

AGENTIVE *SELBST* IN GERMAN*

Daniel Hole
Freie Universität Berlin

Abstract

This paper deals with the syntax and semantics of the German adverbial intensifying particle *selbst/selber* as in *Paul hat seine Wäsche selbst gewaschen* ‘Paul has done his washing himself.’ I will claim that *selbst* denotes the identity function, and that it takes the agentive Voice head proposed by Kratzer (1996) as its semantic argument. This minimal semantics will be combined with standard assumptions about information structure to derive the specific contextual restrictions encountered with adverbial intensifiers. Section 1 prepares the ground for this analysis by presenting a similar account of adnominal intensifiers as in *Paul selbst hat seine Wäsche gewaschen* ‘Paul himself has done his washing’. The discussion of adnominal intensifiers adopts basic insights arrived at by Moravcsik (1972), König (1991), Siemund (2000a) and Eckardt (2000). Section 2 constitutes the main body of the paper. First some effort is made to tell apart adnominal from adverbial uses of intensifiers by using criteria that do not just rely on (surface) position. I will oppose Eckardt’s position that most adverbial intensifiers are interpreted like adnominal intensifiers; moreover I will note a close link between adverbial intensifiers and agentivity which justifies dubbing adverbial intensifiers “agentive intensifiers” (section 2.1). Tasks to be dealt with in the following are identified in section 2.2, at the same time previous proposals and categorizations are reviewed. Section 2.3 introduces the analysis in terms of Voice.

1 Adnominal intensifiers

In this section I will give a very brief survey of problems relating to the analysis of adnominal intensifiers, i.e. of expressions such as *herself* as in *the queen herself*. The research tradition will be exemplified by two different approaches.¹ In the end I will adopt the general idea of Eckardt’s (2000) account which takes adnominal intensifiers to be lexicalizations of the identity function which interact with information structure in a standard way. Even though the present paper is mainly concerned with the analysis of adverbial intensifiers as in *Gina baked the cake herself* (see section 2), the discussion of the adnominal case will help us to pave the way for the parallel, albeit more complex, adverbial case.

Let us start with the sentence in (1).

- (1) The artist herself will be present.

This sentence is true in a situation in which the artist will be present (let’s say, at the opening of a sales exhibition), and with a single focus accent on *herSELF* it is felicitous only if there

* This paper was written in the context of a research project supported by the *Deutsche Forschungsgemeinschaft* (Ko 497/5-1/2/3). I owe thanks to all the members of our stimulating research group, but Volker Gast, Insa Gülzow, Ekkehard König and Peter Siemund have clearly helped me most to sharpen the ideas underlying this work. The audience at *Sinn und Bedeutung 6* was likewise very supportive. Daniel Buring and Hans-Heinrich Lieb have repeatedly taken a very helpful interest in the topics treated in this paper. Ruth Wishart has helped me with some of the English data. Mistakes are mine.

¹ In-depth reviews of previous proposals, and the relevant references, can be found in Siemund (2000a).

is some other referent in the discourse background with respect to which being present or not is under discussion or has been under discussion. But this is not the whole story yet, because such truth and felicity conditions likewise apply without the intensifier as in (1').

(1') The ARTist will be present.

In addition to merely relating to some other contextually salient referent, (1) is moreover felt to imply that the alternative referents must have "something to do" with the artist. Referents satisfying this additional condition may, for instance, be the paintings exhibited, or Mr. Bridges, the owner of the gallery where the exhibition of paintings is on show.

Moravcsik's (1972) proposal takes care of the truth conditional part of the utterance meaning of (1): Moravcsik may be read so as to mean that *herself* in (1) encodes the identity function. This function takes (the referent of) the nominal to which *x-self* attaches as its input, and yields the very same thing as its output. This leaves the truth conditions of (1) unaltered if compared to (1'). As it stands, this account will not allow us to derive the additional preliminary felicity condition stated above: why should a function whose essence it is not to make any difference induce a specific felicity condition that does make a difference to the effect that alternative referents must "have something to do" with the encoded referent?

Recent work by König and Siemund (König 1991, König & Siemund 2000, Siemund 2000a) approaches the problem from the other direction. König and Siemund consider it a lexical property of adnominal intensifiers to characterize (the referents of) the nominals to which they attach as central with regard to other, peripheral alternatives (say, the paintings or the gallery owner as opposed to the artist in (1)). The nominals to which intensifiers attach are regarded as foci. The peripheral alternatives are independently related to by the focus-background structure of sentences in which adnominal intensifiers occur. Much in keeping with the received view of information structure König and Siemund assume that by focusing part of a sentence alternatives to the focus value are considered. Since the focus is characterized as central, the alternatives are automatically characterized as peripheral. Returning to the sentence in (1), König and Siemund would thus say that *herself* focus-marks *the artist*, and it characterizes the artist as central with regard to salient (peripheral) alternatives such as the gallery owner or the paintings.

This approach derives the relatedness intuition stated above with regard to the connection between the focus value and the alternative values in a natural way. Moreover it is theoretically not very costly because some lexically specific entity (the intensifier) interacts with an independently needed component of linguistic structure (information structure) to derive the specific felicity condition of the use of adnominal intensifiers. There are problems, however. As pointed out by Eckardt (2000), and by König & Siemund (1996) themselves, the prosodic patterns of utterances with intensifiers do not conform to expectations. It is usually held that foci should contain a focus exponent, i.e. a syllable with a specific accent (cf. Selkirk 1984, 1995 or Schwarzschild 1999 for details). In (1) the alleged focus *the artist* is prosodically non-prominent, while the purported focus particle, the intensifier, bears a focal accent instead. Secondly focus particles, if immediately adjacent to their foci, do not generally follow their foci, whereas precisely this is the only option for English adnominal intensifiers, and the same holds true of many other languages. Thirdly, if adnominal intensifiers were focus particles, highly restricted readings should emerge if intensifiers are used as foci of other focus markers. For such a highly marked example with one focus marker (*only*) focusing another one (*too*) consider (2).

(2) ?The artist will only come TOO.

No such marked structure results from having *only* interact with an adnominal intensifier, as witnessed by (3).

- (3) Only the artist herSELF will be present.

The more natural assumption would appear to be the following: the intensifier, since it bears an accent, is in focus, but it is not a focus particle itself. Returning to Moravcsik's proposal we may assume that the identity function, i.e. what is encoded by the intensifier, is in focus, thereby relating to contextually salient alternative functions that do not map the respective referent onto itself, but onto some other referent. This is illustrated in (4b) with respect to our old example, repeated here as (4a).

- (4) a. The artist herSELF will be present.
 b. The identity function applied to *the artist*:
 ID(the artist) = the artist
 c. Alternative functions applied to *the artist* (varying with the context)
 GALLERY-OWNER-OF(the artist) = Mr. Bridges
 PAINTINGS-BY(the artist) = {Untitled, Still-life I, Still-life II, Figures,...}
 ...

