerged materially (section 6.1) completely fits the systematic
diachronic motivation I will propose (section 6.2).
ON THE EMERGENCE OF PDM

6.1 Where does the dative marker come from? A scenario

I suggest that the dative marker in or an is not due grammaticalization of the true prepositions in and an, but rather emerged by reanalysis of the definite article Dsm, a process that was possible only under specific phonological conditions. The reanalysis proceeded in three stages A - C:

A: MHG dëm ('the:Dsm') > 'm, -m in postprepositional enclisis

The Middle High German definite article Dsm dëm lost its initial dental when cliticized to a preposition. This is attested already in the late Middle Ages, as is shown in (33):

(33) obem 1280, uffjem 1270, am 1277, im 1258, underm 1276, us(s)em 1409, vom 1277, vorem 1280, hinderm 1403, bim 1280, zem 1245 (IDIOITIKON XIII, 1191f).

B: Extension of this form into other environments:

By analogical extension, this dentalless form has come into use also in other environments, i.e., in other positions than only after preposition:

(34) hern Erchenpreht em purkcrave von Gors

lord:Dsm (name) the:Dsm earl of (name)

1301, Altenburg (Weinhold 1867:376)

Phonetically, this form was very similar or even equal to the preexisting fusional morphs im and am = <preposition (in or an) + definite article Dsm>, especially insofar

29 Although there are prepositional constructions in Standard German as well as in Upper German that are functionally equivalent with a bare dative NP if this encodes a RECIPIENT: Ich habe das Buch an den Vater geschickt, literally 'I have the book to the:Asm father sent', and ich habe das Buch dem Vater geschickt 'I have the book the:Dsm father sent'. Note, however, that directional an assigns accusative but not dative. It cannot be directional an plus accusative that was grammaticalized into PDM, for in general it is not isolated morphemes (an) that are grammaticalized, but constructions (an plus accusative). If this construction was grammaticalized into an analytic encoding of the IO, something else would have resulted than PDM, namely an plus accusative (or, in Alemannic: an plus direct case) and under no circumstances an plus dative.

30 This process is plausibly argued for in Nübling 1992:201.
as *im* and *am* are often phonetically weakened in Upper German. Thus, the three morphs MHG *dëm* 'the:Dsm', *im* 'in_the:Dsm', and *am* 'at_theDsm' merged phonetically in [’m].

C: Reanalysis of ’m as ‘something plus -m’
The crucial step is that the exponent ’m has been reanalyzed as a fusional morph where the definite article Dsm is attached to something. This was possible due to the existence of a paradigm of fusional morphs <preposition + definite article Dsm>, e.g. *bim* (=bi+’m ’beside_the:Dsm), or *zum* (=zu+’m) among others. The vowel resulting from this reanalysis was in some areas *i*, in others *a*.31

The use of the dative marker has been extended to environments other than the definite article Dsm:

(35) am => a der, a dëre, etc.

The strongest argument for this scenario comes from dialect geography: the PDM-zone is included in a zone showing loss of the initial dental of MHG *dëm*. In other words, PDM had a chance to arise only where the initial dental was lost. In Highest Alemannic (Wallis, Bernese Highlands) PDM is not attested – and the article is *d’m, dum*.

6.2 The rise of PDM in the context of Upper German case systems
In this subsection I will suggest that the Upper German dative has a structural property which provides a diachronic motivation and thus an explanation for why in PDM dialects there exists an insertion mechanism at all.

PDM makes it possible to ‘simulate’ a prepositional environment of the dative: whenever a lexical preposition is not given, a dummy preposition (= the dative

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31 It is possible to correlate the development towards *i* or *a* with other phonological properties of the respective dialects. For instance, it is a common phenomenon in some dialects that the nucleus of reduced syllables is realized as *i* rather than as ’.
marker) can be inserted. In this sense, the insertion of the dative marker is similar to other insertions of expletive elements, since they are inserted in order to occupy a structural position that must not be empty at the surface.

Why is this so? It is a fact that in Upper German – despite PDM – the most frequent occurrence of dative case is not as an IO (bare dative NP) but as a complement in (true) PPs.\textsuperscript{32} Thus, it is a structural property of dative NPs even in pre-PDM-Upper German that they usually occur postprepositionally. In PDM dialects, then, this prototypical occurrence of the dative is generalized.

Therefore, I conclude that in Upper German the dative is about to be reinterpreted as a prepositional case.

The way the dative marker itself emerged exactly fits this assumption: remember that 'm 'the:Dsm' has been reanalysed as 'something plus -m'. Thus, it must have been more attractive in PDM-dialects to interpret 'm as a prepositional fusional morph than as a bare dative article form – which was the starting point for the extension of the dative marker to other, non-fusional environments.

