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REANALYSING *SELBST**

This paper investigates the meaning of German *selbst* (\approx E *N-self*) in its intensifying use, and the relation of this *selbst* to the focus particle *selbst* (\approx E *even*). I propose that intensifying *selbst* denotes type-lifted variants of the identity function on the domain of individuals, and that the observed stress accents must be analysed in terms of by now well-established focus theories. This analysis covers the core range of data correctly, predicting obligatory stress on *selbst*, sortal restrictions, centrality effects, and the distribution of examples that express some kind of surprise. Moreover, it allows for a treatment of the reanalysis of intensifying *selbst* into focus particle *selbst* that stipulates fewer historical accidents than previous accounts.

1. INTRODUCTION

German has two different versions of the particle *selbst*. On the one hand, *selbst* can be used as a focus particle as in (1.1) and (1.2). Here, the respective sentence is asserted and we get two presuppositions: (a) the proposition expressed is the least likely, least plausible, or most surprising proposition among the set of focus alternatives (scalar presupposition), and (b) all focus alternatives hold true as well (additivity).¹ Small caps indicate an accent which is generally a fall accent unless stated otherwise.

- (1.1) Peter wußte selbst die LETZTE Antwort.
Peter knew even the last answer
'Peter knew even the last answer.'

* My ideas about the meaning and reanalysis of *selbst* have been shaped by many fruitful discussions with my colleagues at Konstanz, notably Miriam Butt, Urs Egli, Klaus von Heusinger, Shin Sook Kim, and Malvina Nissim. Going further north, I thank Gerd Jäger, Manfred Krifka, and especially the participants of the *selbst* colloquium of Ekkehart König and Peter Siemund, FU Berlin, and SuB 2000 in Amsterdam. Steve Berman generously helped me to bring the language of the paper closer to Standard English. Finally, a manuscript on *selbst* by Daniel Hole which explores ideas closely related to my own made me see more clearly how the present approach relates to other proposals, and I thank him heartily for backing me up in discussions. All persisting fallacies and shortcomings are my own responsibility.

¹ The terms “scalar focus particle” and “additive focus particle” follow the terminology in Krifka (1998). Note that I will not be concerned with the question of whether *selbst* associates with focus directly or whether it signals association of an assert-operator with focus. To keep matters simple, I will assume direct association of *selbst* with focus.



- (1.2) Selbst JANE FONDA nascht manchmal Yogurette.
 even Jane Fonda eats sometimes Yogurette
 ‘Even Jane Fonda sometimes eats Yogurette.’

On the other hand, *selbst* can be used with intensifying function, postponed to an NP with which it is associated. It is always stressed in this use, which is why it has also been called “stressed *selbst*.” Examples (1.3)–(1.5) illustrate this use:

- (1.3) Der Präsident eröffnete die Ausstellung SELBST.
 the president opened the exhibition himself
 ‘The president opened the exhibition himself.’
- (1.4) Der Präsident gab der hungernden Witwe
 (reading a) The president gave the starving widow
 (reading b) The president gave the starving widow
 (reading c) The president gave the starving widow
 den Scheck SELBST.
 the cheque himself
 the cheque herself
 the cheque itself
- (1.5) Jane Fonda SELBST nascht manchmal Yogurette.
 Jane Fonda herself eats sometimes Yogurette
 ‘Jane Fonda herself sometimes eats Yogurette.’

Intensifying *selbst* (like English *N-self*) commonly states that the respective sentence is true and that the proposition is the most surprising, or least probable one in a set of alternative propositions. These alternatives arise by replacing the referent of the NP that is intuitively linked with *selbst* by alternative individuals (or objects). These alternative individuals, finally, have to be somehow “grouped around” or “form the entourage” of the referent of NP (centrality effects). Further aspects of the meaning of *selbst* in examples like (1.3)–(1.5) will be discussed at length later in the paper.

The meaning of the focus particle *selbst* (or its English counterpart *even*) is well understood and has received comprehensive treatments in focus theory (Rooth 1985, 1992; Krifka 1991, 1993; Jacobs 1983; von Stechow 1989, among others).² The meaning of intensifying *selbst* is somewhat

² It is not entirely clear whether English *even* is a correct translation of German *selbst*. The particles might differ in terms of their additivity presuppositions. The point is that treatments of *even* can in any case easily be turned into treatments of the focus particle *selbst*.

less well understood, I claim, in spite of an impressive wealth of literature on the topic that will be surveyed in section 2. The focus particle *selbst*, finally, has developed from intensifying *selbst*, which occurs in German texts hundreds of years before the focus particle arose around 1600. While this insight is part of linguistic folklore, there exists to date no detailed semantic analysis of the reanalysis process.

The first part of the paper is devoted to the synchronic semantic analysis of intensifying *selbst*.³ Section 3 contains the core proposal and shows how the account automatically predicts obligatory stress on *selbst*, the sortal restrictions of adnominal *selbst*, the centrality effects of *selbst*, and the distribution of “no-surprise” cases (which will be introduced in section 2). Section 4 discusses more data, addressing the issue of additive vs. exclusive *selbst* and whether we need extra readings to accommodate them.

Section 5 will treat the diachronic reanalysis of intensifying *selbst* into the focus particle *selbst*. We will review previous stories about this reanalysis and see that they imply a coincidence of no less than *seven* allegedly unrelated changes in the grammar and meaning of *selbst*, turning the intensifier into the focus particle. Again the present analysis of *selbst* will allow us to tell a more convincing story: it explains why six of these seven changes *had* to co-occur by necessity, leaving us with one remaining historical “accident”.⁴ The Appendix will, finally, demonstrate that this remaining accident is indeed supported by the historical data.

To my knowledge, this is the first attempt to analyse a case of historical reanalysis in a formal semantic framework. Historical and formal semantics have so far generally been viewed as disjoint, if not even hostile, enterprises. The present study suggests that compositional semantics is the natural setting to develop detailed accounts of reanalysis, and that language history in turn offers new evidence for speakers’ clean and neat use of semantic composition.

2. PREVIOUS ACCOUNTS

2.1. *König and Siemund*

The most comprehensive semantic analysis of intensifying *selbst* in recent years has been proposed in various papers of König and Siemund (König 1992; König and Siemund 1996; König and Siemund 2000; Siemund 2000).

³ The intensifier will simply be called *selbst* in the following, while I will always make it explicit when I am concerned with the focus particle.

⁴ Apart from the accident that reanalysis took place at all.

According to their view, all instances of *selbst* (stressed and unstressed) are focus particles in the sense of Jacobs, Krifka, Rooth, von Stechow, etc. While this is obvious for *selbst* in (1.1) and (1.2), they argue that postposed and stressed *selbst*, as in (1.3)–(1.5), follows a general German pattern of postposed focus particles under stress, as in examples (2.1)–(2.3).

- (2.1) Otto war AUCH bei der Party.
 Otto was also at the party
 ‘Otto was at the party, too.’
 ≈ Auch OTTO war bei der Party
 also Otto was at the party
 ‘Otto also was at the party.’
- (2.2) Malwina ALLEIN kannte die Lösung.
 Malwina alone knew the solution
 ‘Malwina alone knew the solution.’
 ≈ Allein MALWINA kannte die Lösung.
 alone Malwina knew the solution
 ‘Only Malwina knew the solution.’
- (2.3) Peter war EBENFALLS gegen den Vorschlag.
 Peter was also against the proposal
 ≈ Auch PETER war gegen den Vorschlag.
 also Peter was against the proposal
 ‘Peter also was against the proposal.’

The basic nature of all occurrences of *selbst* thus being determined, it is a lexicographic exercise to spell out the specific semantic and pragmatic contribution of *selbst* in different constructions and uses, and König and Siemund offer extensive lists of such in various writings. Note that these assumptions, apart from treating the contemporary meaning of *selbst*, will moreover allow for an extremely smooth reanalysis process: if all instances of *selbst* are basically the same particle, then syntactic reanalysis plus a couple of new shades of *selbst* should suffice to derive unstressed from stressed *selbst*.

One major drawback of this analysis of intensifying *selbst* is that the alleged focus constructions do not fit very well in the otherwise very systematic landscape of association with focus.

- In German, the most general syntactic pattern of particle + focus requires

that the particle should at least stand in some kind of c-command relation to the focus. This pattern also holds for particles that cannot occur “postposed and stressed”. A theory that can explain cases like (2.1)–(2.3) in a systematic way would clearly be preferable to the claim that some, but not all, focus particles show up in idiosyncratic syntactic relations to their focus.

- The stress pattern of “stressed, postposed” focus particles as in (2.1)–(2.3) is equally unexplainable in view of the general picture. It has proved extremely successful to view prosodic stress as an indication of semantic/pragmatic focusing. Moreover, the meaning contribution of the stress (= focus) can generally be described in a uniform way in terms of focus alternatives and their interpretation by operators that turn them into assertions, presuppositions, or match them against the context. – The stress accent on postposed *selbst* stands out in that it doesn’t mean anything, according to the analysis proposed.
- On the other hand, the putative focused elements in sentences like (1.3)–(1.5) and (2.1)–(2.3) do not carry any accent that would indicate focusing. Of course, focus accents can sometimes be omitted for independent reasons (see Schwarzschild 1999). Still, examples (1.3)–(1.5) would be unusual in that none of the known reasons for deaccenting applies. Thus we remain with the observation that an allegedly focused element is unstressed for no good reason.

König and Siemund accept these consequences, referring to Reis and Rosengren (1997), who offer an analysis of examples like (2.1)–(2.3) in terms of association with focus. According to Reis and Rosengren, such cases of irregular association with focus have to be accepted as part of the linguistic facts of German (and other languages). Krifka (1998) challenges this liberalism by showing that it is at least unnecessary to account for additive particles under stress (Engl. *also, too*, German *auch, ebenfalls*, and similar particles in French, Czech, and Hebrew). He proposes to view sentences like *Otto/ was at the party, too* as instances of hat contour focus: *Otto/ was at the party, too*. By making use of Büring’s (1996) analysis of hat contour accents, and with a sufficiently sophisticated semantic representation for ‘too’, Krifka can derive the meaning of examples like (2.1) and (2.3) as standard cases of focus.