This is basically everything we need to account for the use of adnominal intensifiers. First, facts of prosody and facts of information structure have been reconciled: what is accented is also in focus. Second, we can explain the fact why the truth-conditions of sentences with or without adnominal intensifiers do not differ: the identity function does not influence the denotation of its argument term, and hence no difference arises in terms of truth-conditions if (1) is compared to (1'). Third, the alternatives relating to the identity function are maximally unrestricted. The only formal property restricting the set of possible alternative functions must be such as to allow only functions as alternatives to the identity function that yield outputs of a type identical or similar to the input term. In terms of our example we would say that all kinds of relations between the artist and things and persons having something to do with the artist are possible alternative functions. A way to implement this restriction, and a formal statement of the whole idea of analyzing the meaning of adnominal intensifiers, may be found in Eckardt (2000).² For more details concerning adnominal intensifiers the reader is referred to König & Siemund (2000) or Siemund (2000a). For our purposes this quick introduction is sufficient, because the main emphasis in this paper is on the adverbial/agentive use of intensifiers. I will turn to this use in the following major section.

2 Adverbial intensifiers

In this section I will deal with the syntactic and semantic analysis of intensifiers in non-adnominal positions. Since only German adverbial intensifiers will be given a fully articulate analysis and since a solution for the English case will merely be sketched, I will use German data in this section.³ Two examples are given in (5).

- (5) a. Der Koch hat die Blaubeeren selbst gepflückt.
 'The cook has picked the blueberries himself.'

² Cross-linguistic comparison shows that restrictions on the domain of the identity function play a role in many languages: often only referents of high animacy or a high social rank may interact with specific adnominal intensifiers.

³ *Selbst* and *selber* are free variants, with *selber* not being as frequent as *selbst* in written styles. In the following only *selbst* will be used, but all the examples in this paper are also fine with *selber*.

- b. Der Koch hat selbst schon mal Blaubeeren gepflückt.
'The cook has himself picked blueberries before.'

(5a) may roughly be paraphrased as *The cook has picked the blueberries without any help*, while (5b) expresses something like *The cook, too, has picked blueberries before*. Too-readings as in (5b) will not concern us any further in this paper. There are very specific problems relating to this use of intensifiers, but I cannot deal with them here. The interested reader is referred to Edmondson & Plank (1978), Plank (1979), König (1991) or Siemund (2000a).

2.1 Distinguishing adnominal from adverbial intensifiers

A basic issue to be discussed before setting out for a treatment of adverbial intensifiers becomes apparent when we look at (6).

- (6) a. Der Koch selbst hat die Blaubeeren gepflückt.
'The cook himself has picked the blueberries.'
- b. Der Koch hat die Blaubeeren selbst gepflückt.
'The cook has picked the blueberries himself.'

Upon superficial inspection, (6a) and (6b) only seem to differ syntactically: in (6a) the intensifier is adjacent to the nominal it agrees with in the English translation, while in (6b) it is maximally distant, or almost maximally distant, from it. Before we develop an analysis of adverbial intensifiers which differs from the account of adnominal intensifiers we must show first that (6a) and (6b) are not just syntactic variants with identical interpretations. This would appear to pose quite a problem because we know already that the denotation of the adnominal intensifier does not alter truth-conditions. In the analysis of adverbial intensifiers to be developed below this general fact will be maintained, and the account of adverbial intensification will only differ with respect to the argument the intensifier takes in semantics, or with respect to the adjunction site in terms of syntax. Therefore we do not expect the truth-conditions of (6a) and (6b) to differ, and all we are left with are facts of felicity. Or are we? It turns out that the argument can be put on a solid basis if we turn to a special class of verbs. A set of crucial examples is given in (7).

- (7) [It's not just the poverty of the people from the mountains that has led to the cultural split...]
- a. Die Menschen (selbst) teilen das Land (selbst) in zwei Teile.
'The people (themselves) divide the country into two parts (themselves).'
- b. Die Berge (selbst) teilen das Land (#?selbst) in zwei Teile.
'The mountains (themselves) divide the country into two parts (#themselves).'

In (7) the verb *teilen* 'divide' is used in two different senses, one of them dynamic (as in (7a)), the other one stative (as in (7b)). Other verbs denoting the coming about or the existence of some opening or closure display the same kind of polysemy. Note that (7b) is not just stative, in the context in which it is used it is also interpreted as non-resultative (cf. Kratzer 2000 on this class of verbs). (7a) is much like (6), and it is difficult to see whether switching from the adnominal to the adverbial use makes a real difference. (7b) is different. The use of the adverbial intensifier in this sentence yields a result that is infelicitous, if not uninterpretable (I am ignoring here the highly marked option of accommodating a personified reading for *die Berge* 'the mountains'). One more example of this kind is given in (8).

- (8) a. Die Polizisten (selbst) versperren den Taleingang (selbst).
'The police (themselves) block up the entrance to the valley (themselves).'
- b. Der Gletscher (selbst) versperrt den Taleingang (#?selbst).
'The glacier (itself) blocks up the entrance to the valley (itself).'

Contrasts as the ones in (7) and (8) are valuable; not only do they illustrate the absence of felicitous readings for adverbial intensifiers in some cases, they also give us a hint at what triggers (in-)felicity in this domain. The verbs in the contrasting sentences stand in a systematic and predictable relationship of polysemy to each other, and therefore the infelicity trigger must be among the features setting apart the different verb readings. This situation weakens the position of those who deny a more general difference between adverbial and adnominal intensifiers (cf. Eckardt 2000). The notion which I want to tie adverbial intensifiers to is agentivity. It is easily seen that the sentences in (7) and (8) which allow for adverbial intensifiers have agent arguments, whereas the b-sentences do not. That dynamicity (as opposed to agentivity) cannot be the distinguishing feature is demonstrated in (9).

- (9) Nicht nur die Einnahmen der Firma, die Firma #(selbst) wuchs mit jedem Tag (#?selbst).
Not just the company's receipts, the company #(itself) grew bigger (#?itself) every day.

If dynamicity alone were the licensing factor, adverbial *selbst* in (9) should be fine, because a dynamic, though non-agentive, eventuality is encoded.

To present my analysis of adverbial intensifiers in German I will proceed as follows.⁴ I will first state some recurrent properties of sentences or utterances with adverbial intensifiers. These properties should follow from an adequate theory of adverbial intensification. In the same sub-section (2.2) I will discuss previous proposals and demonstrate why they are not fully satisfactory. I will then move on to develop my proposal for an analysis of agentive intensifiers: the agentive intensifier of German is analyzed as denoting the identity function which takes the agentive Voice head as its argument. To understand this approach we will have to review Kratzer's (1996) theory of a functional Voice projection first (2.3.1). We will then apply this proposal to the German case (2.3.2). Section 2.3.3 offers solutions to the tasks that have been stated in 2.2.

