

Agentive *selbst* and other instantiations of the identity function in
German

Daniel Hole
Institut für Deutsche Philologie/LMU München
Schellingstraße 3/RG
D-80799 München

phone: ++49-89-2180-2061
fax: ++49-89-2180-3871
e-mail: hole@lmu.de

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Abstract

This paper deals with the syntax and semantics of German intensifying *selbst* ‘(non-argumental/emphatic) x-self’. It is argued that at least three distinct uses of *selbst* should be distinguished: (i) the adnominal use as in *the boss herself* and as modeled by Eckardt (2001), (ii) the agentive use as in *clean up the room oneself* and (iii) the inclusive use as in *have children oneself*. The focus of the paper lies with the agentive use, which is carefully separated from the other uses of *selbst*. I put forward an implementation in terms of the focused identity function which takes an agentive argument of type $\langle e, \langle s, t \rangle \rangle$. Kratzer’s (1996) agentive Voice head and the next higher branching node are suitable adjunction sites. Contrasts involving the subject locatum alternation, passives and nominalizations corroborate the claim. Comparisons with Eckardt’s (2001) and Browning’s (1993) approaches round off the discussion of the agentive use of *selbst*. A proposal for a clarification of the relationship between agentive intensifiers, ‘together’-adverbs and ‘alone’-adverbs is made. The paper concludes with a sketch of a compositional analysis of English intensifying *x-self* which reconciles the insights reached for the German case with the clearly reflexive morphology of the English expression.

1. Introduction

In a series of publications, König and Siemund (K&S henceforth) propose a tripartite classification of intensifiers (cf., for instance, König 1991, 2001; Siemund 2000, K&S 1996a, 1996b, 2000, 2005). Intensifiers, as K&S use this term, are elements like German postnominal or adverbial *selbst/selber*, or English non-argumental and emphatic *x-self*.¹ (1) exemplifies each of the uses distinguished by K&S.²

- (1) a. adnominal use:
Paul SELBST wird teilnehmen, nicht nur seine SCHWESTER.
Paul himself will attend, not only his sister
‘Paul himself will attend, not just his sister.’
b. (adverbial-)agentive use:
Paul will SELBST aufräumen.

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¹ Intensifying *selbst* and *selber* are free variants, with *selber* not being as frequent as *selbst* in written styles. In the rest of the paper only *selbst* will be used, but all the examples in this paper are also fine with *selber*. The substitutability of *selbst* with *selber* does not hold for the homophonous (scalar) additive focus particle *selbst* ‘even’ as used in (i):

- (i) Selbst/*Selber PAUL kam.
even/himself Paul came
‘Even PAUL came.’

² Focus accents are marked by small caps throughout.

- Paul wants himself clean.up
 ‘Paul wants to clean up himSELF.’
- c. (adverbial-)inclusive use:
 Paul hat SELBST Kinder.
 Paul has himself children
 ‘Paul has kids himSELF.’

The basic facts are entirely parallel for German and English, except that English instantiates a language with formal identity between reflexives and intensifiers, whereas German opposes *selbst* to the pronouns that are used in reflexive contexts (see section 7.2 for more discussion of this contrast). Intuitively, adnominal *selbst* in (1a) says that at least one other person is under discussion as a possible attendee and that this other person has something to do with Paul; agentive *selbst* in (1b) says that Paul doesn’t delegate the job of cleaning up; inclusive *selbst* as in (1c), finally, says that Paul has kids while somebody else has kids, too. Eckardt (2001) proposes a different classification. One of the aims of the present paper is to marshal more evidence that K&S’s classification is basically correct. The other goal is to propose an explicit account of the syntax and semantics of the agentive use of *selbst* as in (1b). This account will be closely related to the one for adnominal uses as in (1a), but different from Eckardt’s (2001) proposal for the adverbial uses.³

The plan of the paper is as follows. Section 2 introduces the analysis of adnominal *selbst* in terms of the identity function in focus which was developed independently by Eckardt (2001) and Hole (2002). We will then turn to a first piece of evidence which shows that the three uses identified in (1) are really distinct, and that Eckardt’s reduction cannot be maintained (section 3). Section 4 will be devoted to the implementation that I propose for the agentive use of *selbst*. I claim that this use of *selbst* denotes the identity function which takes Kratzer’s (1996) agentive Voice head, or the node above it, as its argument. Section 5 will be devoted to justifying the proposal. Section 6 compares the proposal with Eckardt’s in some more detail, and with Browning’s (1993). Section 7 discusses a case with adjunction of agentive *selbst* to a structure where a recipient involvement, instead of an agent involvement is at stake. We will also try to extend the proposal for agentive *selbst* to English agentive *x-self* while, at the same time, respecting the different morphological make-up and lexical semantics of agentive intensifiers in both languages.

2. Adnominal intensification

2.1 Adnominal *selbst* denotes the identity function over individuals

Eckardt (2001) and Hole (2002) present analyses of adnominal intensification that are identical in spirit, but Eckardt’s implementation is formally explicit. Therefore it is given precedence here.

The simplest case are combinations of proper names with *selbst* as in (2).

- (2) Paul SELBST wird kommen.
 Paul himself will come
 ‘Paul himSELF will come.’

³ I don’t adopt K&S’s terminology for the agentive intensifier. Their term ‘adverbial-exclusive’ may be misleading, and it seems to me that the natural-language implications of the term ‘exclusive’ have given rise to certain misinterpretations of König’s and Siemund’s approaches in Eckardt’s (2001) work. Eckardt applies the term to readings as soon as a referent acts alone, even if the construal is clearly adnominal (cf., for instance, Eckardt’s 2001: 392 ex. (4.3)). For reasons to become clear, I prefer the term ‘agentive intensifier’.

(3a) presents Eckardt's (2001: 380) proposal for the lexical entry of *selbst* as in (2), and (3b) presents a translation of (3a) into a notational format as employed by Heim & Kratzer (1998).

- (3) a. $ID: D_e \rightarrow D_e$
 $ID(a) = a$ for all $a \in D_e$
 b. $\llbracket selbst \rrbracket = \lambda x_e. x$

Adnominal *selbst*, combined with proper names, is thus a function of type $\langle e, e \rangle$ which maps individuals to themselves. Definite DPs with lexical N heads may, I think, be given the same analysis if we assume that all definite DPs denote individuals, or groups of individuals that may again be treated as individuals. Still, Eckardt also provides a type-lifted version of (3) which can cater to those kinds of analyses which assume a generalized-quantifier account for plural DPs such as *die Schüler* 'the students' in *die Schüler selbst* 'the students themselves'. This type-lifted identity function is given in (4a), and (4b) adds the Heim & Kratzer notation again.

- (4) a. Let f be a function on D_e . Then $Lift1(f) := f: D_{\langle\langle e, t \rangle, t \rangle} \rightarrow D_{\langle\langle e, t \rangle, t \rangle}$ is defined as follows:
 If $Q \in D_{\langle\langle e, t \rangle, t \rangle}$ is a principal ultrafilter, i.e. of the form $Q = \lambda P(P(a))$ for some $a \in D_e$, then $f(Q) = \lambda P(P(a))$. Else, f is undefined.
 b. $\llbracket selbst_{lift1} \rrbracket = \lambda f: f \in D_{\langle\langle e, t \rangle, t \rangle}$ & f is a principal ultrafilter . $[\lambda g_{\langle e, t \rangle} . f(g)]$

Since syntactically complex DPs are principal ultrafilters only if their referential argument doesn't vary with different assignments, precisely those DPs are predicted by Eckardt as possible arguments of *selbst_{lift1}* which are definite, or indefinite and specific; cf. the ungrammatical DPs in (5).

- (5) a. * alle Schüler selbst
 all students themselves
 '* all students themselves'
 b. * mindestens fünf Schüler selbst
 at.least five students themselves
 '* at least 5 students themselves'

Gast (2002, section 4.2) states a necessary refinement. The interesting English example from Edmondson & Plank (1978) in (6) helps to illustrate the point.

- (6) A: All Cretans lie. – B: Where did you hear that? – A: A Cretan himSELF told me.

Adnominal intensifiers may combine with non-referential DPs if and only if the intensifier underlyingly attaches to a definite DP. A's second turn may be paraphrased as in (6'), and I believe that all good intensifiers attaching to indefinites may *salva veritate* be transformed into a phrase with an intensifier adjoining to a definite DP.

- (6') One of [the Cretans themSELVES] told me.

On the whole, Eckardt (2001) predicts the correct distribution of adnominal intensifiers. An alternative implementation which doesn't treat definite DPs as quantifiers makes correct predictions throughout if we assume with Gast (2002) that all constituents of the type 'indefinite article + N + intensifier' correspond to [*one of* [[*the Ns*] *themselves*]] underlyingly.

Let us now turn to the information-structural side of the account. Note that, so far, we have employed our machinery to yield a vacuous result: individuals are mapped to themselves.

2.2 The identity function under focus

Sentences with adnominal intensifiers will typically have a focus accent on *selbst*. They better had one, because this is the only way to justify the presence of an otherwise purely vacuous element like the identity function, and we will see in a moment how the identity function under focus does make a difference. The only exceptions to the generalization that *selbst* is focused concern cases of corrective or echo utterances as in (7) in which the propositions with *selbst* as a whole are backgrounded.

- (7) A: Paul SELBST wird kommen.
Paul himself will come
'Paul himself will come.'
B: Falsch, Paul selbst wird wahrscheinlich NICHT kommen.
wrong Paul himself will probably not come
'That's wrong, Paul himself probably WON'T come.'

The focus accent on the intensifier in a sentence like (7A) will lead to a Rooth-style focus meaning of *selbst* as provided in (8a) and as exemplified in (8b) (Rooth 1985, 1992).

- (8) a. $\llbracket \textit{selbst} \rrbracket^f = \{f_{\langle e, e \rangle} : f(x) \neq x\}$
b. $\llbracket \textit{selbst} \rrbracket^f = \{\lambda x_e . \text{the } y \text{ such that } y \text{ is } x\text{'s friend}, \lambda x_e . \text{the } y \text{ such that } y \text{ is } x\text{'s wife},$
 $\lambda x_e . \text{the } y \text{ such that } y \text{ is } x\text{'s proxy}, \lambda x_e . \text{the } y \text{ such that } y \text{ is } x\text{'s T-shirt}, \dots\}$

The focus meaning of adnominal *selbst* is the set of all functions which map individuals to other individuals in D.⁴ Note that the alternative functions need not map Paul in (7) to other humans. The last exemplifying function in (8b) maps Paul to his T-shirt. This may not be an interesting alternative for sentence (7A), but it is relevant for a sentence like *Did Paul himself get wet, or was it just his T-shirt that caught a little splash of water?*

With the mechanics of focus meanings added, *selbst*, which doesn't make a difference in the ordinary denotation, does make a difference in the focus meaning. It introduces variation in the p-set of *selbst* sentences where otherwise there wouldn't be any. Admittedly, Paul's friend may just as well be in a relevant p-set of *Paul* under focus if *selbst* weren't used in the sentence, but there's a difference. With *selbst*, only referents that are identified relative to Paul will be relevant entities, and strictly speaking the contrast only exists between different functions (the identity function vs. the friend-of function), not between different individuals (Paul vs. Paul's friend).

For our purposes this quick introduction is sufficient, because the main emphasis in this paper is on the agentive use of German intensifiers. For a more detailed discussion of adnominal intensifiers, the reader is referred to Gast (2002), Siemund (2000) or Eckardt (2001).

3. Delimiting adverbial intensifiers

3.1 Additive vs. non-additive adverbial intensifiers

In this subsection, quite a few diagnostics to delimit the agentive use from the inclusive use will be presented, because the intuitively well-grounded distinction which K&S did not consider necessary to defend in more refined ways has met with forceful skepticism among formal semanticists like Eckardt (2001) and several anonymous referees of this paper. Readers

⁴ A p-set à la Rooth (1985, 1992) will have the focused element in it, and not just alternatives to it. Thus, strictly speaking (8a) is not the p-set provided by the application of the focus interpretation function, but rather the p-set minus the identity function. Still, it is clear that this is a realistic restriction in our empirical domain. For more reasonings concerning 'realistic p-sets' and how to restrict them cf. Hole (2006).

who are comfortable with the distinction illustrated in (9) without further argumentation may safely skip the following subsections. The main line of argumentation is resumed in section 3.2.