Krifka’s analysis clearly does not extend to intensifying *selbst*.⁵ If the

⁵ Krifka even offers independent reasons as to why his analysis should not extend to focus particles that, like *selbst*, have scalar implications. While I do not agree with his arguments in this respect, the above observation is already sufficient to make the main point here, namely that stressed *selbst* is not in the range of his theory.

respective sentences are read with a hat accent, they change their meaning: Sentence (2.4) means something different than (2.5) and for this reason alone cannot be analysed as hat focus with suppressed hat accent:

- (2.4) Otto hat SELBST das Auto gewaschen.
 Otto has himself the car washed
 ‘Otto HIMSELF\ washed the car.’ (contrasts Otto with entourage)
- (2.5) OTTO/ hat SELBST\ das Auto gewaschen.
 Otto has himself the car washed
 ‘OTTO/ HIMSELF\ washed the car.’ (contrasts Otto/Otto’s entourage with other people and their entourages)

This is unlike in the *auch, too, also* examples, where hat intonation clarifies meaning rather than changing it. Still, with Krifka’s standard focus analysis for additive particles “under stress” in mind, the alleged nonstandard focus particles like *selbst* or *allein* remain even more isolated. An analysis of *selbst* in terms of focus semantics without any extra stipulations would be preferable.

While I propose to give up König and Siemund’s general approach, their writing (especially the very comprehensive Siemund 2000) offer many lucid discussions of various aspects of the data. One observation (already made in Edmondson and Plank 1978) concerns the scale of surprise. They note that not all examples of stressed *selbst* evoke a scale of surprise. The sentences in (2.6)–(2.8) exemplify *no-surprise* uses of intensifying *selbst*:

- (2.6) (The archbishop was easy to spot, thanks to his mitre. The Lords wore shining helmets . . .)
 Der König selbst trug eine Krone.
 the king himself wore a crown
 ‘The king himself wore a crown.’
- (2.7) (We discussed the vices of the crew.)
 Der Pilot selbst raucht Gauloises.
 the pilot himself smokes Gauloises
 ‘The pilot himself smokes Gauloises.’
- (2.8) Der Busfahrer selbst erlitt einen Schädelbruch.
 the bus driver himself suffered a fracture of the skull
 ‘The bus driver himself suffered a fracture of the skull.’

The proposition expressed in (2.6), for instance, is anything but surprising:

the king is by no means the least likely to wear a crown but the most likely to do so. In example (2.7), it is neither likely nor unlikely that the pilot should smoke Gauloises. Sentence (2.8) is discussed in Siemund (2000).

Such no-surprise examples of *selbst* have so far been treated by stipulating yet another reading (modestly called “use”) of intensifying *selbst*. I will propose that stressed *selbst* is simply *selbst* in focus, and that scales of surprise play a role in the interpretation of a sentence if and only if the *focus particle or construction* in question contributes a scale of surprise. We will see that this analysis squares nicely with the data.

Another aspect of sentences with intensifying *selbst* that has received close attention in the literature are the *centrality effects* on the alternatives to ‘N-self’ (see e.g. Baker 1995; Kemmer 1995). In example (2.6), for instance, we understand that the king is perceived as the central figure in government, in example (2.7) that the pilot is intuitively central in the crew. In these cases, the noun (‘king’, ‘pilot’) already offers a hint as to what kind of entourage the speaker might have in mind. If *selbst* links with a proper name, we understand that the person in question must be somehow central in the contextually given alternatives. Analogous sentences with a focus on the proper name do not require any such context. This is illustrated by (2.9) and (2.10).

- (2.9) Hans SELBST wurde verwundet.
 Hans himself was wounded
 Hans wurde SELBST verwundet.
 Hans was himself wounded
 ‘Hans himself was wounded.’

- (2.10) HANS wurde verwundet
 Hans was wounded
 ‘Hans was wounded.’

I do not intend to add to the many different instances of core-periphery structures that have been observed in the literature, ranging from world-based ones (like political hierarchy structures) through verb-based ones (like cases of personal action in contrast to delegated action) to those supported by mode of presentation (like “John – John’s wife, daughter, son, grandmother”), perspectival core and periphery, topic shifts, etc. I will adopt König and Siemund’s view here who argue that all observed cases are characterized by the common pattern of center versus entourage (e.g. König and Siemund 1996; Siemund 2000: chap. 6). This overall structure should

be viewed as the semantic contribution of *selbst*, whereas possible, preferred, and excluded *instances* of center-periphery structures are a question of possible, preferred, or impossible kinds of context.

It is an interesting aspect of the reanalysis of stressed *selbst* into the focus particle *selbst* that the focus particle has lost these centrality effects, the *only* common contribution of all uses of stressed *selbst*. Historical linguistics being a *post hoc* science, we could, like all previous accounts, note this loss as a historical fact without attempting any further explanation. Yet, I take it as an advantage of the account to be proposed that it will predict that the step from stressed to unstressed (= focus particle) *selbst* will necessarily and automatically lead to the loss of centrality effects.

2.2. Other Previous Theories

Without attempting to give a full overview of the literature on intensifying *selbst*, I would like to point out several previous papers that contain core ideas that will be used below.

Moravcsik (1972) offers one of the first comprehensive overviews of intensifying particles like English *self*, German *selbst*, etc. in various languages and notes typological constants. As to the meaning of *selbst*, she proposes that intensifying *selbst* denotes the identity function ID on the domain of objects.⁶ While she does not attempt to combine this proposal with a theory of focus and can therefore not demonstrate the full strength of this suggestion, I will argue that hers is exactly the right meaning of *selbst*.

Edmondson and Plank (1978) on *self/selbst* not only discuss centrality effects but are also the first to distinguish between additive and exclusive uses of *selbst*. They demonstrate how world knowledge supports or excludes either reading. In talking about activities that we are likely to delegate to others, we prefer to understand *selbst* as “N-self did X instead of leaving it to others” (exclusive use). If unique events are at stake, we also understand *selbst* as exclusive. Additive uses are more frequent where we understand that if the least likely person A does X, there is an implica-

⁶ It has sometimes been suggested that *selbst* is restricted to persons, or at least preferred with persons. Examples like “Otto hat nun die CPU SELBST mal ausgewechselt“ (= Otto has now changed the CPU itself) or “Die Krönung selbst fand um 12.00 statt“ (= The coronation itself took place at noon) demonstrate that *selbst* accepts objects and even events. I guess that the many bad examples of *selbst* with objects or events are due to the fact that objects and events are generally harder to set into a core-periphery structure. Where we can construe some such structure, *selbst* is acceptable.

tion that the entourage of A did X as well. These distinctions will be taken up in section 4.

A final observation that was first made by Edmondson and Plank concerns the sortal restrictions of adnominal *selbst* illustrated in (2.11) and (2.12).

- (2.11) Andrea SELBST schaltete den Fernseher ab.
 Andrea herself switched the TV off
 ‘Andrea herself switched off the TV.’
- Die Mutter SELBST schaltete den Fernseher ab.
 the mother herself switched the TV off
 ‘The mother herself switched off the TV.’
- (2.12) *Eine Frau SELBST schaltete den Fernseher ab.
 A woman herself switched the TV off
- *Jede Mutter SELBST schaltete den Fernseher ab.
 Each mother herself switched the TV off
- *Die meisten Mütter SELBST schalteten den
 the most mothers themselves switched the
 Fernseher ab.
 TV off
 ≈ ‘Most mothers themselves switched off the TV.’

We will characterize these sortal restrictions in more detail in the next section.

Finally, the present paper follows Primus (1992) in spirit, in that she attempts to derive all and only the possible uses of intensifying and focus particle *selbst* from a common core meaning. While my analysis clearly differs from her account in several ways (e.g., I *will* distinguish the meaning of the focus particle from the meaning of intensifying *selbst*), I will follow her general strategy of deriving as much variation as possible from context and knowledge for the sake of a lean lexicon.

In summary, we will have to answer the following questions:

- What is the denotation of intensifying *selbst*? How many “readings” does *selbst* have?
- What are the sortal restrictions of adnominal *selbst*?
- Why does intensifying *selbst* obligatorily carry an accent?
- Does this accent contribute to the semantics or pragmatics of the overall sentence?

- What is the source of the centrality effects, and why do they vanish during reanalysis?
- How do no-surprise examples arise?
- How does reanalysis proceed?

3. THE PROPOSAL

3.1. *The Meaning of Selbst*

I propose that the core meaning contribution of *selbst* is the identity function ID on the domain of objects D_e .

$$(3.1) \quad \text{ID: } D_e \rightarrow D_e \\ \text{ID}(a) = a \text{ for all } a \in D_e$$

In this bare form, *selbst* can combine with proper names, if we assume (contrary to the Montagovian strategy of type-lifting to the worst case) that these denote individuals.

$$(3.2) \quad \llbracket [\text{Otto}]_{\text{EN}} \text{ selbst} \rrbracket = \text{ID} (\llbracket \text{Otto} \rrbracket = \llbracket \text{Otto} \rrbracket)$$

Generally, functions on D_e can be lifted to partial functions that can take certain, but not all, generalized quantifiers as their argument. The definition of Lift1 is given in (3.3).

$$(3.3) \quad \text{Let } f \text{ be a function on } D_e. \text{ Then } \text{Lift1}(f) \approx f: D_{\langle (e, t), t \rangle} \rightarrow D_{\langle (e, t), t \rangle} \\ \text{is defined as follows: If } Q \in D_{\langle (e, t), t \rangle} \text{ is a principal ultrafilter,} \\ \text{i.e. of the form } Q = \lambda P(P(a)) \text{ for some } a \in D_e, \text{ then } f(Q) \approx \\ \lambda P(P(f(a))). \text{ Else, } f \text{ is undefined.}$$

We can now claim that adnominal *selbst* denotes Lift1 of ID. This assumption predicts exactly the range of sortal restrictions of adnominal *selbst*: it can only combine with proper names and definite NPs denoting single individuals or groups like *die Schüler* ('the pupils'), as in *Die Schüler selbst warteten im Stadion* ('The pupils themselves were waiting in the stadium'). Adnominal *selbst* does not combine with any other kind of NP. Our semantic analysis of 'selbst' offers a natural explanation of this fact: only definites and proper names denote principal ultrafilters.⁷

⁷ Jäger (p.c.) notes that specific indefinites can also combine with *selbst*. This observation offers additional evidence for the view that specific indefinites are nonquantificational and refer to specific individuals, much like definite NPs. On the other hand, we get support for our idea that the combination restrictions for *selbst* are semantic rather than grammatical restrictions.

In adverbial position, *selbst* combines with the verb before the nominal argument ties in. Once again, we can provide type-lifted versions of the identity function (and other functions) that account for this order of semantic combination. I will give the different versions as a list of readings of *selbst*, leaving it open whether they should be derived by general type adjustment processes in semantic computation or be stored as a list. The full functions Lift2–Lift4 can easily be defined analogously to Lift1 in (3.3).