2.2 Tasks and previous proposals

In the light of the preceding discussion the most obvious task for us is to say what precisely establishes the link between certain readings of adverbial intensifiers and agentive predicates.

Another very general, albeit subtle, observation to be made if utterances with agentive intensifiers are considered against the background of competing well-formed utterances with adnominal intensifiers is the constructional diversity of contexts in which agentive intensifiers occur. (11) assembles a collection of appropriate contextual alternatives (i.e. of members of the p-set of (10) in Rooth's 1985 terms), each of them involving a different construction that is more complex than the general constructional make-up of the sentence with the agentive intensifier in (10).

- (10) Hannes hat sein Auto selbst gewaschen.
'John washed his car himself.'
(11) a. Hannes hat sein Auto in einer Werkstatt waschen lassen.
'John had his car washed in a garage.'

⁴ I am reluctant to adopt König and Siemund's terminology for the adverbial intensifier investigated here. They call this use "adverbial-exclusive", a term that is both suggestive and appropriate for many examples. It is not entirely satisfactory, though, in view of sentences such as *I built this house myself*. This sentence does not have to mean that nobody has helped me to build the house, it just excludes the possibility that I had the house built without me lifting a finger. Applied to this case the term "exclusive" is not a one hundred percent fit. While "adverbial-exclusive" may not be the ideal solution, Eckardt's term "assistive use" is a misnomer. For obvious reasons, I prefer the term "agentive intensifier".

- b. Hannes hat seinen Sohn gebeten, sein Auto zu waschen.
'John asked his son to wash his car.'
- c. Hannes' Auto ist in einer Werkstatt für ihn gewaschen worden.
'John's car was washed for him in a garage.'
- d. Hannes' Sekretär hat sein Auto gewaschen.
'John's secretary washed his car.'

(11a) is an example of a causative construction delivering the contextual alternative of the agentive intensifier, (11b) involves a control construction, and (11c) is a passive sentence. The overall structure of (11d) is just like that of (10), but the subject argument is complex if compared to the subject of (10). What all alternatives have in common is that Hannes is somehow involved in the event of car-washing, even though his involvement may be quite loose or indirect. In terms of information structure this means that both some involvement of Hannes and the VP of (10) are part of the background. König & Siemund (1996) and Siemund (2000a) are well aware of the fact that appropriate contexts of sentences with agentive intensifiers are diverse. They hold that with agentive intensification, too, the subject/agent argument is contrasted with alternative subject/agent arguments, and they regard the maximal affectedness or "centrality in a situation" of the agent argument as the core notion to account for the diversity of contextual embeddings. Centrality in a situation may be instantiated in different ways, Siemund (2000a) claims. In his analysis relevant instantiations are the possessor relation, the responsibility relation, the beneficiary relation, or the relation of being adversely affected. In this vein, Hannes in (10) may be argued to be central in the situation of his car being washed because he owns the car, and he benefits from its being washed. The section on adnominal intensification has shown that the centrality intuition in that domain can elegantly be reduced to the identity function and its interplay with alternative functions related to via information structure, and I will aim at a similar trade-off in the case of agentive intensification as well. Apart from König's and Siemund's semantic analyses, few other accounts of agentive intensifiers go beyond the statement of some rather unspecific function of discourse structuring (Girke 1993, Kibrik & Bogdanova 1995, Kemmer 1995).

With one exception to be addressed below, Eckardt denies the existence of specific agentive intensifiers. She argues that pertinent examples with intensifiers in adverbial positions only differ syntagmatically, while the interpretations remain unchanged if compared with sentences with intensifiers that are adjacent to the nominals they "belong to". Discussing a German example analogous to the one in (12), Eckardt states that the only reason why the intensifier is used in an adverbial position here is to allow a reading with wide focus on *selbst gemalt* 'painted himself'.

- (12) Hannes hat das Bild [SELBST gemalt]_f.
'John painted the picture himself.'

The wider focus, she argues *mutatis mutandis* for her parallel example, relates to a set of alternative sentences with predicates other than *gemalt* 'painted' such as the German equivalents of *had (it) painted*, *got (it) as a gift* or *bought*. The problem with this analysis is that Eckardt predicts the fact of the picture being a painting not to be part of the background of (12). This is clearly inadequate, as the following argument shows. Imagine a context in which two people are discussing the provenance of a picture they have seen in John's house. One of them asks (13Q). The other one knows that the picture is not really a painting, but rather a photograph that looks like a painting. If he replies by using (13A), this is not fully cooperative.

- (13) Q: Hat Hannes das Bild selbst gemalt?
'Q: Did John paint the picture himself?'

- A: Nein, er hat es geschenkt bekommen.
 'A: No, he got it as a present.'

The reply in (13A), with the speaker knowing about the picture being a photograph, is deceiving, because the speaker ought to cancel the wrong presupposition on the part of the person asking the question, namely that the picture was painted. If this is so, Eckardt's focus projection as delimited by her bracketing in (12) must be given up in favour of the correct bracketing in (14).

- (12') ~~Hannes hat das Bild [SELBST gemalt]_f.~~
 (14) Hannes hat das Bild [SELBST]_f gemalt.
 'John painted the picture himself.'

Eckardt identifies one sub-use of adverbial intensifiers for which she assumes a separate lexical entry. Her example is given in (15).

- (15) Adrian fand den Weg zum Bahnhof selbst.
 'Adrian found the way to the station himself.'

Eckardt correctly points out that (15) does not relate to alternative sentences with other people finding the way in Adrian's stead, but rather to alternative sentences in which other people help Adrian to find his way. She therefore proposes the following interpretation for "assistive" intensifiers.

- (16) $\lambda e \neg \exists x (\text{ASSIST}(x, e))$

This amounts to the meaning of a prepositional phrase such as *without anybody's help* in natural language. The picture Eckardt draws thus looks as follows: all adnominal intensifiers and all adverbial intensifiers that do not have to be read as *without anybody's help* are analyzed alike. Those cases of adverbial intensifiers that are only paraphrasable as *without any help* have a separate lexical entry. There are two things that are unsatisfactory about this proposal. First, I have shown above that Eckardt's account of why her alleged adnominal intensifier is used in an adverbial position in (12) is probably wrong. We thus do not know why an intensifier that is claimed to be basically adnominal is used in an adverbial position. Second, Eckardt spends some polemic effort on the discussion of competing accounts that distinguish several readings of intensifiers. She is particularly concerned with König's and Siemund's idea of giving a separate treatment to agentive intensifiers. However, what she presents instead is, from the point of view of form-meaning correspondences, less convincing than previous accounts. As regards König and Siemund, one may basically say that all adnominal intensifiers are treated alike, and that all adverbial intensifiers (except for the ones with the *too*-readings) receive a uniform treatment. Eckardt claims that a uniform treatment of everything is to be preferred, but in the end a somewhat accidental number of sentences, namely those that require a reading of the *without-any-help* type, is given a separate treatment within the large class of adnominal-or-adverbial intensifiers.