3.1.1. Syntax

Agentive *selbst* is lower in the tree than inclusive *selbst*. This is witnessed by (9) for both German and English.

- (9) a. agentive reading strongly preferred:
 ... dass der Koch schon mal SELBST Blaubeeren gepflückt hat.
 that the cook already once himself blueberries picked has
 ‘... that the cook has picked blueberries himSELF before.’
 b. inclusive reading strongly preferred:
 ... dass der Koch SELBST schon mal Blaubeeren gepflückt hat.
 that the cook himself already once blueberries picked has
 ‘... that the cook has himSELF picked blueberries before.’

A sharpened interpretive difference comes out with topicalization. Look at the contrast in (10).⁵

- (10) a. Maria würde ja SELBST ein Fahrrad reparieren.
 Mary would MOD.PRT herself a bike repair
 ‘You should know, Mary would repair a bike herSELF.’
 ✓agentive reading, i.e. Mary wouldn’t wait for somebody else to repair a bike
 ✓inclusive reading, i.e. along with somebody else who repairs a bike, Mary would repair a bike
 b. [/SELBST ein Fahrrad reparieren]_i würde Maria ja _{t_i}.
 herself a bike repair would Mary MOD.PRT
 ‘You should know, repair a bike her/SELF, Mary WOULD.’
 ✓agentive reading, i.e. Mary wouldn’t wait for somebody else to repair a bike
 * inclusive reading, i.e. along with somebody else who repairs a bike, Mary would repair a bike

(10a) is ambiguous between an agentive and an additive reading, while the topicalization structure in (10b) only has an agentive reading. This behavior follows straightforwardly if we assume that *selbst* in (10a) is really in two different positions as shown in (10a’).

- (10) a’. Maria würde ja {SELBST /... SELBST} ein Fahrrad reparieren.
 Mary would MOD.PRT herself herself a bike repair
 ‘You should know, Mary would repair a bike herSELF.’
 ✓agentive reading, i.e. Mary wouldn’t wait for somebody else to repair a bike
 ✓inclusive reading, i.e. along with somebody else who repairs a bike, Mary would repair a bike

On this view, the agentive reading of (10a) will involve *selbst* in the right-hand position. This *selbst* topicalizes along with the material to its right, as witnessed by (10b). The structure between the two *selbsts* in (10a’) crosses the boundary between structures that may still be topicalized as in (10b), and those that may not. In sum, inclusive/additive *selbst* is syntactically higher than agentive *selbst*. Note that a reading would be available for (10a’) with both intensifiers, and the same is true in English: *You should know, Mary would herSELF repair a bike herSELF*. This constitutes a further syntactic argument for distinguishing, if not two different lexical items, then at least two different syntactic positions of adverbial intensifiers. (Note that this last argument has also been stated repeatedly in K&S’s works).

Adverbial quantifiers may also be used to make the syntactic difference between agentive and inclusive intensifiers come out clearly; cf. (11).

⁵ Small-cap syllables with initial slashes are used to notate contrastive topics in the sense of Büring (1997, 2003).

- (11) a. Paul muss oft/manchmal/selten SELBST aufräumen.
 Paul must often/sometimes/rarely himself clean.up
 ‘Paul must often/sometimes/rarely clean up himSELF.’
 ✓agentive reading
 ✓inclusive reading
- b. Paul muss SELBST oft/manchmal/selten aufräumen.
 Paul must himself often/sometimes/rarely clean.up
 ‘Paul must himSELF clean up often/sometimes/rarely.’
 * agentive reading (good if *selbst* is a contrastive topic followed by a focus)
 ✓inclusive reading

(11a) with the adverbs to the left of the intensifier is ambiguous between an agentive and an inclusive interpretation. (11b) with the adverbs to the right of the intensifier and a single information-structurally distinguished category only allows for the inclusive interpretation. Again, agentive intensifiers behave systematically different from inclusive intensifiers.

3.1.2 Semantics

The most important ingredient of the adverbial-inclusive use is an additive presupposition to the effect that the predicate of the sentence in which additive *selbst* occurs is true of somebody else, as well. This component of meaning is absent with agentive uses. The presuppositional status of this component of meaning comes out clearly in (12), where the additive presupposition in (12b) persists, while no parallel effect is observed for the agentive use in (12a).

- (12) a. no additive presupposition with the agentive use
 Falls Paul gestern SELBST aufgeräumt hat, ...
 if Paul yesterday himself cleaned.up has
 ‘If Paul cleaned up himSELF yesterday...’ (no presupposition that somebody else cleaned up)
- b. additive presupposition with the inclusive use
 Falls Paul SELBST Kinder hat, ...
 if Paul himself children has
 ‘If Paul has kids himSELF ...’ (presupposition that somebody else has kids)

For a second semantic argument let us look at verbs specifying manner of motion like *fliegen* ‘fly’ which come with two different construals, a causative or agentive one, and a non-causative one. If the difference between the two adverbial uses has something to do with agentivity, we will expect the agentive reading of the intensifier to be absent with the non-causative readings of *fliegen* ‘fly’, while both the agentive and the inclusive reading should be available with agentive uses of such verbs. This prediction is borne out by sentences like (13).

- (13) Paul ist SELBST nach Wien geflogen.
 Paul is himself to Vienna flown.
 ‘Paul flew to Vienna himSELF.’
 ✓non-causative reading of the verb + inclusive intensifier
 *non-causative reading of the verb + agentive intensifier
 ✓causative reading of the verb + inclusive intensifier
 ✓causative reading of the verb + agentive intensifier

On the non-causative reading of *fliegen* in (13), i.e. if Paul passively moved to Vienna by sitting on a plane as a regular passenger, only the inclusive reading of the intensifier exists: Paul went to Vienna, and somebody else did, too. The second, causative, reading of *fliegen* is easy to get if we think of Paul as being a pilot who steers his own plane to Vienna. He could have had another pilot steer it, but he decided to fly the plane himself. This typically triggers the agentive reading of the intensifier in (13). With causative *fliegen*, the inclusive interpretation of the intensifier is possible alongside the agentive one: If Paul’s wife flew her plane to

Vienna to see her sick mother, and if Paul flew his own plane to Vienna a day later, (13) is a good sentence to encode his going to Vienna, plus the presupposition that somebody else has also steered a plane to Vienna.

3.1.3 A crosslinguistic argument

Let me finally mention a crosslinguistic argument supporting a distinction between agentive and inclusive adverbial intensifier uses (cf., again, K&S's publications or Gast et al. 2003). While languages all over the world have adnominal intensifiers that may also be used adverbially, the special inclusive use of intensifiers seems to be restricted to European languages. Taking together the evidence of subsection 3.1, I will henceforth take it for granted that an inclusive use among the adverbial uses of intensifiers must be distinguished in German (and English).

3.2 Agentive adverbial intensifiers vs. adnominal intensifiers

3.2.1 Eckardt's (2001) account of the bulk of adverbial intensifiers

No one would deny that adnominal and adverbial adjunction sites for intensifiers must be distinguished. But researchers are divided over the question how important these different syntactic environments are. K&S defend the claim that the difference matters, but they don't strictly speaking explain it. Eckardt (2001) denies more far-reaching semantic differences by saying that most uses of adverbial intensifiers are ultimately instances of the identity function over the domain of individuals. To capture their syntax, she defines the type-lifted variants of adnominal *selbst* in (14) (Eckardt 2001: 381). The primed variants are Heim-and-Kratzer style renderings of the same functions.

(14) Adverbial *selbst* for intransitive verbs:

$$a. \text{Lift2(ID)} := \lambda P_{\langle e, t \rangle} (\lambda x . P(\text{ID}(x)))$$

$$a'. \llbracket \text{selbst}_{\text{lift2}} \rrbracket = \lambda f_{\langle e, t \rangle} . [\lambda x_e . f(x)]$$

Adverbial *selbst* for transitive verbs, subject-oriented:

$$b. \text{Lift3(ID)} := \lambda Q_{\langle e, \langle e, t \rangle \rangle} (\lambda y \lambda x . Q(\text{ID}(x), y))$$

$$b'. \llbracket \text{selbst}_{\text{lift3}} \rrbracket = \lambda f_{\langle e, \langle e, t \rangle \rangle} . [\lambda y_e . [\lambda x_e . f(y)(x)]]$$

Adverbial *selbst* for transitive verbs, object-oriented:

$$c. \text{Lift4(ID)} := \lambda Q_{\langle e, \langle e, \langle e, t \rangle \rangle \rangle} (\lambda y \lambda x . Q(x, \text{ID}(y)))$$

$$c'. \llbracket \text{selbst}_{\text{lift4}} \rrbracket = \lambda f_{\langle e, \langle e, \langle e, t \rangle \rangle \rangle} . [\lambda y_e . [\lambda x_e . f(y)(x)]]$$

The type-lifted identity functions in (14) all take the verb as their only argument, and then yield functions of the types of the respective verbs such that the arguments expected for these verbs may successively enter the derivation. Additional lifted functions, for ditransitive verbs for instance, may easily be defined along the same general lines. In the end, however, the identity function will always apply to individuals; cf. ID, which always takes an element of D_e as its argument in (14), viz. the subject in (14b), and the object in (14c). The difference between the subject-oriented and the object-oriented reading doesn't surface in the Heim & Kratzer notation. This is a consequence of Heim & Kratzer's dispensing with an intermediate meta-language. Heim & Kratzer (1998) interpret natural language expressions right away.

3.2.2 A first problem for Eckardt's account: the agentivity constraint

I will defer the bulk of the discussion of Eckardt's account of agentive intensification to a point where my own analysis has already been put forward (section 6). At this early point I would just like to point out one kind of contrast which is unaccounted for under Eckardt's analysis, but will follow straightforwardly from the account to be developed below. The contrasts in (15) through (18) show that agentive *selbst* is only licensed in agentive predications

(which, given our terminology of ‘agentive intensification’, may not seem much of a surprise; but note that the use of the term ‘agentive’ has not been justified so far).

- (15) a. Der Gletscher SELBST versperrt ja den Taleingang.
 the glacier itself blocks.up MOD.PRT the entrance.to.the.valley
 ‘The glacier itself blocks up the entrance to the valley.’
 b. Der Gletscher versperrt den Taleingang ja (*SELBST).
 the glacier blocks.up the entrance.to.the.valley MOD.PRT itself
 ‘The glacier blocks up the entrance to the valley (*itself).’
- (16) Die Polizisten versperrten den Taleingang ja SELBST.
 The policemen block.up the entrance.to.the.valley MOD.PRT themselves
 ‘The policemen block up the entrance to the valley themSELVES.’
- (17) [No PLANTS in the POTS were needed to beautifully decorate the balcony, ...]
 a. ... die Töpfe SELBST schmückten den Balkon wunderbar.
 the pots themSELVES decorated the balcony beautifully
 ‘... the pots themSELVES beautifully decorated the balcony.’
 b. ... die Töpfe schmückten den Balkon wunderbar (*SELBST).
 the pots decorated the balcony beautifully themselves
 ‘... the pots beautifully decorated the balcony (*themSELVES).’
- (18) Die Bewohner schmückten den Balkon wunderbar SELBST.
 the residents decorated the balcony beautifully themselves
 ‘The residents beautifully decorated the balcony themSELVES.’