(3.4) Adverbial *selbst* for intransitive verbs:

$$\text{Lift2}(\text{ID}) \equiv \lambda P_{(e, t)}(\lambda x.P(\text{ID}(x)))$$

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

$$\text{Lift3}(\text{ID}) \equiv \lambda Q_{(e, (e, t))}(\lambda y \lambda x.Q(\text{ID}(x), y))$$

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

$$\text{Lift4}(\text{ID}) \equiv \lambda Q_{(e, (e, t))}(\lambda y \lambda x.Q(x, \text{ID}(y)))$$

As before, Lift2–Lift4 can apply to all functions that map individuals to individuals. We will make use of this fact in the next section.

All these variants will merely change the combinatorial possibilities of *selbst*, while leaving the core meaning contribution unchanged. Whereas adnominal *selbst* operates on the referent of the NP that it is linked to, adverbial *selbst* only indirectly operates on the referent of the linked NP: the verbal predicate itself is changed into something that maps one of its future arguments onto something else before inserting it into the respective relation.⁸ This difference explains why adverbial *selbst* does not impose any sortal restrictions on the NP.

But then, you might object, the meaning contribution of *selbst* according to this suggestion amounts to nil. Not a single sentence will change its meaning whether we stick in *selbst* or not. This does not appear to be a reasonable semantics for *selbst*. Is ID a reasonable denotation for any word at all? This is where focus enters the picture.

3.2. Focus Alternatives of Selbst

We have already noted that intensifying *selbst* is also sometimes called “stressed *selbst*,” accounting for the observation that it occurs unstressed only under circumstances that will generally suppress all previous accents. Corrective echo utterances are the best-known case.

⁸ As a reviewer pointed out, an alternative way to account for the combinatorial variation might be a treatment at the syntax-semantics interface via movement and reconstruction. I will leave this as an open possibility to develop a smoother version of the account.

- (3.5) Der König SELBST öffnete die Gartentür.
 the king himself opened the garden door
 – Nein, falsch: Der König selbst öffnete die
 no wrong the king himself opened the
 HAUSTür.
 door of the house
 ‘The king HIMSELF opened the garden door. – No, wrong: The
 king himself opened the door of the HOUSE.’

The denotation of *selbst* proposed in section 3.1 offers a natural explanation for this empirical observation. While *selbst* does not contribute anything to the meaning of the sentence, it will become meaningful exactly if it is in focus: focused *selbst* will, like any other focused item, evoke focus alternatives that will enter in the meaning of the respective focus construction.

Selbst is obligatorily stressed
 because it needs to be in focus
 because only in focus will it contribute to the meaning of the
 sentence.

I adopt the general picture of Rooth (1985, 1992) where the interaction between focus semantics and context is characterized as follows: the logical type of the focused expression determines the logical type of allowed focus alternatives. The focus semantic value of the expression does not predict the content of focus alternatives.

Yet, the case of *selbst* allows us to be a little more restrictive than what the official doctrine suggests. As we know that *selbst* denotes type-lifted variants of ID, I will assume that the focus alternatives of *selbst* are type-lifted variants of other functions from D_e to D_e . Therefore I propose that *selbst* in focus relates to alternative functions on the domain of objects and individuals. In the notation of Rooth (1992a):

- (3.6) $\llbracket \textit{selbst} \rrbracket^f = \{\text{Lift}_n(f) \mid f \text{ is a contextually salient alternative to ID} \}$
 for appropriate lift Lift1–Lift4.

If we assume that focus on *selbst* evokes alternative functions on the domain of individuals, we predict that focused *selbst* indirectly induces a set of alternative individuals in D_e :

- (3.7) Let a be the referent of the NP linked to *selbst* and let $\{f_1, f_2, f_3, \dots, f_k\}$ be salient alternatives to ID in the given context. $\text{Alt}^*(a) = \{f_1(a), f_2(a), f_3(a), \dots, f_k(a)\}$ will be called the induced set of alternatives to a in D_e .

Interestingly, the induced set of alternatives to a is logically structured into core element a , the referent of NP, and a periphery, consisting of all other elements $f_i(a)$ in $\text{Alt}^*(a)$: While $\text{Alt}^*(a)$ is generated from a by applying $\{f_1, f_2, f_3, \dots, f_k\}$, the application of $\{f_1, f_2, f_3, \dots, f_k\}$ to some other $x \in \text{Alt}^*(a)$ will in general yield a totally different set.

Therefore, the account automatically predicts that whatever the exact set of focus alternatives to ID will be, it will always induce a set of alternative individual objects in D_e that is structured into a center, held by the referent a of the respective NP, and a periphery, generated by applying all alternative functions to a . In short, we logically expect *centrality effects*.

Evidently, the proposal does not in and of itself predict the broad yet limited range of actual instances of center-periphery that we observe in the data, and neither that there are cases where such a centre-periphery structure might be hard to get. Logically speaking, we can find for any set $\{a, a_1, \dots, a_k\} \subseteq D_e$ a set of functions $\{f_1, f_2, f_3, \dots, f_k\}$ such that $f_1(a) = a_1, f_2(a) = a_2, \dots, f_k(a) = a_k$. But, not any old set of functions is conceptually accessible so as to be even potentially available as a set of focus alternatives for ID. A similar situation is well known from the case of focus on property denoting terms (e.g. verbs or adjectives). For instance, logically speaking any property could be a focus alternative to ‘red’, but only very few occur in practice when we focus the adjective ‘red’ in a sentence.

It would be desirable to have a theory that can predict what a “conceptually accessible set of functions” should be, and the account here certainly cannot offer this prediction. I can only discuss, by way of illustration, some examples that show possible sets of alternative functions. Roughly speaking, the choice of alternative functions seems always driven by the question “Who instead?” – in whatever sense that might be of interest in a given context. This is, evidently, not a very precise characterization. All I can say to my defence is that, to my feeling, most previous papers likewise only offer lists of examples for centre-periphery structures without being able to give necessary and sufficient criteria for when a set with a prominent element is a legitimate centre-periphery structure.

(3.8) Peters Familie streitet jedes Jahr lange über ihr Ferienziel.

Peter SELBST/ fährt gerne IN DIE BERGE\.

‘Every year, Peter’s family quarrels about where to go for vacation. Peter HIMSELF/ likes to go to the MOUNTAINS\.’

{f|f maps Peter onto a member of Peter’s family}

= {wife-of, son-of, daughter-of, mother-of, dog-of, . . . }

- (3.9) Der König öffnete SELBST die Türe.
 the king opened himself the door
 ‘The king opened the door himself.’
 {f|f maps king onto someone who might have opened the door
 instead} = {butler-of, servant-of, child-of, maid-of, . . .}
- (3.10) Anna raucht doch SELBST wie ein Schlot.
 Anna smokes prt. herself like a chimney
 ‘Anna is a heavy smoker herself.’
 {f|f maps Anna onto someone to who’s smoking Anna objected}
 = { . . . }
- (3.11) Otto wurde zusehends unsicher. Wurde denn der ganze Tumult
 von ihm, Otto SELBST, verursacht?
 ‘Otto became more and more nervous. Was all this turmoil
 caused by him, Otto himself?’
 {f|f maps Otto onto someone in the visible environment of Otto}
 = {f|f(O) is potential view of O}
- (3.12) Andrea hat die CPU SELBST ausgebaut.
 Andrea has the CPU itself removed
 ‘Andrea has removed the CPU itself.’
 {f|f maps CPU onto peripheral part *x* of computer that might
 be responsible for the malfunctions instead}

In summary, we can account for all known examples in a natural way, while at the same time not being able to tell precisely why an impossible example is impossible.

3.3. *Selbst in Focus Constructions*

Now that we have proposed a meaning for *selbst* and investigated possible focus alternatives, we can ask in what kinds of focus constructions *selbst* can occur. The answer will be quite simple and systematically appealing: *selbst* can occur in all types of focus constructions that we know. Importantly, we will predict that a sentence with *selbst* expresses surprise of some kind iff the focus construction in question expresses surprise, like the focus particle *sogar* (‘even’), emphatic focus, or adverbs like *surprisingly*. Sentences with *selbst* do not express surprise (*no-surprise* examples) if the focus construction does not. This is the case for question-answer focus,

hat contours, focus particles like *nur* ('only'), or adverbs like *expectedly*. And this prediction fits nicely with the data. Let me go through some cases.

Selbst can unproblematically occur in *association-with-focus* constructions.⁹

- (3.13) Nur der König SELBST warf einen Groschen in die
 only the king himself threw a coin into the
 Büchse.
 box
 'Only the king himself threw a coin into the box.'
- (3.14) Auch der König SELBST trug seine Amtsinsignien.
 also the king himself wore his insignia
 'Also the king himself wore his insignia.'
- (3.15) Erwartbarerweise eröffnete der König SELBST die
 as expected opened the king himself the
 Sitzung.
 meeting
 'As expected, the king himself opened the meeting.'

For illustrative purposes, I will give the main steps of a focus semantic analysis of (3.13) in terms of Rooth (1985):

- (3.13') a. $\llbracket \text{selbst}_f \rrbracket^f = \{g \mid g \text{ maps king onto person in king's periphery}\}$
 b. $\llbracket \text{der König selbst}_f \rrbracket^o = \text{king}$
 c. $\llbracket \text{der König selbst}_f \rrbracket^f = \{x \mid x = g(\text{king}) \text{ for some } g \in \llbracket \text{selbst}_f \rrbracket^f\}$
 d. $\llbracket \text{der König selbst}_f \text{ warf einen Groschen in die Büchse} \rrbracket^o$
 $= \exists y \exists z (\text{Coin}(y) \ \& \ z = \text{box} \ \& \ \text{Throw-in}(\text{king}, y, z))$
 e. $\llbracket \text{der König selbst}_f \text{ warf einen Groschen in die Büchse} \rrbracket^f$
 $= \exists y \exists z (\text{Coin}(y) \ \& \ z = \text{box} \ \& \ \text{Throw-in}(g(\mathbf{king}), y, z) \mid$
 $g \in \llbracket \text{selbst}_f \rrbracket^f \}$

⁹ Remember that our analysis does *not* assume that stressed *selbst* is itself a "focus particle."

