

Remarks on the projection of dative arguments in German*

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In this article it is argued that contrary to influential work by Höhle (1982) and Haider (1992, 1993), German ditransitive verbs do not display different base orders in the projection of dative and accusative arguments. The claim that there are three types of ditransitive verbs taking one dative and one accusative object characterized by the relative hierarchization of the given arguments cannot be maintained. It is the result of a misunderstanding of focus projection on the one hand, and the overlooking of some semantic facts with the DAT > ACC, ACC > PP alternation on the other. A closer look at the facts reveals that true dative objects (so-called higher datives) generally precede and therefore c-command accusative arguments. There are no verbs which allow for both orders simultaneously. If dative objects appear to be closer to the verb than accusatives (so-called lower datives), the datives at issue are no true datives, but hidden PPs. The relation between the two non-accusative positions will be analyzed in a lexical decomposition framework as a transformational step creating the allegedly atomic predicate POSS by incorporation of a preposition into the primitive BE (transfer of Kayne's 1993 theory of the *have-be* alternation to the inner-lexical domain). Since the quoted work by Haider and Höhle, research has made quite some progress. The ideas laid down in the present article are very close to those developed independently by McIntyre (this volume) and McFadden (2003, 2004). The aim of this article can be characterized as an endorsement for a single universal hierarchy of arguments: [SU[IO[DO[PP (V)]]]].

1. Introduction

The aim of this paper is to argue that there is a single case hierarchy according to which the arguments of a verbal head are projected – crosslinguistically as well as particularly in German. The case hierarchy, which is in correspondence to the argumental hierarchy in the abstract, i.e. – [SU[IO[DO[PP (V)]]]], is argued to be valid for three place verbs only. The corresponding case hierarchy would position nomina-

tive before/higher than dative (NOM > DAT). This ordering is not valid for all predicates, biargumental verbs in particular may realize the arguments differently.¹

I will focus on ditransitive verbs of two different types and their relationship: verbs that govern one accusative and one dative object and verbs that govern one accusative object and a PP. I will make the assumption that the (internal) arguments of a verb are projected VP-internally in a binary branching fashion. This implies that out of any two arguments one always asymmetrically c-commands the other. This relation can also be labeled ‘ranking over’. One controversial question is the ranking of dative and accusative objects. As for the basic orders, it has been claimed that all possible rankings are attested (Höhle 1982, for a reprise cf. Haider 1992, 1993). All possible rankings means: (I) dative is higher than accusative, (II) accusative is higher than dative, and neither ranks over the other, (III) or both are interchangeable. It is claimed that the instantiation depends on the nature of the verb.

- (1) I. *abgewöhnen, beibringen, verweigern, zutrauen...*
 wean, administer, deny, think somebody is able to
- II. *aussetzen, unterziehen, zuführen...*
 expose, submit, bring/feed
- III. *geben, zeigen, empfehlen...*
 give, show, recommend

Indeed, at first glance this division seems to be well motivated. If one asks native speakers of German to form sentences with these verbs, they will with high probability order the arguments in the way the classification predicts. That means that whereas in sentences with verbs of class I dative objects will precede accusative ones, sentences with class II verbs will show the reverse order. Sentences that contain class III verbs will come with both orders. It will be shown, however, that this is not sufficient for the classification proposed by Höhle or Haider.

2. Difficulties with focus projection and a diagnostic for basic word order

Höhle (1982) takes the intuitions described above only as a point of departure and develops a test to justify the ‘different-order-hypothesis’ theoretically. He proposes a correlation between basic word order and maximal focus spreading on the one hand, and derived word order and narrow focus on the other. (The regular term is ‘focus projection’. Höhle calls it ‘focus spreading’. This should not cause any confusion, however.) Thus, Höhle’s claim is that focus projection (along the lines of Selkirk 1984) is possible for base generated structures, but impossible for derived orders. I, too, assume that this is the right conjecture. However, I think that one has to be very careful in using focus projection as a reliable test. Later I will come back to the reason for a cautious attitude towards seemingly reliable facts from focus projection. But first, let us look at the data presented and discussed by Höhle.

- (2) a. *dass Carl die Lösung fand* (spreading)
 that Carl_{NOM} [the solution]_{ACC} found
 ‘that Carl found the solution’
- b. *dass [die Lösung]_{ACC} Carl_{NOM} fand* (no spreading)
- (3) class I
- a. *dass er seiner Frau sein Geld nicht gönnte* (spreading)
 that he [his wife]_{DAT} [his money]_{ACC} not not.grudge
 ‘that he grudged his wife his money’
- b. *dass er [sein Geld]_{ACC} [seiner Frau]_{DAT} nicht gönnte* (no spreading)
- class II
- c. *dass er seine Kinder ihrem Einfluss aussetzte* (spreading)
 that he [his children]_{ACC} [her influence]_{DAT}
 exposed
 ‘that he exposed his children to her influence’
- d. *dass er [ihrem Einfluss]_{DAT} [seine Kinder]_{ACC} aussetzte* (no spreading)
- class III
- e. *dass er seiner Frau sein Geld gegeben hat* (spreading)
 that he [his wife]_{DAT} [his money]_{ACC} given has
 ‘that he gave his money to his wife’
- f. *dass er [sein Geld]_{ACC} [seiner Frau]_{DAT} gegeben hat* (spreading)

(2) is uncontroversial and shows that nominative must precede accusative to make focus projection possible. This diagnostic device is then applied to the spreading possibilities in the double object examples from (3). However, the data here are less clear. I claim that the confusion comes from a misunderstanding of the relation between questions and focus projection in possible answers. It is arguably not the case that an answer to a wh-question only consists of the open proposition delivered by the question plus the (exhaustive) instantiation of the open proposition. It is very well possible for the answer to contain more material, for example in order to facilitate storing of new information. Krifka (2001), for that matter, distinguishes between acceptable reactions (answers) to questions and congruent answers (a term borrowed from von Stechow 1990). Krifka gives the illustration in (4).