Versperrten ‘block up’ and *schmücken* ‘decorate’ are ‘fill verbs’ (Levin 1993: 119–20), and they participate in the ‘locatum subject alternation’ (Levin 1993: 81–2). (16) and (18) illustrate the assumed basic agentive-causative construal of these verbs, and the subject is the agent. In (15) and (17) the ‘locatum’, which constitutes the structuring entity in the spatial configuration at hand, is coded as subject. With suitable real-world contexts, the ‘locatum’ arguments may be encoded by *mit*-phrases on the agentive construal (*den Balkon mit Töpfen schmücken* ‘decorate the balcony with pots’, *den Taleingang mit dem Gletscher versperrten* ‘block up the entrance to the valley with the glacier’, the latter example requiring some exceptional agentive use of force). Agentive *selbst* is possible in sentences with the agentive construal of *fill* verbs as in (16) and (18). Adnominal *selbst* is possible with the subject DPs irrespective of the alternation; this is documented for the important cases in (15a) and (17a). Adverbial agentive *selbst* is, however, impossible with locatum subject sentences ((15b)/(17b)). From the perspective of Eckardt’s (2001) proposal, the contrasts in (15) through (18) are entirely unexpected. Adverbial *selbst* in (15b) and (17b) ought to be just as good as in (16) and (18), which it isn’t. The identity function, applied to individuals, cannot be the whole story to account for adverbial *selbst* as in (16) and (18).

I will now turn to my own proposal. Agentive *selbst* is analyzed in terms of the identity function applied to Kratzer’s (1996) agentive Voice head, or to the next higher branching node.

4. 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 to alternative agent referents, but rather to different relations that might hold between the agent referent of the asserted sentence and the VP event. This intuition will be modeled by saying that the agentive intensifier denotes the identity function under focus which, in the simplest case, takes the agentive Voice head as its argument. Apart from its syntactic plausibility the analysis in terms of the Voice head will have one major advantage: it represents the agent relation 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 agent constituent itself 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 subsection.

4.1 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.⁶ As a consequence, transitive verbs are analyzed by Kratzer as having a single argument slot for the internal argument, plus another one for the event variable.

(20a) and (20b) give the neo-Davidsonian denotations that Kratzer provides for the VP and for the Voice head of (19), respectively. The notation has been adapted slightly to conform more closely to Heim & Kratzer (1998).⁷

(19) John bakes the cake.

- (20) a. $\llbracket \textit{the cake bake} \rrbracket = \lambda e_s . \textit{bake the cake}(e)$
 b. $\llbracket \textit{Agent} \rrbracket = \lambda x_e . [\lambda e_s . \textit{agent}(x)(e)]$

The expression *bake the cake* of type $\langle s, t \rangle$ 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 baking the cake*). The Agent head of the Voice phrase in (20b) as its sister in the tree 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. A special mechanism different from Functional Application, namely Event Identification, is needed. Event Identification works as illustrated in (21). (I use the bullet point to notate Event Identification.)

- (21) $f \quad \bullet \quad g \quad \Rightarrow \quad h$
 $\langle e, \langle s, t \rangle \rangle \quad \langle s, t \rangle \quad \langle e, \langle s, t \rangle \rangle$
 $\lambda x_e . [\lambda e_s . f(x)(e) \ \& \ g(e)]$

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 come out as denoting the same eventuality because this is part of the definition of Event Identification. Therefore, the agent introduced by the Voice head in (19) is sure to be the agent of the baking event. Applied to our example, Event Identification delivers the following:

- (22) $\lambda x_e . [\lambda e_s . \textit{agent}(x)(e)] \bullet \lambda e_s . \textit{bake the cake}(e) \Rightarrow \lambda x_e . [\lambda e_s . \textit{agent}(x)(e) \ \& \ \textit{bake the cake}(e)]$

⁶ Light verbs in the tradition of Hale & Keyser (1993) or Chomsky’s little ν (1995) constitute related syntactic concepts, but such purely syntactic analyses are less radical on the semantic side in that agent arguments typically originate VP-internally and move up to the vicinity of little ν only secondarily. These light verbs are lexical in nature, whereas Kratzer’s Voice head is a functional category. See Kratzer (1996: 116–9) in her paper for arguments in favor of the functional phrase analysis. Dowty’s (1979: 110–21) 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.

⁷ I adopt Kratzer’s conventions for her neo-Davidsonian variables and types, even though, in the light of the names for types, I find the convention for variables confusing, to say the least:

x, y range over individuals and are of type e ;
 e ranges over events and is of type s ;
 s ranges over states and is of type s .

The result is of type $\langle e, \langle s, t \rangle \rangle$, a function from individuals to a function from eventualities to truth-values, just like the Voice head itself. If now the agent argument is merged, and the event variable gets existentially bound, we get an interpretation as in (23a). A natural language version is provided in (23b).

- (23) a. $\exists e_s . \text{agent}(x)(e) \ \& \ \text{bake the cake}(e)$
 b. There is an event which has John as agent, and this event is an event of baking the cake.

(23b) 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 deliver what we need.

Kratzer claims her theory has syntactic merits, too. The agentive Voice head is held responsible for the feature checking of accusative case of the internal argument, which is merged right under the Voice head. Therefore, the frequent biconditional link between agentivity and the presence of accusative case (“Burzio’s generalization”) may be modeled: If the Voice head is present, an accusative-marked DP can have its case checked, and if the Voice head is absent, accusative case cannot be checked. Kratzer’s main argument to back up this bifunctionality of the agentive Voice head – introduction of the agent relation, checking of accusative case – comes from nominalizations. It is common to distinguish three kinds of gerunds, i.e., nominalizations of verbal categories, in English grammar. One example each is given in (24).

- (24) a. *of_{ing}-gerund*
 I remember his rebuilding of the barn.
 b. *poss_{ing}-gerund*
 I remember his rebuilding the barn.
 c. *acc_{ing}-gerund*
 I remember him rebuilding the barn.

Only those gerunds that co-occur with direct (i.e., accusative-marked) objects enforce an agentive reading of the DP right to the left of the gerund (*his/him*). According to this generalization, (24b) and (24c) must be read so as to require that *him/his* refers to the builder. In (24a), *his* may refer to the builder, but it need not; a phrase like *Paul’s rebuilding of the barn* may just as well relate to an event in which Paul was involved in the building process in a more indirect way, say, as the one who just observes the building process alongside others who each observe their distinct building processes, too.

For more details concerning Kratzer’s proposal the reader is referred to her original work (Kratzer 1996) and to Kratzer (in prep.).⁸ 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.

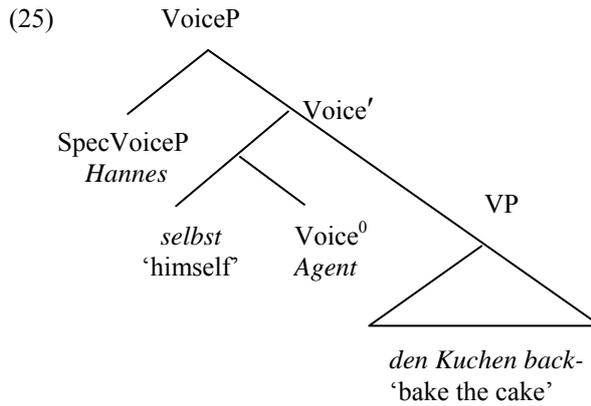
4.2 Agentive intensifiers, the identity function, and Voice

As said before, I propose that agentive intensifiers denote the identity function, but instead of adjoining to DPs as in the adnominal case, they adjoin to the heads of VoicePs in the simplest case. What the identity function in focus will do for us in this position is the following. Contextually given alternatives to the identity function will be functions that map the Agent head onto functions different from the Agent head. The result of applying the alternative functions

⁸ Kratzer (1996) discusses some more facts concerning the relative ordering of functional projections above VP. She concludes that VoiceP must be located below the node where the event variable gets bound (probably in TP) and that VoiceP is probably immediately above VP, or at least very close to VP.

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. This is due to the mechanics of focus semantics and p-set formation (cf. Rooth 1985, 1992, Schwarzschild 1999). Moreover, since the Agent head is not in focus, it should come out as given, too. This means in turn that all elements of $\llbracket \textit{selbst Agent} \rrbracket^f$ will make recourse to an agentive semantics. At the same time nothing is predicted about the thematic role of the asserted agent referent in the alternative propositions. The agent referent of the assertion may instantiate any thematic involvement in alternative propositions. 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 behavior fall out from this general mechanism.

(25) is the syntactic tree that results from adjoining agentive *selbst* to the Voice head.



Let us assume a lexical entry for agentive *selbst* as in (26) for the moment. We will refine it immediately, but (26) will allow us to see where the analysis aims at. Given (26), the computation of (25) proceeds as in (27). (The denotations of the VP and of the other terminal nodes are as in section 4.1 above.)

(26) $\llbracket \textit{selbst}_{\text{agt}} \rrbracket = \lambda f: f \in D_{\langle e, \langle e, t \rangle \rangle} \ \& \ f \text{ is } \llbracket \textit{Agent} \rrbracket . [\lambda x_e . [\lambda e_s . f(x)(e)]]$ (to be revised)

(27) a. $\llbracket \textit{VP} \rrbracket = \lambda e_s . \text{bake the cake}(e)$

b. $\llbracket \textit{selbst}_{\text{agt}} \rrbracket (\llbracket \textit{Agent} \rrbracket) = \lambda f_{\langle e, \langle e, t \rangle \rangle} \ \& \ A_{\text{Agent}} . [\lambda x_e . [\lambda e_s . f(x)(e)]] (\lambda x_e . [\lambda e_s . \text{agent}(x)(e)])$
 $= \lambda x_e . [\lambda e_s . \text{agent}(x)(e)]$

c. $\llbracket \textit{Voice}' \rrbracket = \lambda x_e . [\lambda e_s . \text{agent}(x)(e)] \bullet \lambda e_s . \text{bake the cake}(e)$
 $= \lambda x_e . [\lambda e_s . \text{bake the cake}(e) \ \& \ \text{agent}(x)(e)]$ (by Event Identification; cf. (21)/(22))

d. $\llbracket \textit{VoiceP} \rrbracket = \lambda x_e . [\lambda e_s . \text{bake the cake}(e) \ \& \ \text{agent}(x)(e)]$ (Hannes)
 $= \lambda e_s . \text{bake the cake}(e) \ \& \ \text{agent}(\text{Hannes})(e)$

The lexical entry of agentive *selbst* amounts to the identity function, applied to the agentive Voice head. Truth-conditionally, everything remains as with the agentive Voice head alone. But there is an additional selectional restriction in (26) which requires *selbst*'s argument to be the agent function. The computation then proceeds as before, and with existential quantification of the event variable we again arrive at the paraphrase 'There is an event of baking the cake, and the agent of this event is Hannes'.

There is an element of brute force in (26), viz. the restriction of the possible modifyees of agentive *selbst* to the agent function. In an ideal composition where the only formal requirement for combinability is compatibility of logical type, a restriction like this should not be available. But we somehow have to implement the observed agentivity restriction stated in section 3.2.2 above. If a selectional restriction as in (26) is dispreferred, a true presupposition

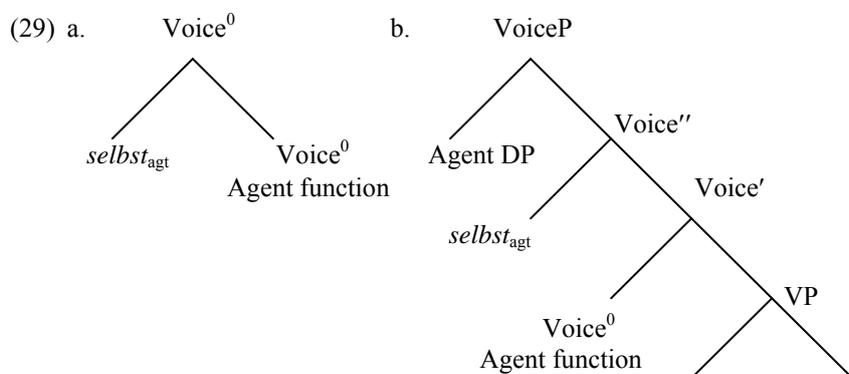
may be useful instead. Here's a modified lexical entry of agentive *selbst* which incorporates a presupposition instead of a subcategorization requirement.

$$(28) \llbracket \textit{selbst}_{\text{agt}} \rrbracket = \lambda f: f \in D_{\langle e, \langle s, t \rangle \rangle} \ \& \ \forall x_e \forall e_s [f(x)(e) \text{ entails that } e \text{ has an agent}]. [\lambda y_e . [\lambda e_s . f(y)(e)]]$$

(to be revised)

This is a step ahead, both syntactically and semantically. In terms of semantics, we have dispensed with the unattractive selectional restriction and replaced it with a presupposition. What the presupposition requires is that the first (function-)argument of agentive *selbst* entail the agentive involvement of someone, no matter what the arguments of this function are. Note right away that (28) has been worded so as to state that *e* has an agent, instead of stating that there is an *x* such that *x* is the agent of *e*. This will become important in section 7.1.