- f. \llbracket nur der König selbst_f warf einen Groschen in die Büchse \rrbracket°
 Assertion:
 $\forall p(p \in \llbracket$ der König selbst_f warf einen Groschen in die Büchse $\rrbracket^f \ \& \ p \neq \llbracket$ der König selbst_f warf einen Groschen in die Büchse $\rrbracket^{\circ} \rightarrow \neg p)$
 Presupposition:
 \llbracket der König selbst_f warf einen Groschen in die Büchse \rrbracket°
 $= \exists y \exists z (\text{Coin}(y) \ \& \ z = \text{box} \ \& \ \text{Throw-in}(\text{king}, y, z))$
- g. Paraphrase of (f): Nobody in the periphery of the king threw a coin into the box.
 Presupposed: The king did throw a coin into the box.

Step (g) shows that we arrive exactly at the intuitive meaning of (3.13). Step (a) shows why we accept the sentence only in a context where a periphery of the king is given or can be derived. It is important to note that nowhere in the derivation we allude to a scale of probabilities, or degrees of surprise. This squares with the intuitive meaning of the sentence. The lack of degrees of surprise is even more plain in (3.14) and (3.15). Sentence (3.14) states that the king wore his insignia, as did everyone else in his periphery – but the speaker doesn't express any surprise about this fact in uttering (3.14). Sentence (3.15) makes use of the fact that evaluative adverbs also can associate with focus, thereby referring to a scale of propositions – in this case: of increasing degrees of expectability. Sentence (3.15) expresses that the proposition 'The king opened the meeting' is at the "probable" end of this scale. Once more, the sentence does not express any surprise. Generally, in association with focus particles, stressed *selbst* sentences only express surprise if the respective focus particle does, otherwise they are *no-surprise* cases. They are usually not listed in the literature as *no-surprise* cases, though, probably because it was assumed that the presence of a focus particle placed them in an extra category.

Let me note in passing that this would also be the appropriate place to discuss intensifying *selbst* under negation, because negation as well can associate with focus. I will defer discussion of examples to section 4 because they bear on questions that will only be tackled later.

Another kind of focus construction that has received much attention in recent years is the hat contour pattern (Büring 1996; Eckardt 1999; Krifka 1998). Its meaning can roughly be characterized as follows: The rise-accented item is contrasted with alternatives that could stand in its place, and some comment containing a fall accent expresses that this item (on a virtual list) has the property expressed by the sentence (rather than some alternative property among its focus alternatives). An example is given in (3.16):

- (3.16) Der JÜNGSTE/ Bruder trug ROTE\ Hosen
 the youngest brother wore red trousers

‘The YOUNGEST brother wore RED trousers.’

List of people under discussion: brothers of varying age
 Assertion made with respect to the youngest brother: wears red trousers (rather than green ones, blue ones, or black ones).

Contextual restrictions:

- (a) List of more than one brother and their apparel must be under discussion;
 (b) For all brothers, we must be concerned with the colour of trousers they wear (not, e.g., whether they wear kilts rather than trousers, shirts, caps, etc.)

Going through the no-surprise examples of intensifying *selbst* that are discussed in the literature, one will note that they all carry hat contour accents with a rise on *selbst* and a fall later in the sentence. I repeat the examples from section 2 with an indication of the respective intonation pattern. Once more, the test for suppressed accents applies: we can pronounce the fall accents without change in meaning. The meanings of the German sentences match the meanings of the respective English sentences, and I therefore refrain from offering wordy paraphrases.

- (3.17) (The archbishop was easy to spot, due to his mitre. The Lords wore shining helmets . . .)

Der König SELBST/ trug eine KRONE\
 the king himself wore a crown

‘The king HIMSELF/ wore a CROWN\.’

- (3.18) (We discussed the vices of the crew.)

Der Pilot SELBST/ raucht GAULOISES\
 the pilot himself smoke Gauloises

‘The pilot HIMSELF/ smokes GAULOISES\.’

The given contexts make it clear that lists of (people in periphery of king × their head wear) and (people in periphery of pilot × their vices) are under discussion. Another nice minimal pair can be constructed from example (120) in Edmondson and Plank (1978), repeated in (3.19). Pragmatically speaking, it only makes sense as a no-surprise case with the accent pattern in (3.19a). In the single-accent pattern in (3.19b), which we will investigate presently, the sentence implies that those who buried W. C. Fields did not like him very much.

- (3.19) W. C. Fields, who had himself always hated the place, is buried in Philadelphia.
- a. W. C. Fields, who had HIMSELF/ always HATED\ the place, is buried in Philadelphia.
 - b. W. C. Fields, who had HIMSELF\ always hated the place, is buried in Philadelphia.

Edmondson and Plank discuss (3.19) in the context of an alleged role reversal function of stressed *selbst*. Siemund (2000) correctly observes that this impression is due to the fact that the lists of propositions that are characteristic for hat contour contexts can arise in the form of ‘A doing X to B, while B himself doing X to C’, like in (3.20).

- (3.20) Brutus betrayed Cesar who HIMSELF/ betrayed CLEOPATRA\.

The author fails to note, however, that hat contours also characterize the range of no-surprise examples without overt focus particles:¹⁰

A sentence with stressed *selbst* (not associating with a focus particle) is a no-surprise example iff *selbst* enters a hat focus construction.

3.4. *Emphatic Focus and the Scale of Surprise*

Let me now turn to the core cases of intensifying *selbst*, *selbst* in emphatic focus. I will adopt the view of emphatic focus expressed in Krifka (1995, 227): “The function of emphatic focus is to indicate that the proposition that is actually asserted is *prima facie* a particularly unlikely one with respect to the alternatives.” I will slightly simplify Krifka’s analysis of emphatic focus and use the analysis in (3.21). Here $p <_c q$ stands for “p is less likely

¹⁰ As a reviewer pointed out, the term “no-surprise example” is sloppily used in two senses here. In one sense, I use it for any sentence with *selbst* without a scale of surprise, including *selbst* in question-answer focus, with focus particles, focus and negation, and focus and adverbials. In another sense, however, I use it – in accordance with previous authors on *selbst* – for sentences with *selbst* that lack not only a scale of surprise but also “any other thing evidently intervening,” like particles, adverbials, preceding questions, etc. In this sense, *no surprise* equals *hat focus*. While the first use is clearly the more systematic one, the fact remains that *no-surprise* examples in the latter sense have caused the most confusion in the literature about *selbst*.

(or expectable) than q , given the common ground c "; the focus alternatives are given in the format of Rooth (1985).¹¹

- (3.21) **Emph.Assert** ($\llbracket S \rrbracket^o$, $\llbracket S \rrbracket^f$) in context c
 Assertion: $\llbracket S \rrbracket^o$
 Presupposition: $\forall p \in \llbracket S \rrbracket^f \setminus \llbracket S \rrbracket^o$: $\llbracket S \rrbracket^o <_c p$

Let us apply this definition to an example.

- (3.22) Der König SELBST hat die Tür geöffnet.
 the king himself has the door opened
 'The king himself has opened the door.'

Again, I will give the main steps in the semantic derivation.

- (3.23) a. $\llbracket \text{selbst}_t \rrbracket^f =$
 $\{g \mid g \text{ maps king onto person who might have opened the door instead}\}$
 b. $\llbracket \text{der König selbst}_t \rrbracket^o = \text{ID}(\text{king}) = \text{king}$
 c. $\llbracket \text{der König selbst}_t \rrbracket^f = \{x \mid x = g(\text{king}) \text{ for some } g \in \llbracket \text{selbst}_t \rrbracket^f\}$
 d. Assertion:
 $\llbracket \text{der König selbst}_t \text{ hat die Türe geöffnet} \rrbracket^o$
 $= \text{OPEN}(\text{king}, \text{door})$
 e. $\llbracket \text{der König selbst}_t \text{ hat die Türe geöffnet} \rrbracket^f$
 $= \{\text{OPEN}(g(\text{king}), \text{door}) \mid g \in \llbracket \text{selbst}_t \rrbracket^f\}$
 f. Presupposition:
 $\forall p \in \{\text{OPEN}(g(\text{king}), \text{door}) \mid g \in \llbracket \text{selbst}_t \rrbracket^f \setminus \{\text{ID}\}\}$:
 $\text{OPEN}(\text{king}, \text{door}) <_c p$.

The last two steps can be paraphrased as follows: The king opened the door, and we presuppose that for anyone else in the periphery of the king, it would have been more likely that this person opened the door than that the king did it. This is a clumsy but correct paraphrase of the sentence. Let us look at some more cases, without spelling out the derivation in full detail.

¹¹ As the interested reader may check, Krifka's proposal differs from (3.21) in that (a) we make no reference to the context change potential but evaluate the probability of the respective propositions themselves, and (b) we omit the stronger requirement that S is less probable than even the conjunction of *all* its alternatives. The subtle refinements in Krifka (1995) are required by the cases he is interested in, and his semantics for emphatic focus would yield the same results for our case as (3.21), yet would cause us unnecessary notational trouble.

- (3.24) Karl hat sich SELBST rasiert.
Karl has himself himself shaved

Sentence (3.24) with *selbst* related to the subject NP is ambiguous between a strict and a sloppy reading. (Speakers of German will note that yet another reading arises if *selbst* is related to the pronoun *sich*, evoking alternatives of the kind ‘Whom did Karl shave’ – i.e., the Karl-the-barber scenario.)

- (3.24') a. *Sloppy*: (It was required that someone should shave, and) Karl shaved, rather than have one of his comrades take their beard off.
b. *Strict*: Rather than going to the barber's, Karl took the razor in his own hand and shaved.

Let us look at the strict reading. A reasonable set of focus alternatives of *selbst* might be the following: $\llbracket \text{selbst}_t \rrbracket^f = \{\text{Lift2}(g) | g: \text{Karl} \rightarrow x, \text{ who might replace Karl for the purpose of shaving}\}$. In the strict reading, we deal with the verbal predicate ‘selbst + hat Karl rasiert’, where the argument that corresponds to the reflexive pronoun has been instantiated with ‘Karl’ independently of the subject.

$\lambda x. \text{SHAVE}(\text{ID}(x), \text{KARL})$

Combining this with the NP ‘KARL’, we get the asserted proposition

$\text{SHAVE}(\text{KARL}, \text{KARL})$

Alternative propositions arise if we replace ID by alternatives to *selbst*:

$\text{SHAVE}(\text{BARBER}, \text{KARL})$
 $\text{SHAVE}(\text{KARL'S WIFE}, \text{KARL})$
 $\text{SHAVE}(\text{KARL'S MOTHER}, \text{KARL})$

...