- (4) a. *What did Mary read?*
 b. *Mary read ‘Die Kinder der Finsternis’ / a novel by Wolf von Niebelschütz.*
 c. *Mary read, and enjoyed, a novel by Wolf von Niebelschütz.*
 d. *Mary read, or perhaps just bought, ‘Die Kinder der Finsternis’.*
 e. *Mary’s boyfriend read ‘Die Kinder der Finsternis’.*
 f. *I don’t know.*
 g. *I won’t tell you...*

Whereas (4c) to (4e) are claimed to be acceptable reactions to (4a), only (4b) is (taken to be) a congruent answer. From Krifka's work it follows that a purely congruent answer is an idealized construct which can be formally defined, but which is not the only possibility. Question-answer sequences come in a variety of realizations. In most conversations one finds felicitous over- and under-informative answers quite often. The latter have become an interesting object of investigation for the notion of topic (especially since Büring 1997). The former, i.e. over-informative answers, have been of less interest. A closer look at them would be very useful for the following argumentation. I dare claim that the answer to a question of the sort *What happened? / What's the matter?* need not necessarily be an all-new-utterance. One should be aware that focus projection, question-answer-felicity, context dependent deaccentuation is a delicate matter (see Schwarzschild 1999, especially the introductory comments). It seems to me that a felicitous (but not fully congruent) answer may contain more discourse old material than what is directly obtainable from the question. This means that not everything that is contained in the answer must be focus or new information. Let me give an example.

- (5) A: *Why is Mary angry with Paul? What did he do?*
 B: *Yesterday, he slept with AMANda.*²

This dialogue does not have the slightest flavor of oddness. The question asks for information about some action by Paul that caused Mary's anger. The cause for her anger is Paul's sex with Amanda, encoded in the VP [VP slept with Amanda]. For some reason, B decided to be a bit more explicit and indicated the time of the action although the exact point in time does not matter for Mary to be upset. The sentence initial position of the temporal adjunct, together with an intonation pattern that puts little weight on it (no contrastive or any other additional stress), but more on *Amanda* (i.e. regular falling tone), indicates that the temporal information encoded in *yesterday* is a (sort of non-contrastive) topic. Thus it can be considered as given, see Halliday (1967:206) and may be used as a tail element in the sense of Vallduví (1992). We then have two constituents that are not in focus, but only one of them is delivered by the linguistic context, namely *Paul = he*. The other one, which contains a deictic expression, can still be easily accommodated. Thus, we see that it is not completely conclusive to consider question-answer pairs as a reliable diagnostic for focus projection. Given a question and a felicitous answer ('acceptable reaction' in Krifka's terms), one cannot claim that all the material which is contained in the answer, but which is missing in the question, must be new information and hence in the range of focus projection.

Now, why this long discussion? It has been claimed that focus projection is sometimes possible if accusative precedes dative, cf. (3f). However, focus projection was understood there as question-answer felicity. Thus, (3f) is regarded as a possible answer to a question *Was hat er gemacht?* 'What did he do?'. With the wrong theory about the focus projection test outlined above, this then leads to the conclusion that every constituent (including the verb), but *er* (he), must be focus. This, however, is not the case. I still claim that the accusative argument in this case may be discourse-related

and focus does not necessarily spread over it. The same line of argument as illustrated with a deictic adverb in (5) can be carried over to discourse old constituents. This is (more) difficult to show, however. This intuition is confirmed by many other native speakers. For example, Steinbach and Vogel (1995) argue that in sentence (3f) focus does not project over both arguments. The accusative DP gets a discourse related interpretation here. In this light, the accusative argument has been scrambled over the dative DP. The structure is not a basic configuration anymore.

In any case, I hope to have shown that a generous interpretation of focus projection without any restriction is not a reliable test for basic word order.

3. The strict word order hypothesis

It turns out that there is a clear and more reliable test for showing that dative is ranked higher than accusative (for both class I and class III verbs). This test is actually not completely unrelated to the focus spreading test, it is mainly a refinement restricting its application domain. According to earlier work of mine (Meinunger 1995, 2000), which is based on Diesing's (1992) Mapping Hypothesis, I will assume that linguistic material which is introduced into the discourse frame stays in its base generated position. Discourse related constituents (topical material) must be scrambled out of the VP. This view has become relatively popular and can be illustrated as in (6).

- (6) [CP... [AgrPs... [[VP ((discourse new adjuncts)) [VP...]]]
 topic(s)³ | comment

Thus we have to examine the order in which new material organizes. Since DPs containing ordinary nouns are not conclusive, we have to look for something else. Most DPs are not conclusive because even indefinite DPs can easily obtain a presuppositional reading. However, DPs containing unstressed indefinite articles are almost perfect indicators of what we are looking for. The best way of showing the linear order of arguments is to use indefinite pronouns that cannot or can hardly have a presuppositional reading. Such elements are *jemand*, *etwas*, *nichts*, *wer*, *wen*, *was*, ('somebody', 'something', 'nothing') and unstressed *einer*, *niemand* ('someone', 'none') and their reduced forms *ner*, *was*, and the like. W-pronouns qualify best because they are commonly and uncontroversially assumed to be 'scrambling resistant'; thus they never move in the middlefield. When one constructs sentences with these pronouns, one finds that verbs of class I behave exactly as verbs of class III in that the dative object must precede the accusative one.

(7) class III

- a. *weil er jemandem (et) was* $\left. \begin{array}{l} \text{gezeigt} \\ \text{gegeben} \\ \text{empfohlen} \\ \text{erklärt} \\ \text{geschickt...} \end{array} \right\} \text{ hat}$

since he somebody_{DAT} something_{ACC} {shown, given, recommended, explained, sent} has
 ‘since he {showed, gave, recommended, explained, sent} something to someone’

- b. **weil er (et) was jemandem* $\left. \begin{array}{l} \text{gezeigt} \\ \text{gegeben} \\ \text{empfohlen} \\ \text{erklärt} \\ \text{geschickt...} \end{array} \right\} \text{ hat}$

(reverse order, i.e. ACC > DAT)

The same is of course the case with class I verbs, which is already predicted by Höhle’s theory.