The agentive Voice head clearly fulfills the presuppositional requirement of agentive *selbst* as stated in (28). But the next higher node, i.e. Voice', also qualifies. It is of the right type and it, too, entails the agentive involvement of someone, no matter what referents this function would take as its argument. The two adjunction options for agentive *selbst* are depicted in (29).



Since these two options would be available without any further stipulations, I assume that they are indeed available.

4.3 Agentive *selbst* and focus semantics

(30) yields three different question-answer pairs. The use of agentive *selbst* in the question is felicitous in each case.

- (30) Q: Hat Paul den Kuchen SELBST gebacken?
 has Paul the cake himself baked
 'Did Paul bake the cake himself?'
- A₁: NEIN, jemand hat ihn FÜR ihn gebacken.
 no someone has it for him baked
 'NO, someone baked it FOR him.'
- A₂: NEIN, er hat ihn jemanden backen LASSen.
 no he has it someone bake let
 'NO, he HAD someone bake it.'
- A₃: NEIN, er hat ihn in einem Laden geKAUFT [, wo er frisch gebacken WORDEN ist].
 no he has it in a shop bought where it had just been baked
 'NO, he BOUGHT it from a SHOP [where it HAD just been baked].'

The three instances of possible alternative functions illustrated in (30) are stated in (32a) and generalized over in (32b).⁹ They form a cline of conventionalization in that the preposition *für* in (30A₁) encapsulates the alternative involvement in a single word; (30A₂) features an analytic causative construction; (30A₃), finally, is a fully ad-hoc alternative involvement. (31) repeats our lexical entry for agentive *selbst* as it stands at the moment.

$$(31) \llbracket \textit{selbst}_{\text{agt}} \rrbracket = \lambda f: f \in D_{\langle e, \langle s, t \rangle \rangle} \ \& \ \forall x_e \forall e_s [f(x)(e) \text{ entails that } e \text{ has an agent}] \cdot [\lambda y_e \cdot [\lambda e_s \cdot f(y)(e)]]$$

(to be revised)

(32) a. The relevant p-set of agentive *selbst* for (30):

$$\llbracket \textit{selbst}_{\text{agt}} \rrbracket^f = \{ \lambda f_{\langle e, \langle s, t \rangle \rangle \& \text{AGENTPRESUPP}} \cdot [\lambda x_e \cdot [\lambda e_s \cdot e \text{ has } x \text{ as beneficiary}]], \\ \lambda f_{\langle e, \langle s, t \rangle \rangle \& \text{AGENTPRESUPP}} \cdot [\lambda x_e \cdot [\lambda e_s \cdot x \text{ delegates } e]], \\ \lambda f_{\langle e, \langle s, t \rangle \rangle \& \text{AGENTPRESUPP}} \cdot [\lambda x_e \cdot [\lambda e_s \cdot x \text{ is a customer in a shop where } e \text{ took place}], \dots \}$$

b. The relevant p-set of agentive *selbst*:

$$\llbracket \textit{selbst}_{\text{agt}} \rrbracket^f = \{ g_{\langle \langle e, \langle s, t \rangle \rangle \& \text{AGENTPRESUPP}, \langle e, \langle s, t \rangle \rangle \rangle}: g(f)(x)(e) \text{ is incompatible with } e \text{ having } x \text{ f-involved} \}$$

The relevant p-set in (32a) corresponds to (30A₁-A₃), respectively. The alternatives in (32a) all take the agent head, or the next higher node, as their arguments, and then yield functions which entail the following after saturation: the agent referent of the *selbst* sentence is involved in the event of the contrasting sentence in a way different from the involvement of the *selbst* sentence. Note that the way (32b) puts things doesn't preclude the x-argument to be merged from being an agent. If it did, contexts of delegated action as in (30Q-A₂) could not be covered. An eventuality of delegating something to someone who performs an action instead is certainly agentive. But the delegating person is not the agent of the original event *e*, but in an event *e'* which has *e* as a part. The way (32b) is stated allows for this kind of contextualization. It might look as if we're still not done yet. What may be said to be missing from our lexical entry of agentive *selbst* is the special kind of immediacy that it entails. If you say something like *I didn't buy the house from anybody who built it beforehand, I built the house myself* you entail that your agentive involvement in the building of the house was somehow immediate. But this notion of immediacy must be a contextually hedged one. Probably you hired an architect, carpenters, possibly bricklayers and what not, and strictly speaking it was these people who built your house. Still, in the above context you are entitled to say *I didn't buy the house from anybody who built it beforehand, I built the house myself*. This means that immediate last-link agency is not a necessary condition of the use of agentive *selbst*. What matters is that the relevant contextually delimited p-set should contain no agentive links to the event at hand that are more immediate than the link of the *selbst*-sentence. I would still argue that the lexical entry of *selbst* needn't make recourse to C-immediacy of this kind. This is so because agentive involvements, and probably all thematic involvements, are interpreted in the C-immediate way. Thus, if one says *I didn't buy the house from anybody who built it beforehand, i built the house* we get the very same effect. The sentence remains true even if the bricklayers and the carpenters did the real job.

Before we move on, an obvious alternative to (31) must briefly be discussed. Why not say that agentive *selbst* simply serves the function to make the Voice head accessible to focusing by somehow providing it with phonetic material? Alternative thematic involvements of the asserted agent referent in alternative sentences would likewise follow. This idea, attractive as it seems at first, is immediately discredited by the fact that agentivity is given (in the sense of Schwarzschild 1999) in all alternative sentences contrasting with agentive *selbst* sen-

⁹ As with adnominal *selbst* in (8) above I only consider alternative functions that are not identical to the identity function. I call such alternative functions 'relevant alternatives' or 'the relevant p-set'.

tences. All members of the p-sets of agentive *selbst* sentences entail agentivity. This fact is brought out in (33).

- (33) a. A: Hat der Hausbesitzer das Fenster SELBST zerbrochen?
 has the landlord the window himself broken
 ‘A: Did the landlord break the window himself?’
 b. B: Es HAT gar niemand zerbrochen.
 it has at.all nobody broken
 ‘B: Nobody broke it in the FIRST place.’
 c. B: Er hatte das PECH, dass es im STURM gestern zerbrochen ist.
 he had the misfortune that it in.the storm yesterday broken is
 ‘B: He was UNLUCKY, it broke in the STORM yesterday.’

It is given in A’s question in (33a) that the window didn’t break by itself or in a storm. This is witnessed by the fact that B’s turn in (33b) is not at all dispensable before uttering (33c). The use of *gar* ‘in the first place/at all’ makes it clear that this given piece of information must first be removed from the common ground. Only then can the clause with the unaccusative use of *zerbrechen* ‘break’ be used without triggering a need for accomodation. I.e., if B replies to A’s question by uttering (33c) right after (33a) was asked, the information given by (33b) must be accomodated.

We will have to add something to the lexical entry of agentive *selbst* in section 6 to make its empirical coverage more complete. To be more precise, we’ll need an entailment of the absence of super-actions, at least in certain contexts (cf. (59)). But this is just a small change, and we can move on now to justify the analysis as it stands against the background of more data and competing proposals.

5. Justifying the proposal

5.1 Agentivity

First, and most straightforwardly, the proposal for agentive *selbst* in terms of the identity function with its agentivity presupposition for its first argument explains the contrast in cases like (15) through (18) above and partly repeated here as (34) and (35).

- (34) [No PLANTS in the POTS were needed to beautifully decorate the balcony, ...]
 a. ... die Töpfe SELBST schmückten den Balkon wunderbar.
 the pots themSELVES decorated the balcony beautifully
 ‘... the pots themSELVES beautifully decorated the balcony.’
 b. ... die Töpfe schmückten den Balkon wunderbar (*SELBST).
 the pots decorated the balcony beautifully themselves
 ‘... the pots beautifully decorated the balcony (*themSELVES).’
 (35) Die Bewohner schmückten den Balkon wunderbar SELBST.
 the residents decorated the balcony beautifully themselves
 ‘The residents beautifully decorated the balcony themSELVES.’

(34a) is fine with adnominal *selbst* because we can think of alternatives to the identity function which map the pots to something else. The relevant function here is the one which maps the pots to the plants in them. Agentive *selbst* in sentence-final position in (34b) amounts to a presupposition failure because the eventuality at hand doesn’t entail an agentive involvement. With an agentive-causative eventuality as in (35), the agentivity requirement is met and agentive *selbst* is fine.

5.2 Passives

Eventive *werden*-passives in German have an agentive semantics. This is fully parallel to English. German allows agentive *selbst* in passive sentences, and this is as predicted; cf. (36).¹⁰ (I have inserted parenthesized material between *selbst* and the verbs in (36) to preclude a possibly morphological construal of complex verbs such as *selbst-schneiden* ‘self-tailor’; see section 6.1.5 below.) In English, agentive *x-self* is ungrammatical in passives (see section 7.1 for a slight modification of this statement).

- (36) a. Die Kostüme wurden SELBST (von den Kindern) geschneidert.
the costumes were themselves by the children tailored
≈‘The costumes were tailored (by the children) themSELVES.’
- b. Ostereier werden hier SELBST (rundum) bemalt.
easter.eggs are here x-self all.over painted
‘Easter eggs are painted (all over) here (*x-SELF).’

(36a) differs from (36b) in the presence of an overt agent PP. With the PP present, an English near-equivalent translation of the German sentence is possible, but just because *themselves* in the English translation may be construed as adnominal *x-self*. In the absence of a *by*-agent as in (36b), this option is not available, and the use of *x-self* leads to ungrammaticality.

As said already, the facts in German are as predicted by our theory. It is not the presence of an agent DP or of an agentive Voice head that is required for the grammatical use of agentive *selbst*, but just the entailment of agentivity in the argument of agentive *selbst*. Since *werden*-passives as in (36) indeed entail agentivity this requirement is met. If this is so and if this is to yield corroborating evidence for the analysis of agentive *selbst* proposed here, why, then, is agentive *x-self* ungrammatical in English passives? I take this to be a consequence of the fact that English *x-self* bears morphosyntactic features, features which don’t agree with any c-commanding element marked for the same features in English passive sentences. In section 7.2 below we will see that there are English passive sentences in which agentive *himself* may be used because there is a suitable c-commanding DP present in the construction

5.3 Nominalizations

Recall from section 4.1 that nominalization data as in (24) play a crucial role in Kratzer’s (1996) paper. If an internal argument is marked accusative in a nominalization, then a VoiceP should be among the nominalized material. Unfortunately, German nominalizations of verbs do not play a role comparable to that of gerunds in English, and good data are consequently difficult to come by. Still, if we manage to control for a number of interfering factors, clear contrasts may be arrived at.

A domain where a relevant contrast emerges are nominalized infinitives. Take the short discourse in (37).