The sentence expresses that the assertion ‘Karl shaved’ is true, and that this is surprising: all possible alternatives that are listed above would have been more likely. The sloppy reading can be obtained analogously, starting with $\lambda x. \text{SHAVE}(\text{ID}(x), \text{ID}(x))$.

Example (3.25) illustrates that the scale is not always one of likelihood in the strict statistical sense.

- (3.25) Der Papst SELBST muß einmal sterben.
the pope himself must once die
‘Even the pope himself will have to die eventually.’

Statistically speaking, the likelihoods of the propositions expressed by

'The pope will have to die' and 'NN has to die' for any NN in the entourage of the pope, whatever it may be in a given context, are all equal to 1. This shows that emphatic assertions can not only refer to likelihood but also to more general scales of saliency of propositions.

In summary, I propose a treatment of sentences with intensifying *selbst* in terms of classical focus semantics. *Selbst* is assumed to denote the identity function, and hence is semantically vacuous. It will contribute to the meaning of the sentence if it is in focus, which accounts for the obligatory stress. Sentences with *selbst* are included in the usual range of focus constructions, and we generally get the right meanings and presuppositions if we combine the focus semantic contribution of stressed *selbst* with the semantic and pragmatic contribution of the respective focus construction. Scales of surprise are contributed by the respective focus particles or constructions, while centrality effects on the induced set of alternative individuals are an artifact of the focus alternatives, namely functions, of *selbst*.

This may look like a very simple account in view of an amazing diversity of examples. In the next section, I will discuss the question whether one (core) meaning of intensifying *selbst* is actually enough.

4. THE NUMBER OF READINGS

I will use the present section to discuss whether we have reason to distinguish further readings of stressed *selbst*. Importantly, two kinds of distinctions have been proposed in the literature:

- (4.1) the distinction between additive and exclusive uses of *selbst*
- (4.2) the distinction between the meaning of adnominal *selbst* and adverbial *selbst* (beyond type shifting)

I will argue that the choice of alternatives of *selbst* as well as the question whether we understand the sentence as exclusive or inclusive is mainly driven by context and world knowledge. Intuitive meaning differences between adnominal and adverbial *selbst* are mostly due to the fact that speakers tend to prefer different positions in different kinds of context, without this tendency being compulsory. Only *selbst* in the sense of 'on one's own, without help' will be acknowledged as an extra reading.

4.1. *Additive and Exclusive Readings*

Before starting, I need to provide some terminological clarifications. The terms “additive” and “exclusive” use of *selbst* comprise several more specific kinds of examples. Generally, “additive” uses of *selbst* suggest that in addition to N-*selbst*, other persons acted, too. “Exclusive” uses, in contrast, indicate that N *instead of someone else* was involved in a certain action. (4.3) and (4.4) illustrate this basic distinction.

- (4.3) Der Präsident SELBST hielt die Neujahrsansprache.
The president himself held the New Year’s speech
‘The president held the New Year’s speech himself.
(exclusive)
- (4.4) Aphrodite SELBST ist nicht schöner als Maria.
Aphrodite herself is not more-beautiful than Maria
‘Aphrodite herself isn’t more beautiful than Maria.’
(additive)

Several kinds of context support an exclusive use of *selbst*, all with extra implications that invite a further subclassification of exclusive *selbst*.

- (a) Logically-exclusive: If the sentence reports a unique, unrepeatable action, then “N-*selbst* did X” implies “Nobody else did X” for purely logical reasons. This is the case in (4.3).
- (b) Corrective-exclusive: Another type of exclusive use arises in corrective contexts. The speaker assumes that the hearer, wrongly, thinks that another person was involved in action X and corrects this presumptive error. This is illustrated in (4.5):

- (4.5) (Unfortunately it wasn’t only a simple soldier but . . .)
Der König SELBST wurde gefangengenommen.
The king himself was captured
‘The king himself was captured.’

While it is logically possible that other persons were captured, too, we tend to understand (4.5) as stating that only the king was captured. (Vague cases might arise where others were captured as well and we are just not interested in these.)

- (c) Delegative-exclusive: Another type of exclusive use which is restricted to *selbst* in combination with agentive verbs will arise when we understand that N-*selbst* did X rather than have it done by someone else.

- (4.6) Maria hat sich die Haare SELBST gefärbt.
 Maria has herself the hair herself dyed
 ‘Maria dyed her hair herself.’

- (d) Assistive-exclusive: In combination with other verbs, “N tat es *selbst*” can suggest that the referent of N acted without external help: “Maria fand den Weg zum Bahnhof selbst” (= Maria found the way to the station by herself). We will have a closer look at uses (c) and (d) in section 4.2.

Additive uses follow less specific patterns, but are generally possible whenever the action in question is repeatable at all and the context or world knowledge suggest that other persons, apart from N-*selbst*, did X. In (4.4), we will derive by world knowledge that if Aphrodite, being the goddess of beauty, is less beautiful than Maria, then all other women will be less beautiful, too. Another example of this type is given in (4.7): We will assume that, if the author of the theory himself does not understand it, then all others won’t be able to, either.

- (4.7) Einstein versteht die Relativitätstheorie SELBST nicht.
 Einstein understands the relativity theory himself not
 ‘Einstein himself doesn’t understand relativity theory.’

A further context for additive readings is the one where we understand that “N objected to others doing X although he is doing X himself”:

- (4.8) (Why does Hans get so upset about smokers?)
 Hans raucht (doch) SELBST!
 Hans smokes (prt) himself
 ‘But Hans himself smokes (as well)!’

Generally, all implications as to “Who too?” or “N instead of who?” are dependent on context and world knowledge, and this fact renders it impossible to offer a full list of “types of exclusive readings” or “types of additive readings.” I stress the distinction between *type* of exclusive-ness/additivity and exclusive/additive reading because it is usually not drawn in the literature, which leads to very puzzling evaluations of the data.¹²

In the remainder of this section, I will be concerned with the question of whether the semantics of *selbst* or of emphatic focusing should provide

¹² Virtually any of the listed papers can be used to get this experience.

additive implications or exclusivity implications. Let us turn to examples (4.9)–(4.11):

- (4.9) Goethe SELBST hat dies hingeschrieben.
Goethe himself has this written-down
'Goethe wrote this down himself.'
(logically forced: exclusive)
- (4.10) Goethe SELBST wußte seinen Geburtstag nicht mehr.
Goethe himself knew his birthday not more
'Goethe himself could not remember his birthday.'
(prominent reading: additive)
- (4.11) Goethe SELBST war bei dem Konzert.
Goethe himself was at the concert
'Goethe himself attended the concert.'
(none, some or all of the entourage might have attended, too)

They illustrate an exclusive additive, and indifferent use of *selbst*, respectively: Given that we do not want to predict the particular reasons why we understand a *certain type* of exclusive or additive implication, we might still propose to capture the implications as such by separate versions of emphatic focus. We might tentatively distinguish *Add.Emph.Assert*, *Excl.Emph.Assert*, and *Plain.Emph.Assert* in (4.12)–(4.14):

- (4.12) *Add.Emph.Assert* ($\llbracket S \rrbracket^o$, $\llbracket S \rrbracket^f$) in context *c*:
Assertion: $\llbracket S \rrbracket^o$
Presupposition: (i) $\forall p \in \llbracket S \rrbracket^f \setminus \llbracket S \rrbracket^o$: $\llbracket S \rrbracket^o <_c p$
(ii) $\forall p \in \llbracket S \rrbracket^f \setminus \llbracket S \rrbracket^o$: p
- (4.13) *Excl.Emph.Assert* ($\llbracket S \rrbracket^o$, $\llbracket S \rrbracket^f$) in context *c*:
Assertion: $\llbracket S \rrbracket^o$
Presupposition: (i) $\forall p \in \llbracket S \rrbracket^f \setminus \llbracket S \rrbracket^o$: $\llbracket S \rrbracket^o <_c p$
(ii) $\forall p \in \llbracket S \rrbracket^f \setminus \llbracket S \rrbracket^o$: $\neg p$
- (4.14) *Plain.Emph.Assert* ($\llbracket S \rrbracket^o \setminus \llbracket S \rrbracket^f$) in context *c*:
Assertion: $\llbracket S \rrbracket^o$
Presupposition: (i) $\forall p \in \llbracket S \rrbracket^f \setminus \llbracket S \rrbracket^o$: $\llbracket S \rrbracket^o <_c p$

However, it is easy to see that (4.14) subsumes (4.13) and (4.12). Hence, it would be simplest to claim that any sentence with *selbst* can be understood in any way that is covered by (4.14), logically possible, and supported by a suitable context. Very often, this is indeed the case. Sentence (4.10),

for instance, can also get an exclusive, or plain, interpretation in a corrective context, where the question “Who instead” makes sense.

- (4.10') (Wasn't there some kind of embarrassing incident at Goethe's when someone could not remember the master's birthday? Goethe got fairly grumpy, I bet!)
 Nein, Goethe SELBST wußte seinen Geburtstag nicht mehr.
 (No, Goethe himself could not remember his birthday. Thus he could hardly get grumpy.)

Sentence (4.11), on the other hand, can stand in contexts where it is fully clear that Goethe instead of his entourage came; or where it is clear that Goethe, in addition to his entourage, came.

- (4.11') Goethe SELBST war bei dem Konzert (– as Eckermann was sick in bed)
 (4.11'') (The concert of this young and very promising piano player aroused a great deal of interest and curiosity in Weimar.)
 Goethe SELBST war bei dem Konzert.
 (in addition to everyone else)

Yet, not all sentences show this lavish choice of readings. Various examples with *selbst* appear to lack one reading or the other, although it would be logically possible and supported by suitable contexts. Such cases would offer reason to distinguish several readings of *selbst*. I will now discuss two of these, *selbst* with negation and *selbst* in narrative discourse, and show that the analysis in section 3 will suffice to predict present and absent readings.

Sentences (4.15) and (4.16) appear to be a minimal pair showing that only “additive” *selbst* is possible over negation, and only exclusive (delegative) *selbst* is possible under negation (similar pairs are discussed in Edmondson and Plank (1978), König and Siemund (1996), and Siemund (2000), among others).

- (4.15) Peter hat SELBST nicht sein Hemd gewaschen.
 Peter has himself not his shirt washed
 ‘Peter himself didn't wash his shirt.’
 (4.16) Peter hat sein Hemd nicht SELBST gewaschen.
 Peter has his shirt not himself washed
 ‘Peter didn't wash his shirt by himself.’

Let me analyse these sentences in more detail.