(8) class I

- a. *weil er jemandem (et) was* $\left. \begin{array}{l} \text{abgewöhnt} \\ \text{verweigert} \\ \text{beigebracht} \\ \text{zugetraut} \\ \text{verübelt...} \end{array} \right\} \text{ hat}$

since he somebody_{DAT} something_{ACC} {weaned, denied, taught, blamed...} has

- b. **weil er (et) was jemandem* $\left. \begin{array}{l} \text{abgewöhnt} \\ \text{verweigert} \\ \text{beigebracht} \\ \text{zugetraut} \\ \text{verübelt...} \end{array} \right\} \text{ hat}$

(reverse order, i.e. ACC > DAT)

As mentioned above, indefinite DPs behave similarly. However, things are more complicated here. The order ACC > DAT itself is not ungrammatical, and the unmarked stress always falls on the verb adjacent argument. In this sense (8a/10a) and (9b/10b) are supposed to be equally good. What distinguishes (9a/10a) from (9b/10b) is that the former may serve for focus projection whereas the latter may not. However, as I have

argued above, the focus spreading test is not appropriate. So I propose that (9b/10b) are infelicitous/inappropriate when the intended reading is such that the indefinite objects are both being introduced into the discourse frame simultaneously.

(9) class III

- a. *weil er einer Frau eine Rose geschenkt hat*
 since he [a woman]_{DAT} [a rose]_{ACC} given has
 ‘since he gave a rose to a woman’
 b. **weil er [eine Rose]_{ACC} [einer FRAU]_{DAT} geschenkt hat*

(10) class I

- a. *weil er einem Freund ein LIED beigebracht hat*
 since he [a friend]_{DAT} [a song]_{ACC} taught has
 ‘since he taught a song to a friend’
 b. **weil er [ein Lied]_{ACC} [einem FREUND]_{DAT} beigebracht hat*

I hope to have shown that class I and class III are not different with respect to argument projection and that we therefore should not speak of two different classes.

Let us now turn to class II. If we apply our test (ordering of indefinite discourse-new material) to the verbs of this class, we find that the base order is ACC > DAT indeed. (11) illustrates the fact. However, I have to admit that the ordering test with indefinite pronouns does not work very well here.

(11) class II

- a. *weil ich auf der Party niemand(en) jemandem vorgestellt habe*
 since I at the party nobody_{ACC} somebody_{DAT} presented have
 ‘since at the party I introduced nobody to anybody’
 b. **/?weil ich auf der Party niemandem_{DAT} jemand(en)_{ACC} vorgestellt habe*

To make the data clearer we may resort to slightly different examples. It is sufficient to just have one argument which is an indefinite pronoun. The other argument may then be realized as a full DP. The claim is that the relevant indefinite pronoun must be in its base position. Thus it does no harm if the linearly following argument is a structured DP and the pronoun precedes it. Thus as long as the indefinite pronoun is necessarily occupying its base position, the full noun phrase must not have moved either. Then the data become uncontroversial again.

- (12) a. *weil er jemanden einer schweren PRÜfung unterzog*
 since he somebody_{ACC} [a difficult exam]_{DAT} submitted
 ‘since he submitted someone to a difficult exam’
 b. **weil er einer schweren Prüfung jemanden unterzog*

- (13) a. *weil sie niemanden einer großen GeFAHR aussetzen würde*
 since she nobody_{ACC} [a big danger]_{DAT} expose would
 ‘since she would not expose anyone to a big danger’
 b. **weil sie [einer großen Gefahr]_{DAT} niemanden_{ACC} aussetzen würde*

Thus it seems that there are not three classes – instead, there exist at most two: DAT > ACC and ACC > DAT. Nevertheless I would like to maintain the claim that DAT > ACC holds underlyingly.

The ACC > DAT order can be seen as an epiphenomenon similar to what is going on with the so-called ill-behaved experiencer verbs (cf. next paragraph).

4. Some similarities with experiencer verbs

Ideally, arguments should be projected uniformly and in accordance with a hierarchy, for example the one advocated in Grimshaw (1990), here given under (14) (UTAH: Baker 1988). There are some difficulties with some verb classes, however. One well-known puzzle is the existence of two different types of experiencer verbs. One class of experiencer verbs – the *fear* class (or Belletti & Rizzi's 1988 *temere* class) – is well-behaved. That means that the experiencer, located higher in the thematic hierarchy, becomes the subject of the sentence; the stimulus – in some approaches also called theme or trigger, located deeper – becomes the object. (Cf. Dowty 1991, whose hierarchy works without discrete theta-roles, but the approach offers a good mapping mechanism for subjects and other grammatical relations.)

(14) (Agent (Experiencer (Goal / Source (Patient/Theme/Stimulus))))

(15) *Lohengrin fears Elsa's question.*

(16) *Alberich likes the Rhine maidens.*

However, there is a class of ill-behaved verbs – the *frighten* class (Belletti & Rizzi's 1988 *preoccupare* class).

(17) *Alberich frightens the Nibelungs.*

Here the experiencer appears as a postverbal object, and the stimulus occupies the subject position. Grimshaw presents a way out of the dilemma. Her proposal is that there is not only one hierarchy scale, but at least two. She shows that the ill-behaved verbs have something to them which the other class lacks. There is a causative element involved such that (17) can be paraphrased by (18).

(18) *Alberich causes the Nibelungs to experience fear.*

She goes on to state that the causal structure of a predicate also defines a hierarchy, just as the thematic structure does, a hierarchy in which the cause argument is most prominent:

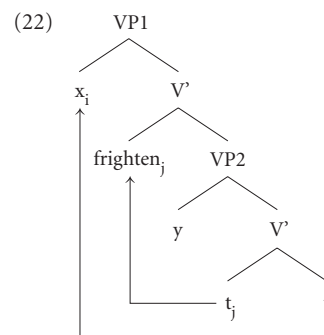
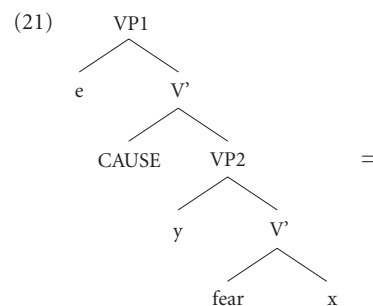
(19) (cause (...))