Browning's (1993) proposal for a treatment of agentive intensifiers comes closer to the type of analysis aimed at in this paper. Browning claims that the sentence in (17a) is interpreted as (17b).

- (17) a. Mary wrote this memo herself.
 b. Mary(agent) wrote this memo(patient) & her = (agent)

She thus states that agentive intensifiers are redundant emphasizees of the fact that the agent participant in a sentence is really the agent participant. At the same time she assumes the word *herself* in (17a) to have syntactic structure such that *her-* saturates one of two valency

positions of *-self*. The crucial notion in her account is Higginbotham's (1985) theta-identification, a device that allows an open theta-position in one predicate to be linked to an open theta-position in another predicate. *-self* is analyzed as the second predicate alongside *write*, and the argument *-self* takes, i.e. *her-* in (17a), is restricted to an interpretation with the same theta-role as the subject of *wrote*. Browning's account is tailored to fit the English case, but it is not general enough to be applied cross-linguistically. Many languages have agentive intensifiers with no morphological, let alone syntactic, structure, and a general account should not be limited to a single language. Moreover, the analysis is not fully explicit in terms of semantic compositionality. Thirdly, Browning does not pay attention to the interplay of agentive intensifiers with information structure. As a result, it remains unclear why speakers should bother to use such a highly redundant expression which only states that the agent role has not been assigned erroneously. Still, Browning's proposal is very close to the approach that I want to defend in the following, and together with Browning I believe that agentive intensifiers basically say that the agent participant of a predicate is really the agent participant. The challenge will be to derive this meaning at a low theoretical cost, to show its appropriateness in all the relevant contexts, and to provide an explicit account in terms of (the interplay of) syntax and semantics. The following general facts should follow from it without any extra assumptions:

- (i) both the subject and the VP of a sentence with an agentive intensifier and a single nuclear stress on the intensifier are necessarily part of the background (cf. (12)-(14));
- (ii) alternative sentences display a large structural/constructional diversity (cf. (10)/(11);
- (iii) non-agentive predicates are barred from interacting with agentive intensifiers (cf. (7)-(9));

2.3 An analysis in terms of Voice

In this section I will develop an account of agentive intensifiers in which Kratzer's (1996) Voice phrase plays a crucial role. The guiding intuition will be that agentive intensifiers in German do not relate (a sentence) to alternative agent referents, but rather to different relations that might hold between the subject referent of the asserted sentence and its predicate. Quite pre-theoretically, this intuition may be expressed as in (19) in order to cover the case in (18).

- (18) Hannes backt den Kuchen selbst.
'John bakes the cake himself.'
- (19) a. Assertion:
John REL_{SUBJECT/AGENT} the-baking-of-the-cake
- b. Alternatives:
John REL_{NON-SUBJECT/NON-AGENT} the-baking-of-the-cake

(19a) states that John stands in the subject/agent relation to the event of cake-baking, while (19b) states that John stands in some relation to the event of cake-baking which is not the subject/agent relation. Quite impressionistically again, we want to say that all possible contextually salient alternatives to (18) should conform to the general pattern in (19b): there is a certain relationship between John and a presupposed event of cake-baking, but John is not the agent of the event of baking in the alternative sentences. A large variety of alternative sentences may be subsumed under this pattern. A small selection is given in (20), with the specific instantiation of REL_{NON-SUBJECT/NON-AGENT} printed in capital letters.

- (20) a. John HAS HIS MOTHER bake the cake.
- b. The cake is baked FOR John BY HIS MOTHER.
- c. John BUYS THE CAKE FROM A BAKER'S SHOP (WHERE A BAKER baked it YESTERDAY).

This list is reminiscent of the list of alternatives to (10) in (11). As above, alternative sentences (or contextually salient sentences) are structurally diverse, and in (20b) and (20c) the relations between John and the cake-baking are of a heavily discontinuous and non-encapsulated kind. Still, I claim that our account must be liberal enough to allow for something like the relation BUYS-A-CAKE-FROM-A-BAKER’S-SHOP-WHERE-YESTERDAY-A-BAKER(*x*, did *y*) holding between an *x*, namely *John*, and the doing of something, namely *bake it/the cake* in (20c). This liberal side to the account will be derivative of general assumptions about information structure. But before elaborating on this, let us turn to the semantico-syntactic side of the problem: what is the syntactic position of agentive intensifiers, and what do they denote? I will discuss each question in separate sub-sections. The answers that I will propose are the following: agentive intensifiers are identity functions which take phonetically empty heads of Voice phrases as their arguments. The Voice head encodes the agent relation holding between subject referents and agentive eventualities. Apart from its syntactic plausibility the analysis in terms of the Voice head will have one major advantage: it takes the agent relation to be represented as a constituent. This allows us to have another element – the identity function – interact with the agentive relation as a syntactic constituent while leaving the subject constituent unaffected. To prepare the ground for this solution we will have to familiarize ourselves with the design of Kratzer’s theory of subject severance and of Voice implementation. This will be the goal of the immediately following section.

2.3.1 Kratzer’s subject severance, or external arguments do not exist

Kratzer (1996) does not treat subjects of agentive predicates as arguments of verbs, but rather as arguments of an agentive Voice head above VP.⁵ As a consequence, transitive verbs are analyzed by Kratzer as having a single argument slot for participants (plus another one for the event variable), while intransitive activity verbs have none. A very general argument in favour of severing the external argument from the verb in this way comes from data discussed by Marantz (1984): particular object classes often impose special readings onto verbs, but subjects never, or hardly ever, do. Consider the VP’s in (21) (Kratzer 1996: 114).

- (21) a. kill a cockroach
 b. kill a conversation
 c. kill an evening watching TV
 d. kill a bottle
 e. kill an audience (i.e., wow them)

Depending on the class of object referents (living beings, incidents of verbal interaction, time spans, etc.), different meanings are triggered for *kill*. No such effects arise with respect to the external argument of *kill*: in no case will the choice between different subjects in the subject-verb strings *Mary killed...* or *The school killed...* determine the specific meaning of *kill*. Kratzer also shows that this behaviour can (pace Bresnan 1982 or Grimshaw 1990) not be made to follow from the higher position of subjects as opposed to objects in the structure.

⁵ This does not just set Kratzer’s analysis apart from traditional views. Current syntactic accounts in mainstream generative grammar assume subjects of transitive verbs to be arguments of so-called light verbs that are usually phonetically empty (cf. Hale & Keyser 1993, Chomsky 1995). These light verbs are lexical in nature, whereas Kratzer’s Voice head is a functional category. See pp. 116-119 in her paper for arguments in favour of the functional phrase analysis. Dowty’s (1979: 110ff) DO-predicate is also similar, especially in the alternative proposal made on p. 118, but, again, it is a lexical element, and not a functional category.