¹⁰ Using DP constructions with past participle modifiers, Referee 3 claims that agentive *selbst* is not generally available in non-finite contexts even if the semantics is clearly agentive. I was unable to reproduce grammaticality contrasts as the purported ones between, e.g., *der selbst gebackene Kuchen* ‘the self-baked cake’ vs. *der ((*selbst) gegessene Kuchen* ‘the self-eaten cake’, or even *die selbst bemalten Eier* ‘the self-painted eggs’ vs. *die ((*selbst) zerbrochenen Eier* ‘the self-broken eggs’, i.e., the eggs that one has agentively broken oneself. Given appropriate contexts, I found no speakers who could reproduce the referee’s intuitions. Data involving stative passives which are also adduced by the reviewer yield shakier and less uniform results indeed. They are not immediately relevant to the argument, though. The availability of stative passives is not constrained by the agentivity of the eventuality, but by other facts such as the noteworthiness of the resulting state. It is therefore not a surprise that some agentive verbs yield good stative passives, while others don’t.

- (37) Wir sollten Studierende besser beraten. Das Studierende-Beraten ...
 we should students.ACCstrong better counsel the students.ACCstrong-counseling
 ‘We should counsel students better. The counseling of students ...’

The two tokens of the accusative nouns *Studierende* ‘students’ have been interlinearized with the additional information that the endings are instances of so-called strong adjectival inflection. The noun *Studierende* is really a present participle (‘the ones studying’), and as such it inflects for case more visibly than lexical nouns and is almost unambiguously recognizable as accusative-marked (judging from the ending alone, it could also be nominative, but not genitive or dative). The second occurrence of *Studierende* in the compound *Studierende-Beraten* ‘students-counseling’ shows that *Studierende* may appear case-marked within a compound. If Kratzer is right, this shows that a VoiceP has been nominalized, and agentive *selbst* should accordingly be possible as part of the compound. This prediction is borne out, as witnessed by (38).

- (38) a. das SELBST-Studierende-Beraten
 the self-students-counseling
 ‘counseling students oneself’
 b. das Studierende-SELBST-Beraten
 the students-self-counseling
 ‘counseling students oneself’

The compound comes out in two variants depending on whether the object of *beraten* has been “scrambled” or not, but this doesn’t affect the argument.¹¹ This constitutes the first half of the argument. Agentive *selbst* is grammatical in those compounds where we expect it to be grammatical. What remains to be shown is that agentive *selbst* is ungrammatical in compounds which constitute nominalizations below the VoiceP level. (Recall that agentive *selbst* requires an agentive constituent of type <e,<s,t>> to adjoin.) Such compounds are given in (39).

- (39) a. * die (SELBST-)Studierend-en-Beratung
 the self-student-LINKER-counseling
 b. * die Studierend-en-(SELBST-)Beratung
 the student-LINKER-self-counseling

The morphological differences between (38) and (39) are minute, but the effect is strong.¹² In (39) it is not the infinitive that has been nominalized. Instead, the verb stem *berat-* has been suffixed with *-ung* to yield a noun. Nouns in *-ung* take no accusative-marked complements. To give the forms with *selbst* a fair chance, a linking morpheme is used in (39) which allows for compounding in such cases. These forms may not cooccur with agentive *selbst*, at least not in the reading of (38a/b).¹³ Again, this is as predicted, because removing the accusative potential from the compound should go hand in hand with the loss of grammatical *selbst* uses. This constitutes the second half of the argument.

¹¹ The reason why both versions are given in (38) is that the “scrambled” version in (37b) conforms better to a phonological constraint of German which disprefers compound accents followed by long strings of deaccented material. (38a) with its more basic syntax would be enough to state the argument.

¹² Reviewer 3 is unable to reproduce the contrast between (38) and (39), or at least the contrast doesn’t present itself as strong enough to merit a justificational status for the hypothesis to be defended. Those native speakers that I have additionally consulted in this matter (six individuals) reproduced the contrast without any difficulties.

¹³ For some speakers (including myself), there is a reflexive interpretation of (39b) ‘the counseling of students by themselves’. This reading is irrelevant here.

This concludes the first row of arguments to justify my proposal. More arguments will be delivered when we compare the proposal to previous ones.

6. Other proposals

6.1 Eckardt (2001)

As said above already, the tie-up with agentivity does not follow from Eckardt's (2001) account of non-additive adverbial *selbst*. Therefore, the effects described in section 5 are beyond the scope of facts that Eckardt can explain. More problems for Eckardt's approach are discussed in a moment. Before entering into the discussion, Kratzer's proposal for a set of type-lifted identity functions over individuals which take verbs as arguments is repeated in (40).

- (40) Adverbial *selbst* for intransitive verbs:
 a. Lift2(ID) := $\lambda P_{\langle e, t \rangle} (\lambda x . P(\text{ID}(x)))$
 Adverbial *selbst* for transitive verbs, subject-oriented:
 b. Lift3(ID) := $\lambda Q_{\langle e, \langle e, t \rangle \rangle} (\lambda y \lambda x . Q(\text{ID}(x), y))$
 Adverbial *selbst* for transitive verbs, object-oriented:
 c. Lift4(ID) := $\lambda Q_{\langle e, \langle e, t \rangle \rangle} (\lambda y \lambda x . Q(x, \text{ID}(y)))$

Lift2(ID) in (40a) has the identity function apply to the subject of intransitive verbs, Lift3(ID) in (40b) has it apply to the subject of transitive verbs, and Lift4(ID) in (40c) has it apply to the objects of transitive verbs.

6.1.1 No object-oriented readings

Eckardt's theory predicts that each argument of a verb should be a possible target of the identity function. It turns out, though, that internal arguments cannot be targeted by adverbial *selbst*, contrary to the proposal in (40c). (41) is an example which has an object-oriented reading, and such examples may have led Eckardt to assume an object-oriented reading for adverbial/agentive *selbst*.

- (41) ... dass Paul die Probleme SELBST beklagen wird[, nicht aber ihre Ursachen].
 that Paul the problems themselves/himself lament.about will not though their causes
 '...that Paul will lament about the problems themselves [, but not about their CAUSES].'
 '...that Paul will lament about the problems HIMSELF[, #but not about their CAUSES.]'

The object-oriented reading is made explicit in the first translation. What is unclear is whether this reading arises because the infinitive and *selbst* form a constituent and *selbst* is interpreted as Lift4(ID), or because the object and *selbst* form a constituent such that we would be dealing with a case of adnominal intensification. The second translation of (41) renders the agentive *selbst* meaning. That meaning is irrelevant here, and the continuation given filters it out. If we check what happens under (contrastive) topicalization of [*selbst* V], we find that the object-oriented reading is lost and the continuation becomes odd.

- (42) [/SELBST beklagen] WIRD Paul die Probleme[, #nicht aber ihre Ursachen].
 himself lament.about will Paul the problems not though their causes
 'Paul will lament about the problems HIMSELF.'

The only remaining reading in (42) is the agentive one, and this reading is easily derived if we assume that the definite object has been scrambled out of the VP and has left the *selbst* adjunct stranded before topicalization. (See the following subsection for more details.) This

means that the object-oriented reading of (41) is linked to the adnominal construal of *selbst* only.

Since Eckardt presents no clear case of object-oriented adverbial readings that could not be dealt with as seen in (41) and (42), I will henceforth assume that these readings don't exist. Note that this means for Eckardt's account that a reading which falls out for free from the mechanics of her proposal must be excluded by stipulation.

6.1.2 Adverbial *selbst* never adjoins to V

It may look as if (41) and (42) give us a good reason to assume an adjunction site of agentive *selbst* at the V level. In the literature on adverbial *selbst* this possibility has, however, never been entertained. Researchers agree on the point that agentive *selbst* adjoins at least as high as at the VP level. So why is it that we get strings of 'DIRECT OBJECT *selbst* V' in German? The answer has to do with scrambling. Definite direct objects are usually moved to the left in the German middlefield (Lenerz 1976), thereby yielding structures in which *selbst* and the verb are adjacent at the surface with just a trace left between them. Evidence for this explanation of the cases of verb adjacent *selbst* comes from unmarked word order in *selbst* predicates with indefinite direct objects, which are typically in situ.

- (43) a. *selbst* [einen Kuchen] backen (unmarked)
 oneself a cake bake
 b. [einen Kuchen]_i *selbst* t_i backen (marked)
 a cake oneself bake
 'bake a cake oneself'

(43b) is good in a context in which the options concerning cakes are under discussion at a generic level. It may, for instance, be used in the German equivalent of a discourse like *Buying a cake each time we celebrate someone's birthday is really boring. Why not bake a cake ourselves this time?* (43a) being the unmarked construction, this phrase is also good in the same discourse. What is deviant, though, at least without a lot of rescuing intonation, is to use (43b) in a context in which the whole phrase including the VP and *selbst* is non-given. A relevant context would be *Let's think what we can do to surprise her. We could all go and congratulate her, or we could bake a cake ourselves and give it to her.* I thus take it that agentive *selbst* never adjoins to V and that Eckardt's theory would have to be revised accordingly. This state of affairs has a desired consequence if we recall the last subsection. It is quite natural that object-oriented readings are not available if agentive *selbst* never attaches before the direct object has been merged. My own proposal is compatible with this finding.

6.1.3 Eckardt's (2001) proposal from the syntactic perspective of Kratzer (1996)

If Kratzer (1996) is on the right track in that lexical entries of verbs make no recourse to agent arguments, and I assume she is, then Eckardt's Lift3(ID) in (40b) will not be storable. This is so because Lift3(ID) treats agent subjects as arguments of verbs. Moreover, for that portion of Lift2(ID) for which the identity function targets agentive subjects the same problem arises. That is, each of the functions in (40) must be dismissed as possible denotations of agentive *selbst*. If the spirit of Eckardt's proposal were to be maintained and her idea were to be modeled in such a way that it is compatible with Kratzer's agent severance, a lexical entry as in (44) would be the consequence for agent-oriented *selbst*.

- (44) An agent-severed lexical entry of agentive *selbst* in the spirit of Eckardt (2001):

$$\llbracket \textit{selbst}_{\text{agtE\&K}} \rrbracket = \lambda P_{\langle e, \langle s, t \rangle \rangle} . [\lambda x . [\lambda e . P(\text{ID}(x))(e)]]$$

This lexical entry defines an adjunct to the agentive Voice head, or to Voice', and it results in the application of the identity function to the agent/subject argument. In terms of syntax, this is precisely the proposal that I make. In terms of semantics, this remodeled and arguably more realistic reformulation of Eckardt's proposal for agentive *selbst* makes predictions different from the ones associated with our proposal, and it does so no matter whether the adjunction site is the Voice head or the main merging line. The difference in predictions just mentioned will be the topic of the following subsection.

6.1.4 No centrality effects with agentive *selbst*

Adnominal *selbst* as in *The minister himself didn't come, he just sent a representative* always leads to what is dubbed 'centrality effects' by K&S. Since all alternatives to the identity function in this sentence yield functions from the minister to somebody or something else, a specific discourse effect is the result. The minister is construed as a center, and the outputs of the sum of the alternative functions taken together (say, his representative, his secretary, his car, etc.) yield something like the minister's periphery or entourage. This is a maximally general effect with adnominal intensification. Eckardt's proposal for agentive *selbst*, which has been remodeled in (44) to conform to current syntax-semantics assumptions, predicts the same kind of centrality effects, because the semantic impact of agentive intensification boils down to displaced adnominal intensification.¹⁴ Contrary to this, we find that the typical centrality effects tied to adnominal intensification are absent with agentive *selbst*. The idea is simple, but it is not at all easy to make the difference surface with natural language data. The complication comes in by way of the fact that few agentive discourse referents are so derelationalized that the use of agentive *selbst* could not be accompanied by an independently accommodated center-periphery structure. The discourse options in (45) and (46), however, provide us with a clear contrast.

(45) Der Eremit war seit 20 Jahren nicht mehr im Tal, er kennt dort niemand mehr.

'The hermit hasn't been to the valley in 20 years, he doesn't know anybody down there any longer.'

- (46) a. Er [macht alles SELBST].
 he makes everything himself
 'He does everything himSELF.'
 b. # [Er SELBST] macht alles.
 he himself makes everything
 '# He himSELF does everything.'