She claims that the causativity hierarchy overrides the other one(s) and imposes a structure where the causer is the most prominent argument. Another possible and similar way of capturing the difference between the two classes is more along the lines

of Pesetsky (1990). In his theory, too, *frighten* is not merely equal in meaning to *fear* with the theta-roles in the reverse order. The difference lies in the additional causative component, which the well-behaved class lacks, but the ill-behaved class exhibits. This can be captured in the following representation:

- (20) a. *like/fear*: $\lambda x \lambda y [x E y]$
 b. *please/frighten*: $\lambda x \lambda y [y \text{ CAUSE } [x E y]]$

If this notation, taken from Haider (1992), is translated into a syntactic tree, we get a specifier position where the causer is licensed in the topmost argument position – a tree that looks quite familiar nowadays in Distributed Morphology approaches working with vPs (projections of little *v* (corresponding to CAUSE)). Instead of making the lambda prefix unselectively bind two variables, we can handle the difference syntactically by assuming movement (or another position dependency):⁴



Thus, decomposition of verb meanings into atomic predicates followed by a related head and phrasal movement may explain the unusual nature of the ill-behaved class of experiencer verbs: *FRIGHTEN* = *CAUSE* + *FEAR*. The universal alignment principles are nicely obeyed under such an approach.

5. The DAT > ACC > DAT / PP asymmetry

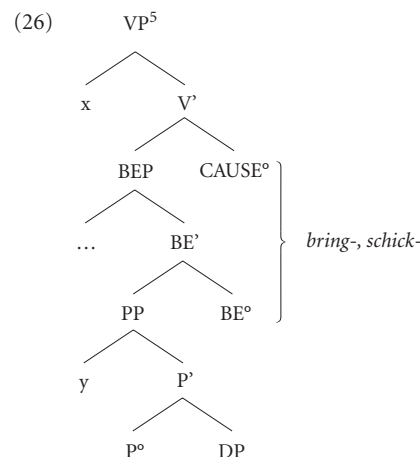
I would like to claim now that this kind of argument (position) manipulation can be fruitfully carried over to the asymmetry found with ditransitive verbs. It has been observed that (in German) there seems to exist a tendency for the [+animate] or [+human] non-theme object of ditransitive verbs to be realized as a dative object (23a), (24a). On the other hand, when it is not animate or human, it is likely to be expressed in a directional PP (23b), (24b) (see Kaufmann 1993 among others). Another difference, which Kaufmann does not comment on, is the fact that in the animate case the dative object preferably appears before the accusative object; in the inanimate case, the PP must appear after the accusative object, see also Vogel and Steinbach (1988).

- (23) a. *Sie schickte ihrer Tante ein BUCH.*
 she sent [her aunt]_{DAT} [a book]_{ACC}
 'She sent her aunt a book.'
- b. *Sie schickte das BUCH an die Bibliothek.*
 she sent [the book]_{ACC} to the library
 'She sent a book to the library.'
- (24) a. *Sie brachte ihrem Vater einen Kuchen.*
 she brought [her father]_{DAT} [a cake]_{ACC}
 'She brought her father a cake.'
- b. *Sie brachte einen Kuchen ins Büro.*
 she brought [a cake]_{ACC} into the office
 'She brought a cake (in)to the office.'

The claim is that animacy or humanness do not play the key role here. In this respect I completely agree with McIntyre or Cook (both: in this volume), who argue very convincingly against a substantial impact of animacy in the cases at hand. Instead the difference, illustrated in the given examples, is mediated through a distinction concerning the interaction of the involved atomic predicates. In a Generative Semantics framework or in Lexical Decompositional Grammar (as in Wunderlich 1997) it is generally assumed that POSS(SESSION) is an atomic predicate. I will argue, however, that it is of great advantage to analyze it as a derived one. For this conjecture I will assume a view of argument structure similar to that found in Speas (1990) and a theory of the broadly discussed *have-be* alternation much like that in Kayne (1993). My claim is that many ditransitive verbs either refer to a relation between a theme and the theme's location, or express a process (or a state) in which the dative argument possesses/comes to possess the theme. I furthermore claim that the former relation (location) is underlying and the latter (possession), which contains more information, is derived. As for the constructions with a locational (secondary) predication, I assume that the lexically decomposed structure is as in (25).

- (25) [x CAUSE [... BE [y [IN/ AT/ ON z]]]]

Thus for *bringen* 'bring' and *schicken* 'send' with a prepositional complement, we would have a tree structure as in (26).

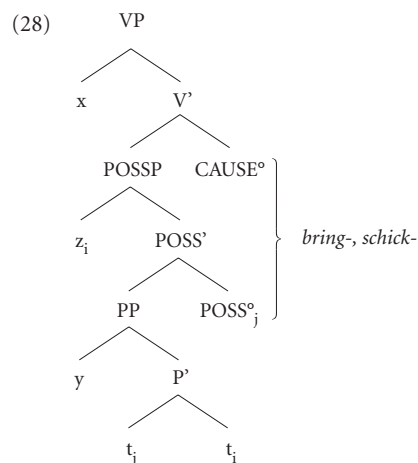


This is the representation for sentences like (23b) and (24b). Now comes Kayne's idea from 1993 (which goes back to earlier work by traditional grammarians, especially Benveniste 1966, but also to work on the Hungarian noun phrase by Szabolcsi 1981). For Kayne *have* is derived from a preposition which has incorporated into *be*. Transferred into a syntactic theory of lexical (head) decomposition, this may be modeled as incorporation of the deepest locative P° into the primitive BE. This incorporation yields a constituent which denotes the POSSESSION relation. Exactly as with the experiencer verbs, the head movement within the VP triggers the movement of an argument. In the case at hand, it is the former complement of the preposition which becomes the specifier of POSS. (The overt preposition disappears and a possession relationship comes across, see also Kayne.) Semantically, that means that this argument becomes the possessor.