In Alemannic and Bavarian, the encoding strategy of the IO merges by means of PDM with that of other oblique relations (relations other than subject and direct object); in other words, PDM makes it possible to give up a separate encoding strategy for the IO. Furthermore, in Alemannic nominative and accusative always merged morphologically (except in personal pronouns) in a, let us call it, direct case, such that the dative is the only morphologically marked case. Thus, in pre-PDM Alemannic, the IO is the only grammatical relation expressed exclusively by case marking. Consequently, this encoding strategy of the IO is completely isolated. With PDM, an encoding of grammatical relations by means of morphological case marking alone can

\textsuperscript{32} See Nübling 1992:221. Nübling presents statistics concerning the ±postprepositional occurrence of the dative.
be given up altogether (subject and direct object are both realized in the direct case nominative= accusative):³³

<table>
<thead>
<tr>
<th>grammatical relations</th>
<th>encoding strategies (no PDM)</th>
<th>(PDM)</th>
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<tr>
<td>subject</td>
<td>direct case</td>
<td>direct case</td>
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<tr>
<td>direct object</td>
<td>direct case</td>
<td>direct case</td>
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<tr>
<td>indirect object</td>
<td>dative case</td>
<td>prep. + dative case</td>
</tr>
<tr>
<td>oblique</td>
<td>prep. + dative (/direct) case</td>
<td>prep. + dative (/direct) case</td>
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Typologically, the status of the IO is very controversial; Dik (1997a:370) remarks that there is no typological legitimation for an independent IO position on the Accessibility Hierarchy (‘Keenan/Comrie-Hierarchy’), because what is mentioned as 'IO' usually patterns either like the DO, or like obliques. In pre-PDM-Alemannic, the IO is not supported by the encoding system insofar as neither SU and DO nor obliques are encoded by the same strategy.³⁴ Thus, it is not unlikely that the IO encoding tends to merge with that of obliques due to the lack of system-internal support. In pre-PDM-Bavarian, the IO encoding strategy – case marking – is better supported only insofar as case marking is involved also in the DO encoding (masculine singulars); however, this support collapses since dative case morphology is not distinct here, due its merger with the accusative.

If I am right in assuming that the dative in Upper German PDM-dialects is reinterpreted as a prepositional case, one problem, however, remains: why does PDM

³³ Interestingly, the Alemannic direct vs. oblique distinction is reflected also in relativization patterns: Whereas the IO and all other obliques can (and must for many speakers) be pronominally resumed, this is completely excluded for SU and DO.

³⁴ One could think that in languages like, for instance, Russian, the IO is also 'isolated' insofar as it is the only grammatical relation encoded by dative case. What I mean, however, is that the strategy type ‘encoding by case marking’ as such is well established and thus supported in Russian, but not in Alemannic.
not always occur? If the prepositional case (=dative) triggers the insertion of a dummy preposition, why do bare dative NPs nevertheless surface in most PDM dialects?35

7 • CONCLUSIONS: EMERGENCE VS. IMPLEMENTATION

The problem mentioned at the end of the preceding section can be solved within a specific approach to the development of grammar that I will propose in what follows. The case of PDM is very instructive with regard to the more general issue of how grammatical change has to be modelled (theoretically) and investigated (empirically).

Let us start with the geographical picture. In the course of the evaluation of all source types that were available it became apparent that the instances of PDM are widespread over a large area, but only in some parts of it they form homogeneous PDM zones. Thus, in many regions there is no clear-cut distinction between areas with 100 percent PDM and others without any reflexes of PDM. Furthermore, the geographically homogeneous PDM areas differ in the systematic prominence of PDM (i.e., the use of PDM is more or less obligatory or constrained, respectively). Where the two options PDM vs. bare dative NP coexist, their distribution is guided to a large extent by discourse-pragmatic and phonological principles that can be traced back to the fact that PDM counts one syllable more. Only in a few areas, however, the regulation of PDM seems to be fully syntactizised, i.e. it has become a purely syntactic automatism.

What do these facts teach us about the evolution of grammar in time and space? I think that it is essential for a historical syntactician to distinguish between (i) the emergence of an encoding strategy and (ii) its stages of implementation.36 Grammatical innovations by all means involve stages of variation between

35 This issue is not relevant for dialects where PDM is consequently used, see section 5.3.1.
36 The distinction proposed here is inspired by Haspelmath’s theory of diachronic adaptation (Haspelmath 1999). For a detailed discussion of this approach and its consequences with respect to PDM, I refer to Seiler (forthcoming). Haspelmath proposes a theory of ‘diachronic adaptation’: What happens in grammatical change is that given a range of equivalent variants one of them is chosen due to its adaptivity with respect to its functionality or naturalness, whereas others die out. For my purposes, the most relevant aspect is that within this framework grammatical change necessarily involves variation; this is what led me to the distinction between emergence (= a new variant appears) and stages of implementation (=which candidate is chosen under which circumstances).
alternatives, and it has to be investigated what principles guide this variation as well as under which conditions the prominence of one alternant increases, possibly until obligatorization – which is, however, only the final step.