It is predicted that the discourse (45) plus (46b) should be bad. With the hermit having lost all ties with other people, no alternatives to the identity function which could map the hermit to somebody else are in the context. The hermit has no periphery or entourage of people. The problem for Eckardt's account is that the same effect should also be there for the discourse (45) plus (46a). But this discourse is felicitous. It seems that no functions mapping the hermit to other individuals need be in the background for agentive *selbst* to be used felicitously. The

¹⁴ Gast (2002: 127) proposes a variant of Eckardt's type-lifting proposal to model agentive intensification. It is given in (i).

(i) $\llbracket \textit{selbst}_{\text{adverbial-exclusive}} \rrbracket = \lambda P_{\langle e, \langle s, t \rangle \rangle} (\lambda x . \lambda e . P(\text{ID}(x)(e)))$

(i) is just like Eckardt's subject-oriented Lift3(ID) in (14b), except that Eckardt's ad-verbal syntax (adjunction to V) is avoided. Gast's adverbial *selbst* adjoins to VP. Therefore, it takes on the same form as (44). But note the following. Gast, just like Eckardt, assumes no Voice phrases, therefore his VP denotation is of type $\langle e, \langle s, t \rangle \rangle$. The problems discussed in sections 6.1.3 and 6.1.4 hold for Gast's proposal the same way as they hold for Eckardt's.

analysis defended here predicts this. The alternative involvements in the eventuality of doing things that come to mind in the felicitous discourse may be being helped by someone, or buying things from people who have produced them. While the agentive involvement of somebody in doing these things is given, the exact referent doesn't matter. Existential closure of the agent variable will do.

6.1.5 Eckardt's (2001) 'do-it-yourself' uses of *selbst*

As regards individual examples, Eckardt (2001: 400) is aware of the problem discussed immediately above, i.e. relevant alternatives seem to be alternative thematic involvements in an eventuality rather than functions yielding referents different from the agent or subject referent. She thinks, though, that this problem only presents itself for a small set of special examples. As should follow from what was said above, it is assumed here that this effect is a constant feature of agentive *selbst*. It is only hidden by the independently given frequent contextual availability of alternative relations to other referents alongside alternative involvements of the asserted agent into the eventuality at hand. (47) is an example of what Eckardt calls 'do-it-yourself' cases. Eckardt considers analyzing the string *selbst gemalt* 'painted x-self' in (47) as a (quasi-)compound which bears a single focus accent and is interpreted as one word (Eckardt 2001: 400). She leaves the matter unresolved, but I want to show briefly that this kind of analysis would make undesired predictions if spelled out in more detail. The analysis would predict that the focus accent on *selbst* should be able to focus-mark the complete purported complex verb, and not just the intensifier. This is impossible, as is witnessed by the discourse in (47).

- (47) Q: Hat Hannes das Bild SELBST gemalt?
 Has John the picture himself painted
 'Q: Did John paint the picture himSELF?'
 A: Nein, er hat es GESCHENKT bekommen.
 no he has it given got
 'A: No, he got it as a PREsent.'

If *selbst gemalt* 'painted himself' in (47) were a complex verb, the focus accent on *selbst* ought to be sufficient for the whole complex verb, i.e., there should be a reading of (47Q) in which alternatives to *selbst gemalt* 'self-painted' as a whole are considered. Now think of a situation in which the person answering the question by saying (47A) knows that the picture is not a painting, but a photograph that looks like a painting. According to Eckardt's proposal, (47) should be completely fine, because *selbst gemalt* 'self-painted' could contrast with *geschenkt bekommen* 'got as a present'. In our situation with the knowledge of the picture being a photograph on the part of the person answering, (47A) is deceiving. The question clearly contains a presupposition for every possible reading which has it that the picture was painted, and if the hearer knows this fact, then she should state it to be cooperative and make sure that false information is removed from the common ground. Put differently, *gemalt* 'painted' cannot be part of the focus in (47Q). Therefore, Eckardt is left without a strategy to take care of her so-called 'do-it-yourself' cases.

6.1.6 Eckardt's (2001) anti-assistive use of *selbst*

The second special use of *selbst* singled out by Eckardt (2001) is illustrated by (48) (Eckardt's ex. (4.26)).

- (48) Adrian fand den Weg zum Bahnhof SELBST.
 Adrian found the way to the station himself
 'Adrian found the way to the station himSELF.'

This sentence poses a problem for Eckardt’s analysis because no alternative referents who might find the way to the station apart from or instead of Adrian need be contextually salient. Rather, the alternative referents that one might think of would typically just help Adrian find the way to the station. Eckardt models this intuition by assuming an ‘assistive’ use of intensifiers (which, in my eyes, should better be called ‘anti-assistive’). Its lexical entry, again adapted to our format, is provided in (48).

$$(49) \llbracket \textit{selbst}_{\text{anti-assistive}} \rrbracket = \lambda e_s . [\neg \exists x_e . x \text{ assists in } e]$$

Anti-assistive *selbst* as defined in (48) may easily be used to explain the agentivity constraint discussed at various places above. It seems plausible to say that one can only be assisted in an event in which one is involved as an agent. Perhaps many of the uses of agentive *selbst* discussed above would not be adverbial as modeled by Eckardt with the help of the type-lifted identity function, but would be instances of anti-assistive *selbst*? It is immediately evident that this assumption will leave the formal identity between agentive *selbst* and adnominal *selbst* entirely unexplained, a serious defect in view of (i) the crosslinguistically frequent formal identity of adnominal and adverbial agentive intensifiers and (ii) the fact that a proposal exists which models agentive *selbst* as a kind of identity function, viz. the proposal defended in the present paper.

Even if Eckardt’s proposal for an anti-assistive use of *selbst* lacks generality, let us stick with the problem raised by Eckardt’s example and see how the proposal defended here fares in cases like (48).

Let us begin by sharpening our intuitions about the felicity of agentive *selbst* in contexts of assistance as opposed to contexts of team action. Consider the interesting contrast between (50) and (51).

- (50) [Q: Did your mummy HELP you to tie your laces?]
 A: Nein, ich habe es ALLEIN/SELBST gemacht.
 no I have it alone/myself done
 ‘A: No, I did it aLONE/mySELF.’
- (51) [Q: Did Ed and Paul paint the kitchen walls together?/
 Did Ed paint the kitchen walls together (with Paul)?]
 A: Nein, Ed hat es ALLEIN/[#]SELBST gemacht.
 no Ed has it alone/himself done
 ‘A: No, Ed did it aLONE/[#]himSELF.’

In contexts in which assistance is at stake, *allein* ‘alone’ and *selbst* are interchangeable if the lack of assistance is to be asserted. This is the case in (50). If, however, joint agentivity in the sense of English postverbal *together* is given as a context, only *allein* ‘alone’ yields a felicitous statement to assert the agentive involvement of an agent referent without the joint agentive activity of another referent; cf. (51). This holds irrespective of where in the contrasting sentence the second agent is mentioned (cf. the different question options in (51)). Intuitively, what is bad about *selbst* in (51) is that the question of whether one did something oneself touches upon a point that is not relevant to determining whether some action was performed jointly. (52) provides a version of Kratzer’s (in prep.: ch. 4) lexical entry for English postverbal *together* or German adverbial *zusammen*.¹⁵

$$(52) \llbracket \textit{together} \rrbracket = \lambda f_{\langle e, \langle s, t \rangle \rangle} . \lambda y_e . \lambda e_s . [f(y)(e) \ \& \ \forall e'_s \in C . [[e' \leq e \ \& \ \text{action}(e')] \rightarrow f_{\text{agents}}(e) = f_{\text{agents}}(e')]]$$

¹⁵ The semantic intuitions behind this entry partially go back to Lasersohn (1988, 1990) and Schwarzschild (1994).

The partial function f_{agents} in the truth-conditions of *together* maps actions with plural agents to their agents and yields no output for other eventualities. *Together* may adjoin to the agent head or to Voice'. I.e., *together* may show up in the same syntactic positions as agentive *selbst*. What (52) says in its truth-conditions is that *together* requires that all sub-events that form part of the action at hand must have the same plural agent as the overall event. To prepare the ground for what follows, we can just as well disentangle the identity condition and the plurality presupposition and state the presupposition separately. This is done in (52').

$$(52') \llbracket \textit{together} \rrbracket = \lambda f_{\langle e, \langle s, t \rangle \rangle} . \lambda y_e . \lambda e_s . [f(y)(e) \ \& \ \forall e_s' \in C \llbracket [e' \leq e \ \& \ \textit{action}(e')] \rrbracket \rightarrow [f_{\text{agent}}(e) = f_{\text{agent}}(e')]]$$

presupposition of f_{agent} for *together*: $\forall e \llbracket [f_{\text{agent}}(e) \text{ has a value}] \rightarrow \llbracket [f_{\text{agent}}(e)] > 1 \rrbracket$

The assertions in (53a), which correspond to (51Q), will then have the truth-conditions and the presupposition in (53b).

- (53) a. Ed and Paul painted the kitchen walls together./Ed painted the kitchen walls together with Paul.
 b. The sum of Ed and Paul was the agent of the event of painting the kitchen walls
 & the agent of all action sub-events of e was identical to the agent of e
 presupposition: the agent of e corresponds to a set of at least two individuals.

Compare this situation with our old preliminary lexical entry of agentive *selbst* from (28), repeated here as (54).

$$(54) \llbracket \textit{selbst}_{\text{agt}} \rrbracket = \lambda f: f \in D_{\langle e, \langle s, t \rangle \rangle} \ \& \ \forall x_e \forall e_s [f(x)(e) \text{ entails that } e \text{ has an agent}] . [\lambda y_e . [\lambda e_s . f(y)(e)]]$$

(to be revised)

In this entry, nothing is stated about sub-events of e, as was the case with the lexical entry of *together/zusammen*. It turns out that the only reference to other events that may become relevant in contrastive contexts concerns super-events of e, and not sub-events. This was the case in (50), repeated here as (55).

- (55) [Q: Did your mummy HELP you to tie your laces?]
 A: Nein, ich habe es ALLEIN/SELBST gemacht.
 no I have it alone/myself done
 'A: No, I did it ALONE/mySELF.'

If we concede that adverbials like *with help/mit Hilfe* contribute basically the same kind of meaning as the control construction with the verb *help* in (55Q), and if we abstract away from the mentioning of the helping agent in (55Q), then the following semi-explicit lexical entry of *with help/mit Hilfe* will help us to get closer to an explanation of *selbst*'s differing substitutability in different contexts. The agentivity presupposition which is present in *with help* just as with agentive *selbst* is left out of consideration to enhance perspicuity.

$$(56) \llbracket \textit{with help/mit Hilfe} \rrbracket = \lambda f_{\langle e, \langle s, t \rangle \rangle} . [\lambda x_e . [\lambda e_s . f(x)(e) \ \& \ \exists e_s' \in C [e \leq e' \ \& \ e' \text{ is an action of helping } x \text{ in being the agent of } e]]]$$

In contexts where agentive *selbst* is in contrast with *mit Hilfe* 'with help', it seems plausible that the lexical entry of agentive *selbst* should contain the negation of a suitably generalized version of the existentially quantified conjunct of (56). Such an entry for agentive *selbst*, again abstracting away from the agentivity presupposition, is provided in (57).

$$(57) \llbracket \textit{selbst}_{\text{agt}} \rrbracket = \lambda f_{\langle e, \langle s, t \rangle \rangle} . [\lambda x_e . [\lambda e_s . f(x)(e) \ \& \ \neg \exists e_s' \in C [e \leq e' \ \& \ e' \text{ is an action}]]]$$

(57) states an additional condition of non-containedness for agentive *selbst*. *Selbst* events are not construed as part of larger agentive events, but enjoy autonomy or conceptual independence from other events with agents. This autonomy is contextually defined; cf. the reference to the context set C in (57). Substituting (56) with (57) yields a good contrast, because the second conjuncts are contradictory. This is not the case with the infelicitous contrastive pair

formed by agentive *selbst* and *zusammen* ‘together’. The lexical entry of ‘together’-words makes recourse to sub-events, and not to super-events. Therefore, contrasting a ‘together’-sentence with an ‘agentive *x-self*’-sentence is not to the point. No incompatibility exists, and the *selbst*-sentence is felt not to be cooperative. What remains to be clarified is how *allein* ‘alone’ comes to be used in both kinds of contexts in (50) and (51). The answer that I propose is that *allein* just has a requirement of non-mereology in its lexical semantics, and this requirement holds in both directions. I.e., *allein* situation have neither agentive sub-events nor super-events in which the agent of *e* would not be the agent. (58a) and (58b) would be such entries, the difference just lying in the statement of identity in the scope of universal quantification, or the statement of difference in the scope of negated existential quantification.