The whole semantic side is in accordance with standard assumptions about datives. Many linguists claim that dative morphology signals possession. Wegener (1985), who presents the most detailed study on the German dative, assigns a vague semantics to this case. For her, dative expresses a meta-role 'BETR' (*betroffen* = concernee), whose most prominent subfeature is REC (recipient). In my terms, Wegener's recipient (REC) is equivalent to POSS (possessor), despite Levin and Rappaport Hovav's (2002:3) explicit statement that '...not all possessors are recipients'. This role expresses some very abstract, and not vague, but very clear and intuitive concept of possession. For more on the impact of possession see Vergnaud and Zubizarreta (1992), Szabolcsi (1981) again on Hungarian and most recently Hole (2005) on German. Furthermore compare the structure in (27), (28) to the applicative analysis by McIntyre (this volume) or McFadden (2004).⁶ Their approach is rather static, i.e. representational, not assuming

a movement dependency, but the merger of the dative argument in the specifier position of a semi-lexical head is quite similar to the analysis proposed here. My claim, however, reaches further. It aims farther by decomposing a formerly primitive semantic unit. Thus, my claim is that the possession relation (POSS) encoded by all these predicates is not an atomic head, but that it is the result of internal changes within the verb phrase emerging from the fusion of two primitives.

(27) $[x \text{ CAUSE } [e \dots \text{ BE } [y [\text{ IN/ AT/ ON } z]]]] \Rightarrow [x \text{ CAUSE } \dots [z [\text{ POSS } y]]]$



This analysis is corroborated by the following facts. The tendency to dativize a [+animate] / [+human] DP (i.e. not having surface it as a PP) is only an epiphenomenon. There is nothing strange about having an [+animate] / [+human] DP within a PP construction.

(29) *weil ich ein BUCH zu meinem Vater gebracht habe*
 since I [a book]_{ACC} to my father brought have
 'since I brought a book to my father('s)'

(30) *weil ich das FAHRrad zu meiner TANTE geschickt hatte*
 since I [the bicycle]_{ACC} to my aunt sent had
 'since I had sent the bike to my aunt's place'

However, the meaning is different from the corresponding DAT > ACC construction. (29) and (30) do not tell us anything about possession. (29), for example, expresses that I brought some book to my father's place. My father needn't even know about the book. In (30), there is not the slightest hint that the aunt becomes the possessor. On the other hand, the corresponding DAT > ACC constructions make a POSS reading much more likely. At this point I have to mention at least the operation of dative shift in

English. This grammatical phenomenon is very similar to what is going on in German, yet there are important and interesting differences. It seems to me to be impossible not to consider the work by Levin and Rappaport Hovav (2001) and all the work listed therein, and Krifka (2004 among others).

(31) *weil ich meinem Vater ein BUCH gebracht habe*
 since I [my father]_{DAT} [a book]_{ACC} brought have
 'since I brought my father a book'

(32) *weil ich meiner Tante das FAHRrad geschickt habe*
 since I [my aunt]_{DAT} [the bicycle]_{ACC} sent have
 '?since I sent the bike to my aunt'

(31) strongly suggests that now the speaker's father owns the book. However, my claim is not that POSS necessarily expresses ownership. It merely means that someone is in the (perhaps temporary) possession of something. For example, (32) does not necessarily mean that the ownership of the bicycle changes from mine or someone else's to my aunt's. However, the sentence says that my aunt is somehow in *conscious possession* of the bike. This is not the case with the PP construction in (30). That sentence might describe a situation where I have sent a/my bike to my aunt's address in Paris. However, for the time being my aunt doesn't live there and I know that. The only reason for my sending it there was that I want to go to Paris and did not want to take the bike with me on the train. In addition, I don't trust left-luggage offices, so I wanted to pick up my bike at my aunt's place rather than at the station. In such a scenario, my aunt need not know anything about that. (32) on the other hand cannot be used to describe such a situation.

This argument is also partly corroborated by the fact that the DAT > ACC vs. ACC > PP alternation is not freely allowed. It is not the case that for every DAT > ACC order there is a corresponding ACC > PP order. This possibility of ACC > PP seems to me to be limited to verbs where the non-accusative object can receive a locative reading in a broad sense. For verbs where this is not possible the ACC > PP construction sounds awkward, as in (33b).

(33) a. ^{ok}*weil ich es meiner MUTter* $\left. \begin{array}{l} \text{gezeigt} \\ \text{empfohlen} \\ \text{geschenkt} \\ \text{zugebraut} \\ \text{verübelt...} \end{array} \right\}$ *habe*
 'since I showed, recommended, ... it to my mother'

- b. *weil ich es an meine MUTter/zu meiner MUTter $\left. \begin{array}{l} \text{gezeigt} \\ \text{empfohlen} \\ \text{geschenkt} \\ \text{zugetraut} \\ \text{verübelt...} \end{array} \right\} \text{habe}$

Now, my own argumentation could be used against the very line of argumentation pursued here. Earlier, what I was doing was dealing with the opposition ‘possession’ vs. ‘location’. Now, I am using the lack of a locational reading with the given verbs as an argument for the lack of the ACC > PP construction. So far, so good. However, if the matters were that uncomplicated, my simple-minded opposition predicts that with the given verbs, we only get a reading where POSS plays a role (as it does with *geschenkt* only). This, however, is not the case. Here we do not get any (sub)relation which must be identified as POSSESSION. It may be, but does not have to. So what has to be said is that my theory of location to possession change does not explain every DAT > ACC ordering. This, however, has never been my claim. What I claim is only that it covers a considerable part.

An interesting set of data that could partly be covered by the present analysis concerns verbs of communication (cf. Krifka 2004 based on Gropen et al. 1989 for the English dative shift). Verbs of mere utterance action (manner of speaking) may realize the non-theme argument as a pure dative (34), (36), (37) or as a PP (35), (36), (38).