In (4.15), *selbst* combines adverbially with “nicht sein Hemd waschen.” “Not doing something” is clearly not an agentive activity, and we can therefore not consider alternative agents that could do “nicht Peters Hemd waschen” instead of Peter or be ordered by him to do so. This accounts for the missing *assistive*- and *delegative*-exclusive readings.

The most natural context to utter (4.15) would be one where others have not washed their shirts either, i.e. with an additive implication. However, given the appropriate context, an exclusive implication can be understood, too:

(4.17) (What’s making that terrible smell here? Did Peter’s kid wet his pants?)

Nein, Peter hat SELBST nicht sein Hemd gewaschen.

No, Peter has himself not his shirt washed

This shows that the generalization “only additive *selbst* over negation” does not hold true. Exclusive *selbst* is possible (see (4.17)), and only those types of exclusive reading are missing that are impossible due to the absent notion of “assisting” and “delegating”.

What about the missing additive reading in (4.16)? In sentence (4.16) the focused element *selbst* occurs in the scope of negation. Unfortunately, this is not an innocent scope reversal of (4.15) but involves further interpretive steps: negation is known to interact with focus. A simple example of the effect can be found in sentence (4.18); the phenomenon is discussed in more detail in Herburger (1998).

(4.18) Peter hat sein Hemd nicht *mit Ariel* gewaschen.

Peter has his shirt not with Ariel washed

‘Peter didn’t wash his shirt with ARIEL (. . . but with some other stuff.)’

Sentence (4.18) presupposes that Peter did wash his shirt, a presupposition that arises through association of negation with focus. Generally, negation in association with focus presupposes that at least one of the focus alternatives of the unnegated sentence holds true; in the case of (4.18) a proposition of the form ‘Peter hat sein Hemd mit NN gewaschen’ (= Peter washed his shirt with NN) where NN ranges over possible detergents.

In the same way, negation associates with stressed *selbst*.

- (4.16) Peter hat sein Hemd nicht [selber]_f gewaschen
 Peter has his shirt not himself washed
 ‘Peter didn’t wash his shirt himself (– but someone else did it).’

What will an analysis of (4.16) in terms of negation in association with focus predict? Apart from the assertion made (“Peter did not wash his shirt”), it will be predicted that the presupposition arises that at least one of the focus alternatives of the unnegated sentence holds true:

- (4.16’) For some *f* that maps Peter onto an alternative person in his entourage: *f*(Peter) washed Peter’s shirt.

Hence, (4.16) means something that looks very much like the negation of an exclusive use of *selbst* and fails to show any other reading. But, this is due to independent reasons and can be predicted without stipulating an extra additive reading of *selbst* (which then would be miraculously ruled out under negation).

Another interesting example of *selbst* with a missing reading has been discussed in Hole (1999). He formulates the hypothesis that only agentive verbs allow for exclusive *selbst/selber*.¹³ In support of this hypothesis he notes that *selbst* in (4.19) can only be understood with additive implications:

- (4.19) Plötzlich bemerkte Sue den Fehler SELBST.
 Suddenly noticed Sue the mistake herself
 ‘Suddenly, Sue noticed the mistake herself – as all others had before her.’

Logically, it would be possible for Sue to be the only one to notice the mistake. Yet, it is hard if not downright impossible to understand sentence (4.19) as it stands in an exclusive way. Why?

Sentence (4.19) will not get an exclusive reading for logical reasons (it is logically possible that more than one person registers a mistake), and the verb is unsuited for the delegative-exclusive use: it is part of the logic of ‘notice’ that its subject could not ask someone else to notice things for him.

¹³ Hole does not distinguish between additive/exclusive *implications* and *types* of additive/exclusive uses. Note that Hole generally uses *selber* instead of *selbst*, to make it clear that it is not the focus particle that is at stake. In German, *selbst* and *selber* can replace each other in almost all places except adnominally in genitive NPs. For the sake of uniformity, I changed all *selber* examples to *selbst*, which does not affect their meaning.

Why does (4.19) lack a corrective-exclusive use? The temporal adverb ‘*plötzlich*’ ‘suddenly’ indicates that in the course of a narrative the speaker is under the assumption that the hearer correctly follows the story and has not made wrong assumptions about the epistemic background. (Discourse relations like *continuation*, *elaboration*, *correction*, etc. have been discussed extensively in Lascarides and Asher (1993), Asker and Lascarides (1998).) Hence in a coherent use of (4.19), the sentence can not get a corrective-exclusive interpretation. This, however, is due to the adverb ‘suddenly’ rather than the meaning of the verb. The missing reading in fact is exhibited in the following context:

- (4.20) (Who noticed the error in the program of Sue’s project? Jane, I bet, as she is the cleverest of Sue’s guys.)
 (Nein), Sue SELBST bemerkte den Fehler.
 (no) Sue herself noticed the mistake
 (Nein,) Sue bemerkte den Fehler SELBST.
 (no) Sue noticed the mistake herself

Finally note that (4.19) in fact *does* have an assistive-exclusive reading, teased out in the following context:

- (4.19’) (The teacher watched Sue struggle with the problem and was just about to tell her where she had made the crucial mistake. Yet, . . .)
 Plötzlich bemerkte Sue den Fehler SELBST.
 Suddenly noticed Sue the mistake herself
 ‘suddenly, Sue noticed the mistake by herself (instead of with the teacher’s assistance).’

Examples like these illustrate why it is necessary to distinguish between exclusive/additive implications and special *types* of exclusive/additive readings. The case moreover exemplifies that the most common context of a sentence might not be the only possible one: some readings are not absent, they simply require a more sophisticated context.

4.2. *Open Cases*

While the last section was devoted to demonstrating the wide range of examples that are covered by the analysis in section 3, I will briefly sketch two issues here that still await further investigation.

The analysis in section 3 rests on the basic idea that a focus on *selbst* evokes functions that map an individual onto “who might have been

involved instead” (we might sloppily call them “instead-of functions”), where the kind of proxy is left to be specified by context. Many authors on *selbst* observe, however, that in certain cases we have fairly precise expectations as to what kinds of “instead-functions” are intended. For instance, when using *selbst* with agentive verbs and linked to the subject, we will often understand “doing X *selbst*” as “not delegating it to others.” Sentence (4.21) is an example of that kind:

- (4.21) Emil hat den Kuchen SELBST gebacken.
 Emil has the cake himself baked
 ‘Emil baked the cake by himself.’

Sentence (4.21) can be understood to say: “*Emil*, not the baker, Emil’s cook, or Emil’s wife, baked the cake.” Importantly, the entourage of Emil in this case is determined with respect to the activity of cake-baking. In contrast to other examples, Emil is not required to have a world-given group of people that cluster around him (un-like kings, presidents, or popes), because the verb in question already offers hints as to what kind of “instead-of” is intended.¹⁴

Yet, this does not weigh against an analysis in terms of focus alternatives, as *every* set of focus alternatives will depend in part on the meaning of the rest of the sentence. (4.22a, b) illustrate this plain fact. Due to the meaning of the rest of the sentence, only male alternatives make sense for (4.22a) while (4.22b) allows male or female alternatives to ‘Emil’.¹⁵ Yet nobody would take this as indication that focus, or *nur* (‘only’), has different meanings in either example.

- (4.22) a. Nur EMIL kann der Vater sein.
 Only Emil can the father be
 ‘Only Emil can be the father.’
 b. Nur EMIL kann der Dieb sein.
 Only Emil can the thief be
 ‘Only Emil can be the thief.’

We therefore need not be surprised that the kind of “instead-of” that is available for agents of agentive verbs might differ from the “instead-of” we obtain for other verbs. Importantly, this kind of entourage is also

¹⁴ Of course, all other types of entourage are possible, too. The point here is whether (4.21) might have more than the readings that we predict in section 3.

¹⁵ Sentence (4.22b) might be uttered in a context where in fact only male suspects are at stake, but this is not the point.

accessible for adnominal use of *selbst* with the same verbs. (4.23) can refer to exactly the encourage that was given above for (4.21):

- (4.23) Emil SELBST hat den Kuchen gebacken
 Emil himself has the cake baked
 (– und nicht der Bäcker, Emils Frau oder sein Koch)
 and not the baker, Emil’s wife or his cook

Still, sentence (4.21) poses the following puzzle: There is a very prominent way to understand (4.21) that does not evoke *any* alternative creators of the cake. Of course, it is implicitly clear that if Emil didn’t bake the cake, then someone else must have, yet these other persons are simply *not at stake*. Sentence (4.21), in the most innocent way of understanding it, requires a context where *alternative actions that Emil might have taken with respect to the cake* are under discussion. This effect is limited to adverbial *selbst*.

- (4.24) (Did Emil buy the cake?)
 (No, –) Emil hat den Kuchen *selbst* gebacken.
 (No, –) #Emil *selbst* hat den Kuchen gebacken.

On the other hand, “do-it-yourself” in this sense cannot contrast with all reasonable alternative actions, only with those that lead to the same end in a more abstract sense – in this case: possessing a cake.

- (4.24) (Did Emil buy the cake?)
 (#Did Emil eat the cake?)
 (No, –) Emil hat den Kuchen *selbst* gebacken.

An anonymous reviewer suggested that such examples might involve bridging effects like the ones discussed in Fox (2000) or Rooth (1992b). Here, as those cases, the actual focus alternatives remain implicit and are only implied by the overt item in focus. Another hypothesis might be that *selbst-tun* in such examples has already passed the borderline between compositional semantics and prefixed verb and is understood as one word, in spite of conventional orthography. Under this assumption, the accent on *selbst* would be the word accent of the compound rather than signaling focus on *selbst* alone. Further investigations will be required to make the case for either (or a third) analysis.

There remains a second puzzling use of adverbial *selbst*, the *assistive* use. This use can be paraphrased as “without any help” and is exemplified in (4.26) and (4.27).

- (4.26) Adrian fand den Weg zum Bahnhof SELBST.
 Adrian found the way to-the station himself
 ‘Adrian found the way to the station by himself.’
 (= assistive reading preferred)
- (4.27) Maria hat die Aufgabe SELBST gelöst.
 Maria has the problem herself solved
 ‘Maria solved the problem by herself.’
 (= assistive reading preferred)

In its most natural reading, (4.26) does not contrast “Adrian found the way to the station” with “Someone else instead found the way to the station (= Adrian’s way?).” The speaker most likely will refer to the fact that Adrian can “find his way by himself” or “find his way with the help of others.” Likewise, Maria can “solve the problem by herself” or “solve the problem with the help of others.”