- (58) a. $\llbracket \textit{allein} \rrbracket = \lambda f_{\langle e, \langle s, t \rangle \rangle} . \lambda y_e . \lambda e_s . [f(y)(e) \ \& \ \forall e_s' \in C \ [[e' \leq e \ \& \ \textit{action}(e')] \rightarrow f_{\textit{agent}}(e) = f_{\textit{agent}}(e')]]$
 b. $\llbracket \textit{allein} \rrbracket = \lambda f_{\langle e, \langle s, t \rangle \rangle} . \lambda y_e . \lambda e_s . [f(y)(e) \ \& \ \neg \exists e_s' \in C \ [e' \triangleleft e \ \& \ \textit{action}(e') \ \& \ f_{\textit{agent}}(e) \neq f_{\textit{agent}}(e')]]$

(58a) says that all contextually relevant sub-actions or super-actions of the *allein*-event are events with agents that are identical to the agent of the *allein*-event. (58b) says that there is no contextually relevant sub-action or super-action of *e* whose agent differs from the one of the *allein*-event. Truth-conditionally this comes out identical, but the double representation helps us see more easily how the contrast emerges with *mit Hilfe* ‘with help’ and agentive *selbst* on the one hand, and with *zusammen* ‘together’ on the other.

As a result of this discussion I will assume that the contribution of agentive *selbst* must, at least in contexts of contrast with *mit Hilfe* ‘with help’ and similar expressions, be spelled out with the additional conjunct as in (57). (59) gives the final statement of the lexical entry of agentive *selbst* which supersedes all previous statements.

- (59) $\llbracket \textit{selbst}_{\textit{agt}} \rrbracket = \lambda f: f \in D_{\langle e, \langle s, t \rangle \rangle} \ \& \ \forall x_e \forall e_s . f(x)(e) \ \textit{entails} \ \textit{that} \ e \ \textit{has} \ \textit{an} \ \textit{agent} .$
 $[\lambda y_e . [\lambda e_s . f(y)(e) \ \& \ \neg \exists e_s' \in C . e \leq e' \ \& \ e' \ \textit{is} \ \textit{an} \ \textit{action}]]$ (final version)

This concludes the process of refining my proposal for agentive *selbst*, and also the review of Eckardt’s proposal for adverbial *selbst*. All in all, Eckardt’s type-lifted variants of the identity function Lift2(ID) through Lift4(ID) must be given up for the reasons presented in sections 6.1.1 through 6.1.6. The entries that aim at tackling the special discourse functions of agentive *selbst* that would be needed, viz. ‘do-it-yourself’ *selbst* as in *das Bild SELBST malen* ‘paint the picture oneself’ and anti-assistive *selbst* as in (48) either lack generality (anti-assistive *selbst*), or they would make unwanted empirical predictions if they were spelled out (‘do-it-yourself’ *selbst*). Still, the discussion of these uses that were singled out by Eckardt made us rethink the current analysis. It turned out that apart from the presupposition of agentivity a further component had to be added to make the lexical semantics of agentive *selbst* complete, namely the exclusion of the existence of contextually relevant super-actions. It is not entirely clear to me whether we have to assume this component for each use of agentive *selbst*, or just in contexts of contrast with super-event sensitive adverbs.

6.2 Browning (1993)

Browning’s proposal for English adverbial (agentive) *x-self*, though couched in a different framework (Higginbotham 1985, 1989), is the proposal which is most similar to the one proposed here. The meaning that a VP, combined with agentive *selbst*, has, may be paraphrased as in (60). After a subject has been plugged in, the truth-conditions will be as in (61).

- (60) $\llbracket \textit{x-self VP} \rrbracket =$ the property denoted by VP, and whatever the theta-role of the subject referent of VP is, it is the case that this is the theta-role of that referent
 (61) $\llbracket \textit{Subject x-self VP} \rrbracket = 1$ iff the subject referent has the property denoted by VP, and whatever the theta-role of the subject referent of VP is, it is the case that this is the theta-role of that referent

In Browning's analysis, adverbial *selbst* adds a tautological truth-condition concerning the thematic involvement of the subject referent. This is similar to saying that *selbst* maps the agentive Voice head to itself. Since the thematic role of the subject referent is not implemented as a constituent in Browning's analysis, but rather as part of the truth-conditions of the verb, Browning cannot directly target this component of meaning. Still the result for complete sentences is very similar to the one predicted by our theory. Browning's sample sentence and a semi-formal paraphrase of its truth-conditions are found in (62) (Browning 1993: 88, 90).

- (62) a. Mary wrote this memo herSELF.
 b. Mary(agent) wrote this memo(patient) & her = (agent)

The idea is clear: Whatever the thematic role of the subject referent in the proposition is, it is asserted a second time.

The weak point of Browning's proposal is that, as with other proposals, the agentivity constraint isn't modeled. Moreover, the information-structural component is missing altogether. If we want to add it, we run into problems. The problem is that if (*her*)*self* is focused in (62a), as it should be, Browning's p-set will only have contradictory members (except for that member where $\llbracket -self \rrbracket$ is mapped to $\llbracket -self \rrbracket$). Browning assumes adverbial *x-self* to be a predicate which takes two arguments, the first one being *her* in (62a), and the second being identical to the subject of *wrote* (this is achieved by theta-identification, a device designed by Higginbotham to perform similar functions like Kratzer's Event Identification). The general form of the truth-conditions for the members of the p-set that Browning would predict for (62a) is (63).

- (63) Mary_i(agent) wrote this memo, and her_i ≠ (agent)

Truth-conditions as in (63) should not be the only ones that may be salient in a discourse when a sentence with agentive *selbst* is uttered, because this would mean that such sentences could only be uttered in a context in which the interlocutors entertain the possibility that a contradiction is true. Let's hope, at least in theory, that such contexts don't exist.

Summing up, we may say that Browning's proposal comes close to our favored proposal, except that it can't make use of the possibilities that the modeling of a thematic role as a constituent offers us. Therefore, the predictions that Browning's analysis would make for the p-set of sentences with agentive *selbst* are too powerful and, in the end, destructive.

7. Further issues and open problems

7.1 Agentive *selbst* and other adjunction sites?

As it stands, the proposal for agentive *selbst* defended here is very general. As soon as we have a constituent of the right semantic type and its denotation entails agentivity, *selbst* may combine with this constituent. If this is so, we should be able to find agentive *selbst* not just as an adjunct inside the agent Voice system, but also higher up in the structure, as long as the adjunction site is of type $\langle e, \langle s, t \rangle \rangle$ and the presupposition is met. Such a case is given in (64).

- (64) [A person who receives blackmail thinks about a world in which blackmailers get what they deserve:]
 In jeder Stadt bekommt ein Erpresser den gemeinsten Erpresserbrief SELBST zugeschickt.
 in every city gets a blackmailer the meanest blackmail x-self sent
 'In each city a blackmailer is sent the meanest blackmail himSELF.'

(64) is construed in such a way that a specific reading of *ein Erpresser* ‘a blackmailer’ is excluded because of the preceding quantifying expression. Thus, an adnominal (dislocated) construal of *selbst* is likewise excluded, because adnominal *selbst* would be deviant with a quantifier-indefinite (cf. section 2.1). At the same time, an inclusive reading is avoided by the use of the superlative in the internal argument (*gemeinsten* ‘meanest’); since there may only be one meanest letter of blackmail in each city, a reading is impossible in which other people receive meanest blackmail as well. Now, the important thing is that it is not the agentive involvement which is mapped to itself in (64). Instead, the receiver involvement is at stake in this sentence. It is asserted that the blackmailer stands in the relationship of a receiver to the blackmail, as opposed to his contextually and lexically salient thematic involvement of agent or sender of blackmails. This reading is supported by the specific derived argument structure of (64). The sentence features a so-called dative or recipient passive (cf. Reis 1985, Wegener 1985, Leirbukt 1997). Subjects of dative passives refer to referents that are dative-marked in corresponding active sentences. Instead of promoting what would come out as a direct object in an active sentence to the subject function as in regular passives, the dative passive promotes what would be a dative argument in an active sentence. If we assume that the dative passive constituent minus the subject below inflection is of type $\langle e, \langle s, t \rangle \rangle$, then agentive *selbst* in focus may take this constituent as its argument, and it will deliver precisely that reading for the complete sentence that we really get: The blackmailer is involved in the event as a recipient, and there is a contextually salient function which, if it takes the dative-passive structure as its argument, yields a different involvement of the blackmailer in the mailing event, viz. that of the agent. At the same time, the dative passive structure entails the kind of agentive involvement of someone as required by *selbst*’s presupposition. We therefore have empirical evidence that it was not just conceptually more attractive to replace our selectional restriction on agent heads with an agentivity presupposition (cf. section 4.2). The presupposition also covers more empirical ground than the selectional restriction.

In sum, agentive *selbst* doesn’t just do its job with agents, but also with other thematic role heads that are merged sufficiently high. Note, finally, that the English translation of (64) is good with the same reading as in German. This holds even though it was stated in section 5.2 above that agentive *selbst* is usually barred from passive sentences. The difference between *The costumes are tailored* (**x-self*) from above and the English rendering of (64) lies in the fact that the recipient phrase *a blackmailer*, which is a p-set agent at the same time, c-commands the intensifier. Like this, there is an argument whose features the agreeing part of *x-self* may agree with.

7.2 English vs. German adverbial intensifiers

There is one big obstacle if we want to transfer the analysis proposed for German agentive *selbst* to English. In English, agentive *x-self* has the form of a reflexive pronoun, and this means it probably denotes a variable of type *e*, or at least it has such a variable as part of its lexical entry. The frequent substitutability of agentive *x-self* by *by x-self* or *for x-self* makes this fact come out even more clearly. In the lexical entry of agentive *selbst* as stated in (26) there is no such variable.

I will briefly sketch a way how one might do justice to the categorial difference between agentive *selbst* and agentive *x-self* while at the same time deriving the parallel contributions of these items to the overall meaning of sentences. This seems necessary, since the phenomenon of (partial) identity between agentive intensifiers and reflexives is so widespread cross-linguistically, and the situation as it presents itself in English cannot be classified as an

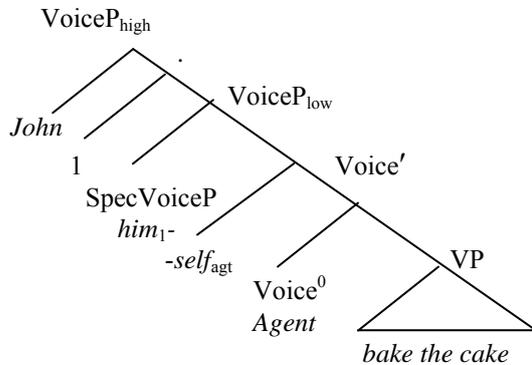
idiosyncratic trait (cf. K&S 2005; Gast et al. 2003). (65) assembles three pertinent examples from other languages.