- (34) *Sie hat ihm die WAHRheit gesagt.*
She has him_{DAT} [the truth]_{ACC} said
‘She told him the truth.’
- (35)^(?) *Sie hat die WAHRheit zu ihm gesagt.*
She has [the truth]_{ACC} to him said
- (36) *Sie hat (zu) ihm gesagt, dass sie ein Kind möchte.*
She has (to) him_{DAT} said, that she a child wants
‘She told him that she wants a baby.’
- (37) *Sie hat mir geschrieben, dass sie ein Kind möchte.*
She has me_{DAT} wrote, that she a child wants
‘She wrote to me that she wanted a baby.’
- (38) *Sie hat an mich geschrieben, dass sie ein Kind möchte.*
She has to me_{ACC} written, that she a child wants

The same holds for all verbs referring to means/manner of communication (*faxen* ‘fax’, *emailen* ‘e-mail’ etc.) Verbs that are related to speech acts where the receiver of the message is more involved do not allow for the ACC > PP pattern.

- (39) *Er hat mir die VORgehensweise erklärt.*
He has me_{DAT} the procedure explained
‘He explained me the procedure.’

- (40) *Er hat mir erklärt, wie sie vorgehen wollen.*
He has me_{DAT} explained, how they proceed want
‘He explained to me how they would want to proceed.’
- (41) **Er hat die VORgehensweise zu mir erklärt.*
He has the procedure to me_{DAT} explained
- (42) **Er hat zu mir erklärt, wie sie vorgehen wollen.*

This is true for verbs like *erzählen* ‘tell’, *beweisen* ‘prove’, *klarmachen* ‘make clear’, *berichten* ‘report’, *antworten* ‘answer’, *entgegenen* ‘reply’ etc. These verbs almost imply that the message has gotten from the source (mostly some speaker) to the addressee (hearer). Thus after a felicitous act of communication, the hearer has gained some new knowledge; he has acquired new information, and he thus qualifies as a possessor in a broader sense. Furthermore, he is more involved (recall Wegener’s semantics for the dative) than in situations like (38). The verbs that allow for both variants are far less implicative concerning the felicitous transmission of the message.

6. Low datives are PPS

Now the reader may wonder why I have spent so much effort on the DAT > ACC vs. ACC > PP alternation. The answer lies in the problem tied to the different orders ‘DAT > ACC’ vs. ‘ACC > DAT’, which was introduced in Section 3, but for which a solution has not yet been given. The following discussion takes this problem up again and seeks to provide an explanation.

In Section 3 it has been shown that there is no DAT > ACC vs. DAT > ACC & ACC > DAT distinction, i.e. class I and class III have been collapsed. The rather lengthy discussion about the DAT > ACC vs. ACC > PP distinction was intended to prepare for the next verb class collapse; namely, I shall claim that the ‘ill-behaved’ class II verbs are hidden ACC > PP verbs. To put it in other words, the dative argument of ACC > DAT verbs (class II) is actually (the remnant of) a PP (the so-called low datives). That low datives are distinct from true, high datives has been shown at various places. A good overview can be found in McFadden (2004). The criteria he lists are (i) focus projection, (ii) the linearization option under the presence of negation (before or after ‘nicht’), (iii) VP topicalization (a remnant may not contain the higher argument without the closer one), (iv) semantic considerations (possession vs. locative interpretation), and a last, very strong and convincing argument: (v) passivization with *kriegen* ‘get’ (see also Abraham 1985 among others).

The argumentation to be pursued here will not be very semantic. The only thing I want to mention is that Müller (1993:204, fn. 3), too, admits that the dative arguments of verbs of class II are not goals. What Müller means is that these expressions are not to be interpreted as recipients. I want to go further and say that the datives denote something local. Let us consider the verbs of class II. Haider (1992) gives the following examples:

- (43) aussetzen 'expose so. to sth.'
ausliefern 'extradite'
entziehen (!) 'take away from'
unterziehen 'submit' / 'subject'
unterwerfen 'subject'
zuführen 'bring to'

We can add (partly from Meinunger 2000):

- vorstellen 'introduce'
vorziehen 'prefer'
unterordnen 'subordinate'
angleichen 'assimilate'
nachbilden 'copy'
nachempfinden 'adapt'
anlagern 'adjoin'
(voraus)schicken 'send ahead of')

All these verbs, with one exception, can be morphologically decomposed into a verbal stem and a separable prefix which is identical to a local preposition (underlined). The only exception seems to be *entziehen* ('withdraw', 'deprive (of)'). This verb behaves strangely. In earlier work of mine (e.g. Meinunger 2000) I claimed that it was completely misplaced in Haider's list. The same argument was brought up by Beermann (2001). The argumentation was the following: even people who accept the Höhle-Haider test of focus projection (spreading) in the context of a question have to admit that the order is dative > accusative.

- (44) A: *Und was hast du dann gemacht?*
 A: 'And what did you do then?'
 B: a. *Dann habe ich dem Wasser die Giftstoffe*
 then have I [the water]_{DAT} [the poisonous.substances]_{ACC}
 entzogen.
 away.taken
 b. *?/#!Dann habe ich [die Giftstoffe]_{ACC} [dem Wasser]_{DAT} entzogen.*
 B: 'Then I depoisoned the water.'

All the more the test for the ordering of indefinite pronouns / or DP shows that *entziehen* behaves like an ordinary DAT > ACC verb (45).