Emergence involves the genesis of a grammatical pattern as such. In the case of PDM, the emergence consists of the reanalysis of definite article forms as fusional morphs <dative marker + article>. Of course, there are many other diachronic processes than reanalysis resulting in new patterns, such as, for instance, the grammaticalization of lexical into grammatical units.

Implementation involves the development this pattern takes, its (changing) paradigmatic relations to similar patterns, its (changing) combinatorics, its (changing) functional extent, possibly its obligatorization, but also its geographical spread as well as its sociolinguistic transmission, etc. What concerns PDM, it is a matter of implementation that some dialects allow it only with lexically filled dative NPs whereas others allow it also with personal pronouns, or that under focus PDM is much more preferred, or to what extent it is obligatorized, etc. 37

Why is the conceptual distinction between emergence and implementation so important and so useful for our purposes (and, in my opinion, for the study of grammar and especially dialectology in general)? Because it provides an explanation for a paradox in Upper German syntax: on the one hand, there seems to be a problem with bare dative NPs such that a dative marker insertion mechanism is introduced, but, on the other hand, this insertion is to a large extent optional.

In section 6.2 I tried to motivate the emergence of the insertion mechanism in the context of Upper German case systems. Thus, although the pure existence of such a

37 It is not unlikely that information structure and sentence stress (among other factors) played some part in the development of the Romance IO, as long as case marked NPs and PPs were in free variation. I think that principles like WSP (‘weight-to-stress’, see above, section 5.3.2) can be involved in what is called ‘emphasis’, ‘expressivity’, or ‘extravagance’ (Haspelmath 1999a) in grammaticalization theory (it is due to ‘emphasis’ that the use of more expensive, more explicit constructions increases – which is, in principle, highly uneconomic; consequently, such constructions get over time more and more desemantizised and automatized). Principles like WSP provide a more concrete motivation for the choice of a more expensive construction, rather than a quite unspecific notion like ‘emphasis’ does.
mechanism can (I hope so) plausibly be motivated, nothing is said about its stages of 
implementation. It would be highly unlikely if a newly emerged grammatical strategy 
were immediately obligatorized, i.e. implemented to the full extent. Instead, the 
emergence of PDM first results in the coexistence of two encoding options. In this 
sense, the variation between PDM and bare dative can be seen as an intermediate 
stage of the implementation process of PDM. It is very likely that such 
implementation processes extend over long periods, and it is certainly not said that 
PDM ever will be fully obligatory everywhere.
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Meaning</th>
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<tbody>
<tr>
<td>A</td>
<td>accusative</td>
</tr>
<tr>
<td>clit</td>
<td>clitic</td>
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<tr>
<td>D</td>
<td>dative</td>
</tr>
<tr>
<td>DO</td>
<td>direct object</td>
</tr>
<tr>
<td>f</td>
<td>feminine</td>
</tr>
<tr>
<td>inf</td>
<td>infinitive</td>
</tr>
<tr>
<td>ipv</td>
<td>imperative</td>
</tr>
<tr>
<td>KP</td>
<td>case phrase</td>
</tr>
<tr>
<td>m</td>
<td>masculine</td>
</tr>
<tr>
<td>MHG</td>
<td>Middle High German</td>
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<tr>
<td>N</td>
<td>nominative</td>
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<tr>
<td>NP</td>
<td>noun phrase</td>
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<tr>
<td>IO</td>
<td>indirect object</td>
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<tr>
<td>OT</td>
<td>Optimality Theory</td>
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<tr>
<td>p</td>
<td>plural</td>
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<tr>
<td>PDM</td>
<td>prepositional dative marking</td>
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<tr>
<td>PP</td>
<td>preposition phrase</td>
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<tr>
<td>REL</td>
<td>relative particle</td>
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<tr>
<td>s</td>
<td>singular</td>
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<tr>
<td>sp.</td>
<td>spontaneous utterance</td>
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<tr>
<td>SU</td>
<td>subject</td>
</tr>
<tr>
<td>1</td>
<td>1st person</td>
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<tr>
<td>2</td>
<td>2nd person</td>
</tr>
<tr>
<td>3</td>
<td>3rd person</td>
</tr>
</tbody>
</table>


SAO: *Sprachatlas von Oberösterreich*, edited by the Adalbert-Stifter-Institut des Landes Oberösterreich. Linz: Adalbert-Stifter-Institut des Landes Oberösterreich, 1998-


SNIB: Sprachatlas von Niederbayern. Research project in progress, University of Passau, directed by Hans-Werner Eroms.

SOB: Sprachatlas von Oberbayern. Research project in progress, University of Passau, directed by Ludwig M. Eichinger.


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