- (65) a. Gulf Arabic (Holes 1990: 78):
 sawweet haadha b-ruuh-ik.
 you.did this by-REFLEXIVE-your
 ‘You did this yourself.’
- b. Hausa (Newman 1990: 315):
 naa gyaarà mootàà dà kâinaa.
 I fixed car with REFLEXIVE.1SG
 ‘I fixed the car myself.’
- c. Japanese (Ogawa 1998: 173):
 Taro-wa jibun-de kuruma-wo arau.
 Taro-TOPIC REFLEXIVE-INSTRUMENTAL car-ACCUSATIVE wash
 ‘Taro washes the car himself.’

The examples in (65) differ from the situation as found in English because they all have prepositional or postpositional elements which take the reflexives as arguments. Still, the examples serve to illustrate that (partial) identity of expression between reflexives and intensifiers is widespread.

(66a) is the English counterpart of our German sample sentence *Hannes backt den Kuchen SELBST* ‘Hannes bakes the cake himself.’ If we are allowed to assume a structure as in (66b) to underlie (66a) we have a way to maintain our analysis of German agentive intensification while at the same time making transparent what is reflexive about agentive intensification in English. The implementation of reflexive binding is modeled after Heim & Kratzer (1998).

- (66) a. John baked the cake himself.
 b.

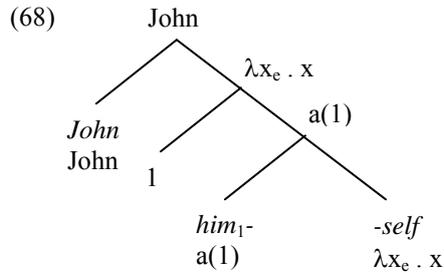


Up to the node where $-self_{agt}$ is merged, everything is as in German, and the lexical entry of $-self_{agt}$ is just like that of its German counterpart. The difference comes in at the next higher node. Instead of the agent argument *John*, a clitic pronoun co-indexed with *John* is merged. Because of its clitic nature, it forms a prosodic word with *-self*. The denotation of the lower VoiceP will then be as in (67a), and the denotations of the two remaining dominating nodes are given in (67b) and (67c).

- (67) a. $\llbracket \text{VoiceP}_{low} \rrbracket = \lambda e_s . \text{bake the cake}(e) \ \& \ a(1) \text{ is the agent of } e$
 b. $\llbracket \cdot \rrbracket = \lambda x_e . [\lambda e_s . \text{bake the cake}(e) \ \& \ x \text{ is the agent of } e]$
 c. $\llbracket \text{VoiceP}_{high} \rrbracket = \lambda e_s . \text{bake the cake}(e) \ \& \ \text{John is the agent of } e$

This is precisely what we need, but of course one would like to know why *John* doesn't enter the composition immediately above VoiceP_{low} . This would save us the vacuous conversion

and abstraction interlude between Voice' and VoiceP_{high}. I have nothing to say to resolve this puzzle. Still, in terms of compositionality, the proposal in (66) is as parsimonious as it could possibly be, given the constituents that we find in English sentences with agentive intensifiers and their usual denotations. At the same time, a compositional analysis of adnominal intensification immediately suggests itself. A possible structure for *John himself* which is maximally parallel to the one for the agentive use and which again does justice to the reflexive morphology is given in (68). (The denotations are annotated in the tree instead of node labels.)



The bound form *-self* again denotes the identity function, this time over the domain of individuals, and it takes *him* as its argument. Abstraction and saturation take place much as with agentive intensification in (66b) and (67), the difference being that everything happens within a DP, and not within a VoiceP.

This would be the natural point to enter into a discussion of the relationship between intensification and reflexivity in English. But this would be another paper. The aim of this pre-final section of the paper has been to make plausible how basically the same story can be told for German and English agentive intensifiers, while at the same time doing justice to the reflexive appearance of English intensifiers.

8. Conclusions

First and foremost, this paper was concerned with the modeling of the agentive use of German *selbst* as in *selbst den Kuchen backen* ‘bake the cake oneself’. I have proposed that agentive *selbst* denotes the identity function which typically takes the agentive Voice head or the next higher node as its argument. *Selbst* under focus will make alternative involvements of the asserted agent referent available. It does so indirectly, though. The alternatives to *selbst* take the Voice head as their argument, and then yield functions that denote other thematic involvement while the agentive involvement of someone remains given. For this analysis to be developed, we first had to clarify what the relevant descriptive generalizations underlying different use types of intensifiers really are. I have tried to show that the descriptive distinctions used by K&S are needed, and that Eckardt’s (2001) reduction to adnominal intensification is too strong. Specifically, (i) an adnominal use, (ii) an agentive adverbial use and (iii) an inclusive adverbial use must at least be distinguished. The distinguishing feature of the inclusive use as in *selbst Kinder haben* ‘have children oneself’ is that it comes with an additive presupposition (‘someone else has kids, too’).¹⁶ The distinguishing feature of the agentive use is that it presupposes agentivity in its argument. Its position as an adjunct to Voice⁰, or Voice’, is syntactically lower than that of the inclusive intensifier. Adnominal intensifiers

¹⁶ For more information on this use, the reader is referred to Gast (2002).

attach to DPs which denote individuals, and they also denote the identity function, this time over individuals.

I have presented cursory evidence for the existence of an additional adjunction site for adverbial *selbst* in German (and English) recipient passives.

English intensifiers are morphologically complex. They have the form of reflexive pronouns. I have tentatively proposed an analysis which takes *-self* to denote the identity function (once over individuals, once over Voice head, or Voice', functions). The *x*-part of *x-self* is interpreted as an ordinary (clitic) pronoun in both cases, and it is bound by the DP to which the intensifier attaches in the adnominal case. With agentive intensification, the pronoun denotes the agent argument, and it is bound by the higher DP. Even though this analysis is very sketchy, I have chosen to present it because it is strictly compositional and may be capable of making transparent the odd difference between the intensifier morphemes of German and English.

9. References

- Browning, M.A.: 1993, 'Adverbial reflexives', *NELS* **23**, vol.1, 83–94.
- Büring, D.: 1997, *The Meaning of Topic and Focus. The 59th Street Bridge Accent*, Routledge, London.
- Büring, D.: 2003, 'On D-Trees, Beans, and B-Accents.' *Linguistics and Philosophy* **26**, 511–545.
- Chomsky, N.: 1995, *The Minimalist Program*, MIT Press, Cambridge, MA.
- Dowty, D.: 1979, *Word Meaning and Montague Grammar*, Reidel, Dordrecht.
- Eckardt, R.: 2001, 'Reanalyzing *selbst*'. *Natural Language Semantics* **9**, 371–412.
- Edmondson, J.A. and F. Plank: 1978, 'Great expectations: An intensive self analysis', *Linguistics & Philosophy* **2**, 373–413.
- von Fintel, K.: 1994, *Restrictions on quantifier domains*, PhD dissertation, University of Massachusetts at Amherst.
- Gast, V.: 2002, *The Grammar of Identity – Intensifiers and Reflexives*, PhD dissertation, Freie Universität, Berlin.
- Gast, V., D. Hole, E. König, P. Siemund and S. Töpfer: 2003, 'TDIR – Typological Database of Intensifiers and Reflexives', Freie Universität, Berlin. [<http://noam.philologie.fu-berlin.de/~gast/tdir/index.htm>]
- Hale, K. and S. J. Keyser: 1993, 'On argument structure and the lexical expression of syntactic relations', in K. Hale and J. S. Keyser (eds.), *The View from Building 20*, pp. 53–109. MIT Press, Cambridge, MA.
- Heim, I. and A. Kratzer: 1998, *Semantics in Generative Grammar*, Blackwell, Oxford and Malden, MA.
- Higginbotham, J.: 1985, 'On semantics', *Linguistic Inquiry* **16**, 547–93.
- Higginbotham, J.: 1989, 'Elucidations of meaning', *Linguistics and Philosophy* **12**, 465–517.
- Hole, D.: 2002, 'Agentive *selbst* in German', in G. Katz, S. Reinhard and P. Reuter (eds.), *Sinn und Bedeutung VI, Proceedings of the sixth meeting of the Gesellschaft für Semantik, Osnabrück, Germany, October, 2001*, pp. 133–150. University of Osnabrück.
- Hole, D.: 2006, 'Mapping VPs to restrictors: Anti-Diesing effects in Mandarin Chinese', in K. Turner and K. von Stechow (eds.), *Where Semantics Meets Pragmatics*, pp. <to be filled in>. Elsevier, Amsterdam.

- Holes, C.: 1990, *Gulf Arabic*, Routledge, London.
- König, E.: 1991, *The Meaning of Focus Particles. A Comparative Perspective*, Routledge, London.
- König, E.: 2001, 'Intensifiers and reflexive pronouns', in M. Haspelmath, E. König, W. Oesterreicher and W. Raible (eds.), *Language Typology and Language Universals. An International Handbook*, vol. 1, pp. 747–760. Walter de Gruyter, Berlin and New York.
- König, E. and P. Siemund: 1996a, 'Emphatische Reflexiva und Fokusstruktur', in I. Rosengren (ed.), *Sprache und Pragmatik* 40, pp. 1–42. Lunds Universitet, Lund.
- König, E. and P. Siemund: 1996b, 'Selbst-Reflektionen', in G. Harras and M. Bierwisch (eds.), *Wenn die Semantik arbeitet. Klaus Baumgärtner zum 65. Geburtstag*, pp. 277–302. Niemeyer, Tübingen.
- König, E. and P. Siemund: 2000, 'Intensifiers and reflexives: A typological perspective', in Z. Frajzyngier and T. S. Curl (eds.), *Reflexives. Forms and Functions*, pp. 41–74. Benjamins, Amsterdam.
- König, E. and P. Siemund: 2005, 'Intensifiers and reflexives', in M. Haspelmath, M. Dryer, D. Gil and B. Comrie (eds.), *The World Atlas of Language Structures*, pp. 194–197. Oxford University Press, Oxford.
- Kratzer, A.: 1996, 'Severing the external argument from its verb', in J. Rooryck and L. Zaring (eds.), *Phrase Structure and the Lexicon*, pp. 109–137. Kluwer, Dordrecht.
- Kratzer: in prep., *The Event Argument and the Semantics of Voice*, MIT Press, Cambridge, MA.
- Lasersohn, P. (1989): 'On the readings of plural noun phrases', *Linguistic Inquiry* 20, 130–134.
- Lasersohn, P. (1990): 'Group action and spatio-temporal proximity', *Linguistics and Philosophy* 13, 179–206.
- Leirbukt, O.: 1997, *Untersuchungen zum bekommen-Passiv im heutigen Deutsch*, Niemeyer, Tübingen.
- Levin, B.: 1993, *English Verb Classes and Alternations. A Preliminary Investigation*, University of Chicago Press, Chicago and London.
- Lenerz, J.: 1976, *Zur Abfolge nominaler Satzglieder im Deutschen*, Narr, Tübingen.
- Newman, R.M.: 1990, *An English-Hausa Dictionary*, Yale University Press, New Haven and London.
- Ogawa, A.: 1998, 'Emphatische Reflexiva im Sprachvergleich: Deutsch – Japanisch', *Sprachtypologie und Universalienforschung* 51, 146–178.
- Reis, M.: 1985, 'Mona Lisa kriegt zuviel. Vom sogenannten "Rezipientenpassiv" im Deutschen'. *Linguistische Berichte* 96, 140–155.
- Rooth, M.: 1985, *Association with focus*, PhD dissertation, University of Massachusetts at Amherst.
- Rooth, M.: 1992, 'A Theory of Focus Interpretation', *Natural Language Semantics*, 1, 75–116.
- Schwarzschild, R.: 1994, 'Plurals, presuppositions, and the sources of distributivity', *Natural Language Semantics* 2, 201–248.
- Schwarzschild, R.: 1999, 'Givenness, AvoidF and other constraints on the placement of accent', *Natural Language Semantics* 7, 141–177.
- Siemund, P.: 2000, *Intensifiers. A Comparison of German and English*, Routledge, London.
- Wegener, H.: 1985, "'Er bekommt widersprochen" – Argumente für die Existenz eines Dativpassivs im Deutschen', *Linguistische Berichte* 96, 127–139.