Semantically, the following is assumed in Kratzer's (extensional version of the) theory. (23a) and (23b) give the denotations that Kratzer provides for the VP and for the Voice head of (22), respectively. The type of each expression is given in parentheses.⁶

- (22) John bakes the cake.
 (23) a. (the cake bake)* = $\lambda e_s [\text{bake}(\text{the cake})(e)]$ ($\langle s, t \rangle$)
 b. Agent* = $\lambda x_e \lambda e_s [\text{Agent}(x)(e)]$ ($\langle e, \langle s, t \rangle \rangle$)

The expression *bake the cake* thus only needs to have its event variable bound by an existential quantifier, and then it will be an expression of type $\langle t \rangle$, i.e. it will have a truth-value (in natural language this would amount to *There is an event of cake-baking*). The Agent head of the Voice phrase, on the other hand, is of a clearly incompatible type: it needs to combine with an expression denoting an individual before it can combine with an expression denoting an eventuality to yield a truth-value. However, the VP and the Voice head are to combine in Kratzer's calculus, and therefore a special mechanism different from Functional Application, namely Event Identification, is needed.⁷ Event Identification works as illustrated in (24).

- (24)
$$\begin{array}{ccc} f & g & \Rightarrow h \\ \langle e, \langle s, t \rangle \rangle & \langle s, t \rangle & \langle e, \langle s, t \rangle \rangle \\ & & \lambda x_e \lambda e_s [f(x)(e) \ \& \ g(e)] \end{array}$$

Event identification takes functions f and g as inputs to yield a function h . Function f is of the type of our agentive Voice head, g is of the VP type. The result is an expression of the type of the Voice head, and the event variables of f and g must denote the same eventuality, i.e. the agent introduced by the Voice head in (22) is sure to be the agent of the baking event. Applied to our example Event Identification delivers the following:

- (25)
$$\begin{array}{ccc} f & g & \Rightarrow h \\ \langle e, \langle s, t \rangle \rangle & \langle s, t \rangle & \langle e, \langle s, t \rangle \rangle \\ \lambda x_e \lambda e_s [\text{Agent}(x)(e)] & \lambda e_s [\text{bake}(\text{the cake})(e)] & \lambda x_e \lambda e_s [\text{Agent}(x)(e) \ \& \ \text{bake}(\text{the cake})(e)] \end{array}$$

The result is a function from individuals to a function from eventualities to truth-values. If now the agent argument is introduced in the next step, and the event variable gets existentially bound, we get an interpretation as in (26a). A natural language version is provided in (26b).

- (26) a. $\exists e_s [\text{Agent}(\text{John})(e) \ \& \ \text{bake}(\text{the cake})(e)]$ ($\langle t \rangle$)
 b. There is an event in which John is the agent, and this event is an event of cake-baking.

(26b) looks like a truth-conditionally licit paraphrase of what the sentence *John bakes the cake* means. As far as the semantics goes, Kratzer's subject severance can thus deliver what we need. But what does the syntax look like? Specifically, where exactly in the tree does the agent argument enter the composition procedure, and how does this interact with the existential quantification of the event variable? Kratzer's answers are as follows. She assumes quite generally that complements are base-generated in the specifier positions of those projections whose heads require them as complements. Specifically, the direct object is base-generated in SpecVP, and consequently the agent argument is base-generated in SpecVoiceP. She furthermore assumes together with current syntactic theorizing that some functional head immedi-

⁶ The asterisk in final position is used by Kratzer as a denotation functor.

⁷ Kratzer does not elaborate on this, but I consider this costly assumption to be justified because of its general applicability in a neo-Davidsonian semantics: it allows one "to chain together various conditions for the event described by a sentence" (op. cit.: 122).

ately above VP assigns or, in Minimalist terms, checks accusative case under government. In this theory government is defined in such a way that the object argument can only be assigned case/have its case feature checked if it moves to the (VP-)specifier position immediately below that functional head. Kratzer identifies this head with her Voice head, and Voice thus has the double function of introducing the agent argument, and of assigning/checking accusative case. Is there any evidence for those far-reaching claims? A nice area to illustrate the empirical coverage of Kratzer's reasoning is the grammar of gerunds, because gerunds vary with the portion of the verbal projection that has been nominalized – with verbal projection taken in a broad sense here so that functional heads above V may be included. For this reason we expect to find differences regarding gerundial nominalizations including or excluding VoiceP's. Kratzer herself discusses gerunds at length, and I will repeat the gist of her argument not just to back up her analysis, but also to prepare the ground for some crucial evidence concerning agentive intensifiers to be presented below (see section 2.3.4).

It is common to distinguish three kinds of gerunds in English grammar, which Kratzer dubs *of_{ing}*, *poss_{ing}*, and *acc_{ing}*, respectively. One example each is given in (27).⁸

- (27) a. I remember his rebuilding of the barn.
 b. I remember his rebuilding the barn.
 c. I remember him rebuilding the barn.

In our context, the most important thing to be said about these different kinds of gerunds is the bi-conditional link between the assignment/checking of accusative case and the agentive interpretation of the argument immediately to the left of the respective gerund. The case of the *acc_{ing}* in (27c) does not require much discussion: the accusative case of the object nominal goes along with a necessarily agentive subject interpretation of *him*. This is just as predicted by Kratzer if we assume that the gerundial construction in (27c) contains at least a VoiceP, because one and the same agentive Voice head brings along the subject argument in its specifier position, and it makes it possible for accusative case to occur on the object nominal. Now turn to the *poss_{ing}*-gerund in (27b). Again *the barn* is the direct object, and it thus has accusative case. At the same time the agent argument is case-marked as a possessive nominal, but still its interpretation may only be that of the agent argument in the gerundial event. The co-occurrence of a necessarily agentive interpretation of *his* in (27b) and of accusative case in the object nominal *the barn* once more speaks in favour of assuming that at least a VoiceP has been nominalized, because agentive Voice heads and VoiceP's are claimed by Kratzer to do precisely this: create an argument position for agent arguments, and assign/check accusative case. The really interesting case is (27a). The object of *rebuild* is not marked as accusative. We would therefore say that some constituent below VoiceP, a VP or a V, has been nominalized, accusative case cannot be assigned/check, and the object of *rebuild* must be appended as an *of*-phrase. Within our present assumptions this forces us to deny that *his* in (27a) is necessarily interpreted as denoting an agentive referent, since not being able to assign/check accusative case entails the non-creation of a slot for an agent argument. This is not immediately evident in (27a), but a comparison of (28a) and (28b) can help us decide the case.

- (28) a. I remember this year's collecting of money[, but I can't remember last year's].
 b. ??I remember this year's collecting money.