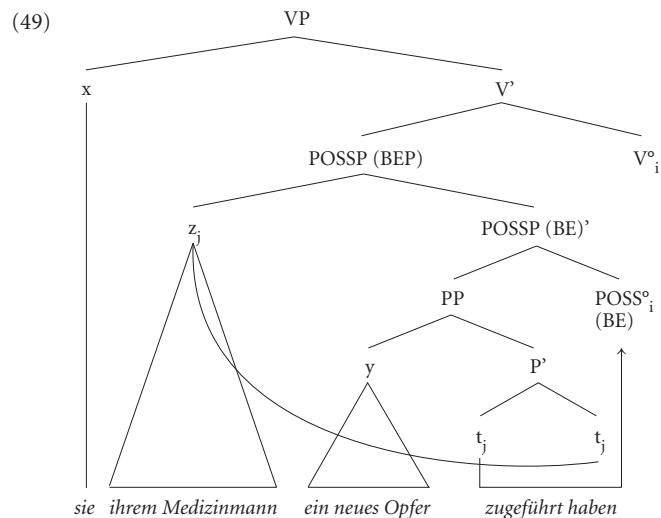
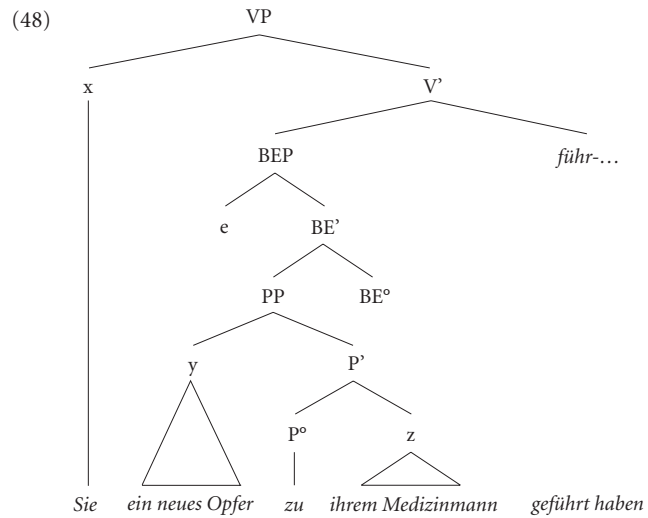
- (45) a. *ok weil ich jemandem etwas entzogen habe*
 since I someone_{DAT} something_{ACC} away.taken have
 b. *?/*weil ich etwas_{ACC} jemandem_{DAT} entzogen habe* (reverse order)

Cook (this volume), however, makes a very interesting observation. She detects a subtle difference in meaning depending on the order ACC > DAT or DAT > ACC. The former linearization triggers what she calls the 'withdraw' reading, the latter the 'deprive' reading.

Cook describes possible scenarios that fit the respective realization. Not unsurprisingly does the 'withdraw' reading get a reformulation in terms of quasi-locational change '...take the child off the father', whereas the other one, i.e., the DAT > ACC reading 'deprive' expresses ('the expiry of') a possession relation. Interestingly, one can integrate Cook's findings into my former work. Stiebels (1996), for different, but related purposes, traces the Modern German particle *ent-* to a preposition in older stages of German: Gothic *and* and Old High German *int*. Both have a locative meaning. This directional, rather purely positional part of the meaning is preserved in *ent-*, which expresses something like 'away from'. Thus, in the end all considerations seem to support the claim that ACC > DAT verbs are ACC > PP verbs where the (local) preposition has been incorporated into the verb. The stranded, bare dative is then the reminiscent of some preposition (either incorporated as in the given analysis, or silent as in McFadden 2004). As a final remark, it should be mentioned that over the last decades it has been argued more and more that, in German, dative seems to be the morphological case (whether structural, or by default) assigned by – and characteristic of prepositions; genitive and accusative are either idiosyncratic or induced by additional conditions (see Abraham 1985, 2001; Wegener 1990 and p.c.; but also Haider 1985 for a different view, i.e., P case = accusative).

A clear case where this incorporation can be shown by a related construction is the acceptability of both variants with the verb (*zu-*)*führen* 'bring to' / 'add', examples (46) and (47). I am aware that *zuführen* is a rather rare case where the proposed transformation from (27, 28) is synchronically understandable. I sketch it here for the sake of illustration. The same would hold for verbs like *überziehen*, *überstülpen* (both: 'cover', 'mantle', 'suffuse'), *vormachen* 'put before / across' AND 'show in front of', *vortäuschen* 'put before', 'fool', *ankleben*, *aufkleben* (both: 'stick', 'post', 'affix'), *aufmalen* 'paint on' etc. The preposition functions either as a true P° or as a separable prefix. A slight change is to be observed with the P *in*, which becomes *ein-* after incorporation: (*e*)*instechen* 'stab, pierce', (*e*)*instecken* 'plug in, slot in', (*e*)*inführen* 'induce, introduce' and so forth; in many dialects it remains *in* as prefix, however.

- (46) *weil sie ein neues Opfer zu ihrem MediZINmann geführt haben*
 since they [a new victim]_{ACC} to their medicine man _led have
 'since they led a new victim to their medicine man / kahuna'
 (47) *weil sie Ø ihrem MediZINmann ein neues Opfer *(zu)geführt haben*
 since they Ø [their medicine man]_{DAT} [a new victim]_{ACC} to-led
 haben
 have



7. Some problems and speculations

Manfred Bierwisch (p.c.) draws my attention to the fact that a simple-minded analysis in terms of movement from the verb adjacent PP position into the specifier of POSS / GOAL is not without problems (see also Cook this volume again). The reason for

Bierwisch's objection is constructions where both positions are obviously present and overtly realized

- (50) *Ich habe meinem Freund das Buch nach München geschickt.*
 I have [my friend]_{DAT} [the book]_{ACC} to Munich sent
 'I sent the book to my friend in Munich.'
- (51) *Ich habe meiner Tante das Rad in die Garage gebracht.*
 I have [my aunt]_{DAT} [the bike]_{ACC} in the garage brought.
 'I brought the bike into my aunt's garage.'

There is clearly more to be said about the relation between the two relevant positions, i.e. the position of the dative DP and the PP. Be that as it may, the data in (50) and (51) point into the direction that there is a referential dependency between the positions. In a construction with a dative DP and a PP, both must not be completely independent. In (51), for example, the garage is understood as the aunt's property. Thus, one may have to abandon an analysis which declares goal datives underlying PPs and says nothing else. In any case, it must be admitted that there is some referential dependency between both positions, either by movement (chains and indexing as discussed in the preceding sections) or by a relation akin to, but more abstract and loosely than inalienability. A very attractive and well elaborated analysis (binding of phonologically empty, but semantically present pronominal variables) is provided in Hole (2005).