Technically, it would be no problem to account for this overall meaning of (4.26) and (4.27) with the meaning of *selbst* in section 3. We could assume that *selbst* evokes functions that map *Adrian* to groups of agents that include *Adrian* plus other helping persons in (4.26), and functions that map *Maria* to groups of *Maria* plus other helping agents in (4.27). Yet, this can not be the full truth because, unlike the delegative use, assistive alternatives are not available for *selbst* in adnominal position. Sentences (4.28) and (4.29), the adnominal variants of (4.26) and (4.27), do not have an assistive reading.¹⁶

- (4.28) *Adrian SELBST fand den Weg zum Bahnhof.
 Adrian himself found the way to-the station
 ‘Adrian himself found the way to the station.’
 (* = no assistive reading)
- (4.29) *Maria SELBST hat die Aufgabe gelöst.
 Maria herself has the problem solved
 ‘Maria herself solved the problem.’
 (* = no assistive reading)

Observe further that *ohne fremde Hilfe* (‘without help by others’) is a

¹⁶ They have not, at least according to my intuition. There seems to be a certain degree of variation among speakers with respect to this question. For those speakers of German who can understand (4.26) assistively, the focus solution as indicated will provide an explanation.

synonym to *selbst* in this use, and that *selbst* contrasts with *mit der Hilfe von NN* ('with the help of NN').

I propose one extra variant for *selbst* to account for this reading. It will have the format of adverbs in general and, taking into account the above observations, will express the absence of any person that stands in the ASSIST-relation to the event in question. I assume that ASSIST is a (hitherto undescribed?) thematic relation that relates persons to an event in which they are not the driving agent themselves but assist the agent in performing a task. If you wish, you can understand ASSIST as the human pendant to the well-known INSTRUMENT role. The event predicate below is sortally restricted to agentive events and states that the event in question was done without further assistance.

$$(4.30) \llbracket \textit{selbst}_{\text{assistive}} \rrbracket = \lambda e \neg \exists x (\text{ASSIST}(x, e))$$

This meaning will account for the assistive use of *selbst* in adverbial position. It is not available in adnominal position for reasons of type mismatch. Whatever the best way to spell out "assistance" may be, it is clearly a notion tied to an event (and its agent, perhaps) and can not be interpreted reasonably with respect to an individual in isolation.

5. REANALYSIS

So far, we have been concerned with the synchronic adequacy of the proposed analysis of *selbst*. In this section, I will turn to diachronic issues, specifically the development of the focus particle *selbst* from intensifying *selbst* around 1600. I will show that the present analysis of *selbst* allows us to treat reanalysis in a more satisfying way than previous accounts. Specifically, we will have to stipulate less historical coincidence in this development and yet be able to explain why the reconstruction of a limited set of borderline *selbst* examples by speakers around 1600 was enough to fully determine the (semantic) nature of the resulting focus particle.

With the extensive survey of examples discussed so far in mind, we can list the following differences in the semantic behaviour of intensifying and particle *selbst*:

<i>selbst</i> ₁ (≈ -self)	<i>selbst</i> ₂ (≈ even)
1. associates with NP (adnominally: with definites, proper names, and specific indefinites)	associates with anything
2. adnominal sortal restriction: only with definites, proper names, and specific indefinites	no sortal restrictions
3. accent on <i>selbst</i>	no accent on <i>selbst</i>
4. no accent on associated element	accent on associated element
5. centrality effects	no centrality effects
6. uses without scale of surprise are possible	all uses involve a scale of surprise/ likeliness/usualness
7. additive and exclusive uses	only additive uses
8. syntax: follows associated element	precedes associated element (c-command, locality)

According to König and Siemund's account, all variants of *selbst* are basically the same focus particle and differ with respect to position, stress patterns, and semantic shades like centrality effects, surprise effects, additivity, or exclusivity. If we take this picture seriously, we have to assume that the seven semantic characteristics of *selbst*₁ (plus its syntax) are tied together by accidental linguistic convention, and so are the semantic characteristics of *selbst*₂. It is not assumed that stressed *selbst* is focused *selbst*, that focusing of the identity function will yield centrality effects, that the identity function will naturally restrict the range of NPs it can directly apply to, etc.

Applied to historical changes, this picture will force us to believe that, magically, speakers of German around 1600 decided to use their old particle *selbst* in a new way where all seven semantic characteristics (plus syntax) changed all at once. The data at the time document no phase of uncertainty with intermediate uses of *selbst*, exhibiting, for instance, the first four characteristics of *selbst*₁ but the last three properties of *selbst*₂. All new uses of *selbst* correctly exhibit all seven characteristics of the modern focus particle (except for a minor variation in syntax, which would certainly be a topic in its own right).

Historical linguistics is, of course, a post hoc science concerned with the contingencies of the actual course of events, but still this magical harmony does seem surprising; all the more as the same magical harmony appears in several other languages, like in French *même* ('self') – *même* ('even'), or Spanish *mismo* ('self') – *mismo* ('even').

The analysis of intensifying *selbst* that was proposed here will tie together characteristics (1) to (6): *selbst* denotes the identity function on objects and hence can only associate with linguistic material referring to objects. The sortal restrictions for adnominal *selbst* follow. Obligatory stress follows from the fact that *selbst* would otherwise be meaningless. The fact that the associated NP remains unstressed follows from the fact that it has nothing to do with focus whatsoever. Centrality effects arise indirectly through the evocation of alternative functions, and implications of surprise arise only if contributed by the respective focus construction.

It appears to be clear that the focus particle *selbst* arose by semantic reanalysis of certain uses of intensifying *selbst* which are “semantically close” to the focus particle construction, like the pair in (5.1) and (5.2).

- (5.1) Jane Fonda SELBST nascht manchmal Yogurette.¹⁷
 Jane Fonda herself eats sometimes Yogurette
 ‘Jane Fonda herself sometimes eats Yogurette.’
- (5.2) Selbst JANE FONDA nascht manchmal Yogurette.
 Even Jane Fonda eats sometimes Yogurette
 ‘Even Jane Fonda sometimes eats Yogurette.’

I will use the term “semantic reanalysis” in the following sense: Speakers understand some proposition *p* as the meaning of a sentence, and they form hypotheses about the way in which the sentence material contributes to this proposition. If these hypotheses are not in accord with the current grammar of the language, then reanalysis has taken place. If the new analysis of the respective construction occurs frequently enough so as to enter the grammar of the language, then language change has occurred.

Going through the semantic composition of sentence (5.1), it will be evident at what point the proposition expressed here is so close to the meaning of (5.2) as to invite reanalysis. The account will also predict that this “misunderstanding” will almost fully determine the nature of the resulting focus particle *selbst*.

The only remaining accident is the restriction to additive uses: interestingly, *selbst* was turned into the focus particle on the basis of additive examples. The result is visible in examples (5.3) and (5.4): the focus particle *selbst*, in contrast to *sogar*, always has an additive implication.

¹⁷ A brand of chocolate bar filled with yoghurt cream that, according to the ads, tastes as if purely made from yoghurt.

- (5.3) Die Verena wurde sogar VOM PAPST getauft.
 The Verena was even by-the pope baptized
 ‘Verena was even baptized by the POPE.’
- (5.4) Die Verena wurde selbst VOM PAPST getauft.
 The Verena was even by-the pope baptized
 ‘Verena was baptized by even the POPE.’

Sentence (5.3) states that remarkably, but otherwise quite straightforwardly, Verena was baptized by the pope rather than by someone else. Sentence (5.4), in contrast, states that Verena was baptized by the pope (remarkably) *in addition to* having been baptized by all alternatives to the pope. Given the way religious baptizing works, world knowledge would support the assumption that Verena was baptized only once. We therefore can be sure that the additivity implication must be contributed by *selbst*.

We can now trace the reanalysis of sentence (5.1). It has the literal meaning given in (5.5). This meaning will be computed by interpreting the accent on *selbst* as emphatic focus.

- (5.5) Assertion:
 NASCHTYOG(JF)
- Presupposition:
 There is a set of functions $\{g \mid g: JF \rightarrow a, \text{ one of the aerobic disciples of JF}\}$ supplied by context, and for all these functions g
 NASCHTYOG(JF) is less likely than NASCHTYOG($g(JF)$)

In the present case, it is plausible to assume that Jane Fonda’s aerobic disciples eat Yogurette as well (additive implication). Importantly, speakers not only understood that this was a reasonable consequence of (5.1) but treated it as part of the literal content of (5.1), leading to the representation in (5.6).

- (5.6) Assertion:
 NASCHTYOG(JF)
- Presupposition:
 There is a set of functions $\{g \mid g: JF \rightarrow a, \text{ one of the aerobic disciples of JF}\}$ supplied by context, such that for all these functions g
- NASCHTYOG(JF) is less likely than NASCHTYOG($g(JF)$)
 - NASCHTYOG($g(JF)$) holds true.

The set of functions induces a (structured) set of individuals that contains Jane Fonda:

$$(5.7) \quad \{g(\text{JF}) \mid g \in \llbracket \text{selbst}_t \rrbracket^f\} \\ = \{\text{JF, Mary-Lou, Peter, John, Elsa, Larry, Andy, . . .}\}$$

The competent hearer will know (from her general mastery of focus constructions) that the set in (5.7) would be a potential focus semantic value of the focused NP “Jane Fonda”:

$$(5.8) \quad \llbracket \text{Jane Fonda}_t \rrbracket^f = \\ \{\text{JF, Mary-Lou, Peter, John, Elsa, Larry, Andy, . . .}\}$$

There is a crucial difference between (5.7) and (5.8), though: if the set in (5.8) is accessed as the focus semantic value of “Jane Fonda”, it will come *without* being structured into centre and periphery. Focus semantic values of proper names consist of sets of individuals without any further structure, as we have already noted in example (2.10). This step in the reanalysis is the one where the centrality effects of stressed *selbst* get lost.