(28a) is a normal thing to say if the collecting procedures of an annual welfare campaign are discussed. The genitive in the *of_{ing}*-gerund of (28a) may be taken to denote some general re-

⁸ The interested reader may wish to peep ahead to (36), data that demonstrate the syntactic wiring of agentive intensification most clearly.

latedness relation available for this case. Not so in (28b). This sentence is incomprehensible unless we manage to fantasize a personification of “this year” which is able to collect donations. The observed difference in interpretational possibilities between the genitives in (28) is precisely the predicted truth-conditional import of nominalizing an agentive VoiceP in (28b), as opposed to a mere V(P) in (28a). For more details concerning Kratzer’s proposal the reader is referred to her original work and to Kratzer (forthcoming). From the perspective of our present research task, namely providing an analysis of agentive intensifiers, we now have everything at hand that we need to tell a very simple story.

2.3.2 Agentive intensifiers, the identity function, and Voice

In view of the emphasis that has been put on Kratzer’s agentive Voice head notion, the proposal to be made here will hardly be a surprise: agentive intensifiers still denote the identity function, but instead of adjoining to nominals as in the adnominal case they adjoin to Agent heads of VoiceP’s. What the identity function in focus will do for us in this position is the following. In terms of denotation, nothing changes: if one maps the Agent head onto itself, nothing will happen. But focusing the identity function does make a difference, because contextually given alternatives to the identity function will be functions that map the Agent head onto functions different from the Agent head. I generally assume that the logical type of the alternative functions is kept sufficiently similar to still supply an argument positions for the agentive Voice head. The result of applying the alternative functions to the Voice head will still be functions that minimally have an argument slot for an event and at least one more argument slot for what is the agent referent in the asserted sentence. At the same time nothing is predicted about the thematic role of this referent in the alternative sentences. I claim that this is the basic plot to account for the meaning and the distribution of agentive intensifiers, and that the complexities of their behaviour fall out from this general mechanism.

Let us first see what this analysis amounts to in formal terms. Agentive *selbst* must be of a modifier type which does not alter the type of the category to which it adjoins: it must be of type $\langle\langle e, \langle s, t \rangle \rangle, \langle e, \langle s, t \rangle \rangle\rangle$, i.e. a function from the type of Voice heads into the type of Voice heads (cf. (23b) above).

The calculation of the meaning of Voice’ (i.e the node dominating Voice and VP) in (29a) will then proceed as in (29b).⁹

- (29) a. [Voice’ selbst [_{VP} den Kuchen back-]] ‘bake the cake oneself’
 b. Calculating the denotation of the VP
 $\text{back-}^* = \lambda x_e \lambda e_s [\text{bake}(x)(e)]$
 $(\text{den Kuchen})^* = \text{the cake}$
 $(\text{den Kuchen back-})^* = \lambda e_s [\text{bake}(\text{the cake})(e)]$
 c. Calculating the denotation of the Voice head from Voice⁰ and the adjoined identity function
 $\text{Agent}^* = \lambda x_e \lambda e_s [\text{Agent}(x)(e)]$
 $\text{selbst}_{\text{agt}}^* = \lambda r_{\langle i, \langle v, t \rangle \rangle} [\text{ID}(r)]^{10}$
 $(\text{selbst Agent})^* = \lambda x_e \lambda e_s [\text{ID}(\text{Agent}(x)(e))] = \lambda x_e \lambda e_s [\text{Agent}(x)(e)]$
 d. Calculating the denotation of Voice’
 $((\text{Agent})(\text{den Kuchen back-})) = \lambda x_e \lambda e_s [\text{Agent}(x)(e) \ \& \ \text{bake}(\text{the cake})(e)]$
 from (29b) and (29c) by Event Identification

⁹ I consider the fact that definite object nominals will usually be scrambled to the left of agentive intensifiers a phenomenon with no significance for our computation.

¹⁰ r is a variable ranging over agentive Voice heads.

What we see is that the denotation of *selbst den Kuchen back-* ‘bake the cake oneself’ is identical to that of the VoiceP *den Kuchen back-* ‘bake the cake’ (cf. (25) above), and this is precisely what we want, since *John bakes the cake himself* and *John bakes the cake* only differ in terms of felicity conditions, but not in terms of truth-conditions. The subject argument only enters the semantic composition in SpecVoiceP, i.e. immediately above Voice’ where it is, according to Kratzer’s general assumptions, inserted. The calculation of the denotation of VoiceP from the denotations of SpecVoiceP and Voice’ is done in (30).

- (30) Calculating the denotation of VoiceP
Hannes* = Hannes
selbst Agent den Kuchen back-* = $\lambda x_e \lambda e_s [\text{ID}(\text{Agent})(x)(e) \ \& \ \text{bake}(\text{the cake})(e)]$
= $\lambda x_e \lambda e_s [\text{Agent}(x)(e) \ \& \ \text{bake}(\text{the cake})(e)]$
Hannes selbst Agent den Kuchen back-* = $\lambda e_s [\text{ID}(\text{Agent})(\text{John})(e) \ \& \ \text{bake}(\text{the cake})(e)]$
= $\lambda e_s [(\text{Agent})(\text{John})(e) \ \& \ \text{bake}(\text{the cake})(e)]$ ¹¹

Whenever the identity function occurred in (29c/d) and (30) I have equated the resulting term with a term lacking the identity function. This must be possible if the identity function is truth-conditionally inactive.

When we turn to the information-structural side of agentive intensifiers, simply dispensing with the identity function is not possible. I stated above that the notation in (19) (repeated here as (32)) is a way to capture on a very intuitive level the kind of alternatives that are related to by (18) (repeated here as (31)).

- (31) Hannes backt den Kuchen selbst.
'John bakes the cake himself.'
- (32) a. Assertion:
John RELSUBJECT/AGENT the-baking-of-the-cake
b. Alternatives:
John RELNON-SUBJECT/NON-AGENT the-baking-of-the-cake

We are now in a position to be more specific about the content of $\text{REL}_{\text{SUBJECT/AGENT}}$. The Agent Voice head is what we were looking for, and it has the required properties, as I will try to demonstrate in an informal way. Recall from the discussion in section 2.2 above that we needed a somewhat non-standard relation holding among subject referents and VP's: the subject and the VP should be presupposed or part of the background, but without the subject referent necessarily being in the background as the agent of the event encoded by the VP. The reason why we needed this was that alternatives to sentences with agentive intensifiers will always have in their backgrounds the involvement of the subject referent of the asserted sentence into the eventuality encoded by the VP, but without taking as given that the asserted agent referent is also the agent referent in the alternative sentences. Standard theories about the integration of subjects into predications cannot deliver this, because a subject will be just another argument of the verb, and the existential closure of the complete proposition will always include the subject argument. In other words: it will be impossible, or very difficult, to structurally reflect a non-presupposed relationship between subject referents and $V(P)$'s as we need it in the case of sentences with agentive intensifiers, while never allowing such a relationship between V 's and objects. Kratzer's Voice theory delivers us the tools to match our information-structural intuitions with a syntactically and semantically explicit representation. After existential closure, agentive VP's denote the existence of eventualities without making reference to subject arguments: the existentially bound VP of (31) reads as *There is an event*

¹¹ Recall from above (cf. (26)) that the event variable only gets bound above VoiceP.

of cake-baking. The way the agent/subject argument is integrated into the sentence in Kratzer's theory may be paraphrased as *(There is an event of cake-baking,) and John stands in the agent-relationship to this event*. If now we add the agentive intensifier, i.e. the identity function, to the agent-relationship, we get the paraphrase in (33), and paraphrases of some possible alternative sentences in (34) (cf. our old alternative sentences in (20)). Note that alternatives to the identity function in focus take the agent head as an argument, and thus alternatives to the agentive head are only indirectly arrived at. It is not the case that alternatives to the agentive head are considered directly. (35) is a λ -categorial representation of the focus-background structure of (31).