8. Summary

Within the (German) VP, the arguments are projected according to a universal hierarchy of thematic roles and corresponding cases. I have shown that the claim that German displays several base orders (DAT > ACC, ACC > DAT, ACC < / > DAT) cannot be maintained. The conclusion that there are different base-orders is the result of a misunderstanding of focus projection on the one hand, and the overlooking of some semantic facts with the DAT > ACC, ACC > PP alternation on the other. A closer look at the facts reveals that true dative objects generally precede and therefore c-command accusative arguments. There are no verbs which allow for both orders simultaneously. If dative objects appear to be closer to the verb than accusatives, the datives at issue are no true datives, but hidden PPs. The semantic proof comes from a lexical decomposition of the meaning. Higher ranked datives (high datives) denote arguments with the status of a possessor, receiver, affectee; deeper ranked ones (low datives), which are actually PPs, denote locations or directions. The syntactic evidence comes from the morphological shape of the relevant class of verbs. All verbs that project an ACC > DAT VP, are particle verbs that consist of a verbal root and a prefixed (locative) preposition. I argue that this word-internal structure is the result of the incorporation of the preposition which makes the former prepositional complement surface as a(n apparent) dative argument. The internal structure of verbs projecting a goal argument is the

result of an abstract incorporation of a locative/directional preposition into the semantic primitive BE. This process – similar to Kayne’s *have-be* alternation (Kayne 1993) – creates a complex part of meaning denoting a possession relation: POSS, which hosts the derived goal or receiver argument in its specifier.

The conclusion of all observations is that the German VP, too, projects according to a familiar hierarchy proposed by many linguists for many languages:

$$(52) \quad [_{VP} \text{ SU } [_{IO} \text{ DO } [_{PP} \text{ verb}([\nu]v]v)]].$$

Notes

* This contribution is a heavily revised and updated and somewhat elaborated version of a chapter from my thesis, which appeared as a book in 2000 (Meinunger 2000). Many linguists have helped me to clarify my thoughts and to develop the further. In particular I would like to thank the participants of the Dative workshop Daniel Hole, Philippa Cook and Heide Wegener, who commented on earlier versions or answered my sometimes bothering questions. All errors and shortcomings are mine, of course.

1. In particular, this holds for ergative verbs like *ausweichen* ‘evade’, *entkommen* ‘escape’, *zusstoßen* ‘happen to’ and specific psych verbs like *gefallen* ‘please’/‘like’, *widerstreben* ‘jib’, ‘dispute’, *einleuchten* ‘make sense to’, ‘be clear’. Here dative precedes and is therefore higher than nominative. For a treatment of such facts see Meinunger (to appear). As for PP(s) in this hierarchy: the relevant constituents that are meant are subcategorized prepositional phrases, which in most cases stand for a directional arguments: however theta-governed local expressions and other verb-selected PPs are also assumed to be base-generated in this verb-adjacent position.

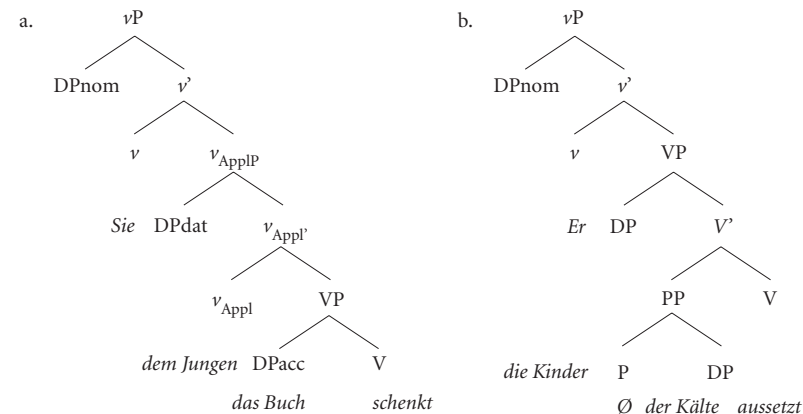
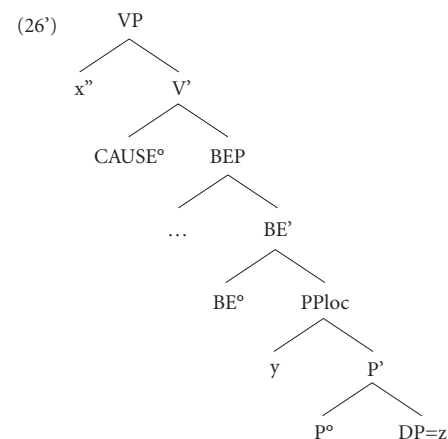
2. I will use the following convention: if a sample sentence is not a citation from the indicated work, which I always quote as given in the original, I will indicate main stress by capitals. In most cases this corresponds to a falling tone (H*_) and can be understood as the phonologically marked entity from which focus projection takes place or is supposed to spread up in the tree. I will not indicate contrastive (non-projective) stress. Such a device would only complicate the matter without bringing any advantage in the cases discussed here. In further cases where indicating stress may blur the intended reading I refrain from indicating. This is often the case when I use stress-phobic indefinite pronouns. Thus many examples will be without accent information. The line of argument will hopefully not be affected, however.

3. Topics are to be understood as in Meinunger (2000), i.e. as familiar expressions. This use is different from the standard one, where ‘topic’ refers to sentence initial constituents inducing the typical aboutness feeling (in the sense of Reinhart 1981). The terminology is immaterial here, however.

4. Note that this proposal violates (a strong interpretation of) the theta-criterion. In very recent approaches this formerly indispensable module of grammar has been weakened, however. Most versions in Minimalism try to eliminate theta-theory and to do without the theta-criterion.

5. For the sake of harmony I will assume that in German also the VP internal atomic predicates project head finally. This makes the trees appear somewhat less familiar. Nevertheless I think

that this is not an insurmountable problem for the reader. One might alternatively think of a more familiar looking left-branching VP as in (26’).



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