When we compute the ordinary and focus semantic values of the sentence “JANE FONDA nascht manchmal Yogurette,” we will get exactly the propositions that play a role in (5.6):

$$(5.9) \quad \llbracket \text{JANE FONDA nascht manchmal Yogurette} \rrbracket^o = \text{NASCHTYOG}(\text{JF}) \\ \llbracket \text{JANE FONDA nascht manchmal Yogurette} \rrbracket^f = \\ \{\text{NASCHTYOG}(\text{Mary-Lou}), \text{NASCHTYOG}(\text{Peter}), \\ \text{NASCHTYOG}(\text{John}), . . .\}$$

Finally, the hearer will know that her language has particles that can do exactly what is needed to turn (5.9) into (5.6) when they associate with focus. Hypothesizing that *selbst* is one of these particles and works so as to turn (5.9) into the assertion and presuppositions in (5.6), the hearer will derive the meaning of the focus particle *selbst* as in (5.10).

$$(5.10) \quad \textit{selbst}+\text{S} \\ \text{Assertion:} \\ \llbracket \text{S} \rrbracket^o \\ \text{Presupposition:} \\ \bullet \text{ For all } p \in \llbracket \text{S} \rrbracket^f \setminus \{\llbracket \text{S} \rrbracket^o\}: \llbracket \text{S} \rrbracket^o \text{ is less likely than } p \\ \bullet \text{ For all } p \in \llbracket \text{S} \rrbracket^f \setminus \{\llbracket \text{S} \rrbracket^o\}: p \text{ holds true}$$

The derivation in (5.10) matches the semantic analysis of the modern German focus particle *selbst*. And, we could demonstrate that the magic harmony of accidents, under the present analysis of reanalysis, is not magical

any more. Even after the first instance of reanalysis, the semantics of the new focus particle *selbst* is almost fully determined, with only one remaining accident, namely the fact that reanalysis started from intensifying *selbst* with additive implication. This accident is supported by the data discussed in the Appendix.

Reanalysis in general appears to be initiated by pragmatically driven “misunderstanding” (see Hopper and Traugott 1993 for a wealth of examples). In our case, we had to assume the following: (i) Hearers ignored that the sentences in question alluded to a contextually given core-periphery structure on the alternative individuals. The historical data in the Appendix suggest that this “forgetfulness” might have been supported by the fact that the respective entourages were part of world knowledge, and hence contexts of utterance were not dramatically restricted by this centrality requirement. (ii) Hearers mistook the additivity statement to be part of the meaning conveyed by the sentence rather than a pragmatic inference. This kind of shift from implication to literal meaning is typical for reanalysis. (iii) Hearers erred with respect to the locus of accenting.

Hence, as far as the first cause of reanalysis is concerned, the present analysis is in accord with previous literature on reanalysis as a pattern of meaning change (see e.g. König and Traugott 1988; Hopper and Traugott 1993; Heine et al. 1991, 1997; Lang and Neumann-Holzschuh 1999). We diverge, however, in the explanation of how a particular word can acquire a new meaning on the basis of such an initial misunderstanding. It is traditionally assumed that words (here: *selbst*) shift their meaning by metaphoric or metonymic processes which, felicitously, yield exactly the missing semantic contribution. Studies with a focus on the genesis of auxiliaries, light verbs, or derivational affixes also use the term “semantic bleaching.” It seems evident that the meaning shift from old to new *selbst* does not fit smoothly under either of these labels.¹⁸

In the present paper, reanalysis is for the first time couched in a formal semantic framework with explicit denotations and a detailed treatment of semantic composition. Only this kind of framework explicates notions like “meaning that would turn what I have understood so far . . . into what I understand the full sentence to mean” (that is, the step from (5.9) to (5.6)). Under this view, reanalysis is not a gradual shift from an old reading of

¹⁸ Metonymy is often used as a “remnant category” that covers all meaning shifts that can not plausibly be classed otherwise. The characterization of metonymy given in Hopper and Traugott (1993), for instance, would extend to *selbst*. I do not wish to start a discussion of the term “metonymy” here; however, I would not like to stretch the term to cover examples like *selbst*.

some word to a new one, but a hypothesis about a new syntactic structure and literal meaning of the sentence that determines meaning and grammar of its parts with almost mathematical precision.

6. APPENDIX: A CASE STUDY

Grimm's Deutsches Wörterbuch, still the best source to date on German etymology, locates the first uses of focus particle *selbst* from 1700 on, quoting passages of the work of Barthold Heinrich Brockes (1680–1747), Christian Fürchtegott Gellert (1715–1769), and Ludwig Christoph Heinrich Hölty (1748–1776), and notes that the reading is described in the grammar of German by Adelung (1781). My search in electronically readable texts in the Gutenberg project corpus produced a very early use of *selbst* shortly before 1624 which seems to be at the threshold of reanalysis. It is hard to decide whether the author, Opitz, in that instance was using intensifying *selbst* or the focus particle. Such uses are crucial in the development of the word, because even if Opitz intended to use stressed *selbst*, his readers will almost inevitably have come to the conclusion that stressed *selbst* was inadequate in this context, and that the author (after all a competent and well-educated writer) must have had in mind a different meaning of *selbst*.

The following is part of a longer poem in Opitz's *Über die poeterey*, published in 1624. I quote the full verse to offer the reader a broad context.

- (6.1) Ich muß bekennen nur / wol tausendt wündtschen mir /
 Vnd tausendt noch darzue / ich möchte die doch meiden
 Die mein' ergetzung ist / mein trost, mein weh vnd leiden
 Doch macht mein starckes hertz' / vnd jhre grosse ziehr /
An welcher ich sie selbst dir / Venus
 in which I her herself?/even? to-you / Venus
setze für /
 prefer PRT
 Das ich / so lang' ein Hirsch wird lieben püsch' vnd Heiden /
 So lange sich dein Sohn mit threnen wird beweiden /
 Wil ohne wancken stehn / vnd halten vber jhr. (. . .)
 'I only have to confess / that thousand would wish me
 and another thousand more / that I should avoid the one (fem)
 who is my pleasure / my comfort, my woe and suffering.
 But my strong heart causes, / and her great beauty,

In which I her **{herself?; even?}** to-you / Venus, prefer
 that I / so long as the deer will love shrubs and heaths
 So long as your son will wet himself with tears
 will stand without reeling / and hold fast over her.'

Opitz (1624/1978: 386)

What kind of *selbst* is in use here? In principle there are two possibilities. We could either have intensifying adnominal *selbst* ("sie SELBST") or focus particle *selbst*, in the latter case most probably associated with focused *dir* ("selbst DIR").

If we look at the account pattern of the sentence, we find that the rhythm of the poem requires an accent on *selbst*. If accenting in poems were to be trusted, this would be a clear indication that Opitz used intensifying *selbst*. However, other poems of Opitz show that prosodic accents can be given up in favour of rhythmic accents. We can not base our diagnosis on accenting.

The use of the slash in line 5 might be taken as an indication that Opitz wanted to group ["selbst dir"] as one syntactic constituent. This kind of grouping would support viewing *selbst* as the focus particle. However, in other places we find slashes that mark proper names, like "Venus" here, as parenthetical insertions. Although parenthetical insertions are often separated from the rest of the text by *two* slashes (one before, one after) we still can not exclude the possibility that the slash has similar function here. We have to turn to a semantic analysis in order to get a clearer picture.

Assume that *selbst* in line 5 actually *was* intensifying *selbst*. We are now in possession of the range of possible interpretations of stressed *selbst* and can ask whether any of these would lead to a reasonable proposition in the given context.

We can evidently exclude association of intensifying *selbst* with focus, as no other focus particle is in appropriate syntactic proximity to *selbst*. It will be equally dubious to claim that Opitz had in mind some kind of meaning that would arise through a hat contour accent. A putative rise accent on *selbst* would require a fall accent somewhere later in the clause – on "Venus" or the verb. Such a pattern would be appropriate in a context where the author wants to refer to a list, e.g.:

I prefer you (yourself) – to Venus,
 I prefer your first friend – to Aphrodite
 I prefer your second friend – to Athena . . .

(This is the variant with a putative fall accent on "Venus".) It is easy to

see that the preceding context in the poem does not license any such list of assertions.¹⁹

The only remaining kind of focus that might apply to intensifying *selbst* is emphatic focussing. However, this kind of focus always evokes a scale of probability/surprise, as we saw in section 3. Consequently, such an assertion would imply that the adored woman (“sie SELBST”) was the least likely among all alternatives to be preferred in beauty to Venus. This, evidently, is not what the author has in mind: Venus is the goddess of beauty. If the woman in question outranks Venus in beauty then she does so because she is extraordinary – not because he is the least likely to do so. We, as well as the 17th century reader, will therefore come to the conclusion that none of the possible uses of intensifying *selbst* is very convincing in this position.²⁰

On the other hand, the assertion that would be made with the focus particle *selbst* is highly reasonable. The focus particle in this position will associate with *dir* in focus. The sentence will assert that the author prefers his adored woman A in beauty to Venus, that he also prefers A to all alternatives to Venus (other women, for instance), and that Venus is the least likely among all women to be dispreferred to A in beauty.

This not only is a natural assertion to make at that point of the poem, it moreover patterns with a figure that is quite common in the writings of Opitz and his contemporaries (e.g. Grimmelshausen, in *Der abentheurliche Simplicissimus Teutsch* (1669), makes lavish use of it). Intensifying *selbst* is frequently used to assert that some deity *selbst* could not have done something better, or could have shown a property to a higher degree, than some figure in the narrative. (6.2) shows what the statement in the poem would look like in this pattern. Opitz could not use it for rhythmic reasons.

¹⁹ The example list of assertions that is given here is based on the assumption that *selbst* evokes functions to alternative women. Another possibility, more plausible in this context, is that *selbst* is contrasted with functions that map the woman in question to her properties: “her beauty – herself“. While this kind of alternative is more plausible in context, the author is also not concerned with things he’d do to the woman’s properties (“Her beauty – I praise, her wisdom – I admire, herself – I prefer to Venus”).

²⁰ Note in passing that the diagnosis that König and Siemund could offer is less sharp. They acknowledge the existence of no-surprise cases of stressed *selbst* but don’t identify them as cases of hat contours. Therefore their account will leave open the possibility that the use of *selbst* in question is a somewhat awkward no-surprise case. (Of course they could exclude that on the basis of their *intuitions* about German, but this again demonstrates that their semantic account is not of help in case of doubt.)

- (6.2) . . . an welcher ich sie dir, Venus SELBST,
 . . . in which respect I her to-you, Venus herself,
 setze für . . .
 prefer . . .

The very common (6.2) and the crucial sentence in (6.1) are a minimal pair exactly of the kind of (5.1)/(5.2) that was used to demonstrate how a hypothetical reanalysis of intensifying *selbst* to focus particle *selbst* must have proceeded. Phrases like (6.2), in the light of the discussion in section 5, would make a good starting point for reanalysis: the center-periphery structures were part of the literate man's knowledge of Greek mythology, and the phrases were typically used to convey an additive statement. Opitz's poem – without being, in all likelihood, the point of change – exemplifies how reanalysis may have started.

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