- (33) There is an event of cake-baking, and John stands in the agent-relationship, and not in a non-agent-relationship, to this event.
- (34) a. There is an event of cake-baking, and John stands in some non-agent relationship to this event, viz. in the relationship of having his mother be the agent in this event.
(John has his mother bake the cake.)
- b. There is an event of cake-baking, and John stands in some non-agent relationship to this event, viz. in the relationship of being the beneficiary of this event, in which his mother is the agent.
(The cake is baked for John by his mother.)
- c. There is an event of cake-baking, and John stands in some non-agent-relationship to this event, viz. in the relationship of having bought the cake from a baker's shop (where a baker baked it yesterday).
(John buys the cake from a baker's shop (where a baker baked it yesterday).)
- (35) λP [Hannes P(AGENT) backt den Kuchen], selbst

Admittedly, the alternative sentence in (34c) is not among the most straightforward ones that may come to mind, but it serves to show that there is, in principle, no limit to the complexity of the alternative involvement of the asserted agent into the eventuality of the alternative sentences: all the thematic roles that have ever been claimed to exist are possible candidates, and any complex ad-hoc involvement into an eventuality likewise is.

2.3.3 Tasks resolved

So far, only points (i) and (ii) of our check-list at the end of section 2.2 have been given an answer. The subject argument, the VP of sentences with agentive intensifiers, and some relation between the two, form the background because only the identity function is in focus (item (i)). Actually, we should be more precise now and say that the subject argument, the VP, the agentive Voice head, and some relation between the asserted subject argument and the Voice head is presupposed. Note that this only means that good contrasting sentences will have to have agentive predicates, but it does not mean that what is the agent in the assertion must be an agent in the contrasting sentence. Alternative sentences are structurally diverse (item (ii)), because linguistic realizations of alternative relationships between asserted subject referents and VP denotations may be structurally highly diverse.

We have not dealt with (iii) yet. Without being able to fully answer the question why adverbial intensifiers of the kind discussed here only occur in sentences with agentive predicates, I can at least restate it in more precise terms. In the light of our present theory the question now is why the identity function may only take the agentive Voice head as its argument, but no other head integrating other thematic roles that one may think of. While a precise answer to our question may be possible if it is couched in a fully articulate theory of thematic-role assignment, I will only mention some plausible hints. First, cross-linguistic data and language acquisition both tell us that the agent role has a special status in grammar and cognition which sets it apart from all other thematic roles. Agentivity is encoded in early stages of child language (Budwig 1989, Gülzow 2001), and it has been shown that linguistic representations of an agentive involvement into eventualities are acquired before those representations encoding

other modes of involvement. It should thus come as no surprise if the special status of agentivity were reflected in some mechanisms only being available to agentive structures. The cross-linguistic correlate of the importance of agentive involvement into eventualities has to do with the subject status of specific nominals. It has long been known that the bundle of properties usually attributed to subjects (cf. Keenan & Comrie 1977) may vary from language to language. One result of this line of research has been that in languages in which the patient or theme argument of transitive predication has many subject properties (ergative languages), some syntactic processes are still sensitive to the agent argument. We thus find ergative languages with syntactic processes only applying to agents, but we do not know of a single accusative language in which reflexivity is consistently triggered by co-reference with the patient or theme arguments. As said above, this does not explain the combinatorial limitations of adverbial intensifiers, but we are now in a position to see that if such limitations exist, we will expect the agent role to be opposed to all other roles. Finally it should be noted that the whole class of subject (or rather: agent) oriented adverbs such as *ambitiously*, *carefully*, *deliberately* etc. are all restricted in a similar way. Again, while this does not explain anything, it demonstrates that agentive relations have a special status within grammar and that the combinatorial options of other elements may be restricted to agentive elements or relations.¹²

2.3.4 Agentive intensifiers and the syntax of nominalizations

This analysis may deliver the desired results, but are there any syntactic arguments to support it? Let us return to English once more before tackling the German case. Recall from above that we may distinguish three kinds of gerundial constructions in English, *of*_{ing}-gerunds, *pos*_{ing}-gerunds, and *acc*_{ing}-gerunds, and it is in the domain of gerundial constructions where my proposal concerning the adjunction site of agentive intensifiers receives some support. We know from above that *pos*_{ing}-gerunds and *acc*_{ing}-gerunds as in (27b) and (27c) are opposed to *of*_{ing}-gerunds as in (27a) in being able to assign/check accusative case, and in forcing an agent interpretation onto the arguments immediately to the left of the *ing*-form. Now turn to the grammaticality pattern that results from adding the agentive intensifier to each type of gerund as illustrated in (36).

- (36) a. I remember his rebuilding of the barn (*himself).
 b. I remember his rebuilding the barn (himself).
 c. I remember him rebuilding the barn (himself).

This pattern supports the idea that agentive intensifiers attach to (some site within) VoiceP's, and above VP's, because their use is only grammatical in those gerunds that contain a VoiceP.

Parallel data for German are not as easy to come by because German gerundial or infinitival nominalizations do not play as big a role as their English counterparts. Still, an analogous argument relying on different kinds of nominalizations is possible; cf. (37).

- (37) a. Ich habe ihn gestern selbst (schnell) Lebensmittel einkaufen sehen.¹³
 'I saw him buy groceries quickly himself yesterday.'
 b. Ich habe gestern sein selbst (schnell) Lebensmittel Einkaufen gesehen.
 'I saw his buying groceries quickly himself yesterday.'

¹² For a functional-phrase approach to agent-oriented adverbs cf. Morzycki (2000).

¹³ In AclI-constructions with the main verb in sentence-final position, the past participle of *sehen* 'see' is identical to the infinitive, and the common past participle form *gesehen* is not used.

- c. Ich habe gestern sein (*selbst) (schnelles) (Selbst-)Einkaufen von Lebensmitteln gesehen.
 'I saw his quick (?self-)buying of groceries (*himself) yesterday.'

Stylistically, (37b) and (37c) are among the disfavoured German sentences, to say the least, but this does not affect our argument, because they are clearly possible, and the point to be demonstrated completely aligns itself with the English data. The use of agentive *selbst* is possible in AcI-constructions as in (37a); it is also possible with nominalizations of the predicate that still assign/check accusative case (cf. (37b)); but it is ungrammatical as soon as accusative case is not assigned/checked anymore as in (37c). (The manner adverb *schnell* 'quickly' in (37a/b) and the respective attribute in (37c) help us to tell adverbial *selbst* apart from *selbst* as part of a compound.) By analogy with the argument for English we may thus assume that a VoiceP is part of the AcI-construction in (37a) and the nominalization in (37b), and that no VoiceP is part of the nominalization in (37c). However, the use of *selbst* is marginally possible if it is attached directly to the nominalized form. I take this to be a clear instance of word-formation not to be dealt with in our context.

3 Conclusions

It has been the aim of this paper to show that the difference between adnominal and agentive adverbial intensifiers in German does not just constitute an option within surface syntax, but also among different loci of interpretation in semantics. While both adnominal *selbst* and adverbial *selbst* always denote the identity function, they may take different semantic arguments: DP's in the adnominal case, Voice heads in the adverbial case. I have shown that these rather economical assumptions, supplemented by standard ideas concerning information structure, allow us to derive the contextual restrictions imposed on the use of agentive intensifiers.

References

- Baker, C. L. (1995) 'Contrast, discourse prominence, and intensification, with special reference to locally free reflexives in British English'. In: *Language* 71: 1, 63-101.
- Bresnan, Joan (1982) 'The passive in Lexical Theory'. In: J. Bresnan (ed.) *The Mental Representation of Grammatical Relations*. Cambridge, Mass.: MIT Press, 282-390.
- Browning, M. A. (1993) 'Adverbial reflexives'. In: *NELS* 23, vol.1, 83-94.
- Budwig, Nancy (1989) 'The linguistic marking of agentivity and control in child language'. In: *Journal of Child Language* 16, 263-284.
- Büring, Daniel (1997) *The Meaning of Topic and Focus. The 59th Street Bridge Accent*. London: Routledge.
- Chomsky, Noam (1995) *The Minimalist Program*. Cambridge, Mass.: MIT Press.
- Dowty, David (1979) 'Word Meaning and Montague Grammar. Dordrecht: Reidel.
- Eckardt, Regine (2000) 'Reanalyzing *selbst*'. Ms. Universität Konstanz.
- Edmondson, J. A. & Frans Plank (1978) 'Great expectations: An intensive self analysis'. In: *Linguistics & Philosophy* 2, 373-413.
- Girke, W. (1993) 'Rollenwechsel und konservierte Spur: Eine funktionale Beschreibung von *sam*'. In: H. R. Mehlig (ed.), *Slavistische Linguistik 1993, Referate des XIX. Konstanzer Slavistischen Arbeitstreffens Kiel 21.-23.9.1993*. München: Verlag Otto Sagner, 81-100.
- Grimshaw, Jane (1990) *Argument Structure*. Cambridge, Mass.: MIT Press.

- Gülzow, Insa (2001) 'Der Ausdruck von Agentivität im Spracherwerb'. *Paper presented at the Ninth Annual Meeting of the Deutsche Gesellschaft für Sprachwissenschaft, Leipzig, 2/28-3/2 2001.*
- Hale, Kenneth & Samuel J. Keyser (1993) 'On argument structure and the lexical expression of syntactic relations'. In: Kenneth Hale & Samuel J. Keyser (eds.) *The View from Building 20*. Cambridge, Mass.: MIT Press.
- Higginbotham, James (1985) 'On semantics'. In: *Linguistic Inquiry* 16, 547-293.
- Keenan, Edward L. & Bernard Comrie (1977) 'Noun phrase accessibility and universal grammar'. In: *Linguistic Inquiry* 8 (1), 63-99.
- Kibrik, Andrej und Ekaterina Bogdanova (1995) 'Sam kak operator korrekciei o'idanii adresata', *Voprosy Jazykoznanija* 3, 4-47.
- König, Ekkehard (1991) *The Meaning of Focus Particles. A Comparative Perspective*. London: Routledge.
- König, Ekkehard (2001) 'Intensifiers and reflexive pronouns'. In: M. Haspelmath, E. König, W. Oesterreicher & W. Raible (eds.) *Language Typology and Language Universals: An International Handbook*. Berlin etc.: Mouton de Gruyter, 747-760.
- König, Ekkehard & Peter Siemund (1996) 'Emphatische Reflexiva und Fokusstruktur'. In: I. Rosengren (ed.) *Sprache und Pragmatik* 40. Lind: Lunds Universitet, 1-42.
- König, Ekkehard & Peter Siemund (2000) 'Intensifiers and reflexives: A typological perspective'. In: Z. Frajzyngier & T. S. Curl (eds.) *Reflexives. Forms and Functions*. Amsterdam: Benjamins, 41-74.
- Kemmer, Suzanne (1995) 'Emphatic and reflexive -self: Expectations, viewpoint and subjectivity'. In: D. Stein & S. Wright (eds.) *Subjectivity and Subjectivisation*. Cambridge: CUP, 55-82.
- Kratzer, Angelika (1996) 'Severing the external argument from its verb'. In: J. Rooryck & L. Zaring (eds.) *Phrase Structure and the Lexicon*. Dordrecht: Kluwer, 109-137.
- Kratzer, Angelika (2000) 'Building Statives'. Ms. University of Massachusetts at Amherst.
- Marantz, Alec (1984) *On the Nature of Grammatical Relations*. Cambridge, Mass.: MIT Press.
- Moravcsik, Edith (1972) 'Some cross-linguistic generalizations about intensifier constructions'. *CLS* 8, 271-277.
- Morzycki, Marcin (2000) 'Measure DP adverbials, Aktionsart, and functional structure'. *Paper presented at "Sinn & Bedeutung V", University of Amsterdam, December 18-20 2000.*
- Plank, Frans (1979) 'Zur Affinität von *selbst* und *auch*'. In: H. Weydt (ed.) *Die Partikeln der deutschen Sprache*. Berlin: de Gruyter, 269-284.
- Rooth, Mats (1985) 'Association with focus'. *Doctoral dissertation*. University of Massachusetts at Amherst.
- Schwarzschild, Roger (1999) 'Givenness, AvoidF and other constraints on the placement of accent'. *Natural Language Semantics* 7, 141-177.
- Siemund, Peter (2000a) *Intensifiers. A Comparison of German and English*. London: Routledge.

- Siemund, Peter (2000b) 'Towards a typology of adverbial intensifiers'. *Paper presented at the workshop "Operations on Argument Structure" held at Free University, Berlin, Aug. 3, 2000.*
- Selkirk, Elisabeth (1984) *Phonology and Syntax: The Relation Between Sound and Structure*. Cambridge, MA: MIT Press.
- Selkirk, Elisabeth (1995) 'Sentence prosody: Intonation, stress, and phrasing'. In: John A. Goldsmith (ed.) *The Handbook of Phonological Theory*. Cambridge, Mass.: Blackwell, 550-569.