

Postponed *auch*: Where does its accent come from?
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There are a few particles in German which change their meaning along with their accented status, *wieder* ‘again’ being the clearest example. Accented *wieder* has a repetitive meaning, while unaccented *wieder* has a restitutive meaning. In the case of *wieder*, the difference in meaning seems to be dependent on a difference in focus.

The particle *auch* ‘also’ appears in an accented and in an unaccented version, as well. But it is not immediately clear whether the accent associates with a shift in semantic interpretation, as with *wieder*. According to Reis & Rosengren (1997), there is just one *auch*, which they analyze as a scope particle. The material c-commanded by *auch* can be focused (new) or not. If it is new, it is also accented (and *auch* is not). If only known material (or nothing) appears in its syntactic scope, *auch* is accented by default. Compare the sentences in (1). At the time of B’s reply, the verb *angerufen* ‘called’ is given and cannot be accented. Either *Stavros* or *auch* has the main accent, depending on their relative order. Both versions in (1B) are well formed and both mean that not only Sam has called, but Stavros has too. (1B’) shows that *auch* is obligatory. (1B’) is readily understood as a correction: it is not Sam who called, but Stavros.

- (1) A. *SAM* hat *ANGERUFEN*. ‘Sam called.’
B. *Auch STAVROS* hat *angerufen*/*STAVROS* hat *AUCH* *angerufen*. ‘Stavros called too.’
B’. **STAVROS* hat *angerufen*.

We will see below that the two versions of (1B) may differ in interpretation.¹ For now, let us concentrate on the following aspect of Reis & Rosengren’s proposal. The other ‘degree’ particles, *nur* ‘only’ and *sogar* ‘even’, remain unaccented when the material in their scope is given. Reis & Rosengren anchor this difference in the observation that *auch*, stressed or not, contributes a non-implicated, truth-relevant meaning element, called ADD (for ‘in addition’). Thus, an *auch* clause corresponds to ADD (p), meaning roughly, ‘in addition p’. ADD may be focused and negated. In contrast, *nur* and *sogar* lack such a meaning component. However, if the accent on postponed *auch* arises as a consequence of its position in the sentence, *nur* and *sogar* should be able to carry a default accent as well, regardless of their meaning.

Krifka (1999) proposes that preposed and postponed *auch* differ in interpretation: postponed *auch* is the focused part of a topic-focus pattern. The associated constituents of postponed *auch* are contrastive topics and *auch* gets its accent because it realizes an overt affirmative element, as can be seen in (2B), an answer to the polarity question in (2A). Additive particles contrast with the non-overt affirmative element AFF and hence express a particular emphasis. (2C) shows a sentence in which AFF is non-overt. The subscripted F stands for focus and FT stands for ‘focused topic’ or ‘contrastive topic.’ The first clause of (2B) answers part of this question (and can also be an answer to the more neutral question ‘*What did Peter and Pia eat?*’), but another part is still open, and the second clause answers the polarity question, and no other. The set of alternatives is {Pia ate Polenta, Pia did not eat Polenta}. The accented additive particles receive their stress because they realize an affirmative element explicitly, just like *did* and *certainly* in some cases.

- (2) A. *Haben Peter und Pia Polenta gegessen?* ‘Did Peter and Pia eat polenta?’
B. *PETER_{FT} hat POLENTA_F gegessen, und PIA_{FT} AUCH_{AFF}*. ‘Peter ate polenta, and Pia too.’
C. *PETER_{FT} hat PASTA gegessen AFF*. ‘Peter ate pasta.’

The first argument Krifka advances to support the interpretation of the fronted element as a topic correlates with the accent pattern. Since the associated constituent is accented in the same

¹ Reis & Rosengren propose that accented and unaccented *auch* may mean ‘in addition’ and ‘likewise’, respectively. It is not entirely clear how to reconcile this difference with their strong claim that there is only one *auch*.

way as a contrastive topic and the particle gets a falling accent, they resemble a topic-focus structure. But this accent is not obligatory, as there are examples of postponed *auch* unaccompanied by a contrastive topic (3). Krifka refers to Kowalski (1992) for such examples. If the accent in a contrastive topic is realizing an embedded focus (inside the topic), the possibility of accentless topics is explained. This focus is just not obligatory, and the contrastive topic is implicit in the answer (3B).

- (3) A: *Du hast das Geschirr gespült. Und den Abfall?* 'You did the dishes. And the garbage?'
 B: *Hab ich AUCH\ erledigt.* 'I took care (of it) too.'

A convincing argument correlating with the first one is the ill-formedness of the sentence (4B') in the context of (4A). *Griechenland* 'Greece' can only appear in the sentence initial position, as in (4B'), when it is clear from the context that it is one of the possible destinations, i.e., when it is a topic. Such a situation would arise if speaker B went to the Mediterranean region, leaving only a small set of countries as possible destinations. (4B) is a perfect answer to (4A) in a situation in which A has no idea where B spent their holidays.

- (4) A: *Ich hab gehört, ihr seid nach Itálien gefahren. Seid ihr sonst noch wohin gefahren?* 'I heard you went to Italy. Did you go anywhere else?'
 B: *Wir sind auch nach GRIECHENLAND\ gefahren.* 'We also went to Greece.'
 B': *?'Nach GRIECHENLAND/ sind wir AUCH\ gefahren.*

Like Reis & Rosengren, Krifka also considers the meaning of *auch* to be additive: it expresses and presupposes that the predication holds for at least one alternative of the expression in focus. Krifka proposes the following formalization, where the presupposed part is in parentheses.

- (5) [ADD₁ [...F₁...]]: [...F...] (∃F' ≠ F [...F'...])

Now for the puzzle: It is not always the case that *auch* is additive and/or has the meaning of (5). To see the problem, consider the dialogue in (6), adapted from Heim (1992:209).

- (6) A: *Yukiko mag Sushi.* 'Yukiko likes sushi.'
 B: *Shin glaubt, dass ich AUCH Sushi mag* (but in fact I hate raw fish).
 'Shin believes that I too like sushi.'
 B': *?'Shin glaubt, dass auch ICH Sushi mag.*
 C: *Shin glaubt, dass ICH Sushi mag.*

What could be the additive meaning of *AUCH* in (6B)? It could introduce the presupposition that Shin believes that somebody other than 'I' (namely Yukiko) likes sushi, in which case *auch* would add 'I' to this set. But this is clearly not part of the assertion of C. Shin does not need to believe that Yukiko likes sushi. In fact he could ignore Yukiko's existence, and the dialogue in (6) would still be well formed. The alternative is that *AUCH* adds 'I' to the set of persons who like sushi, regardless of Shin's beliefs. However, the intention of (B) is to remind the protagonists of the fact that this person doesn't like sushi. The stress pattern indicated in (6B') with an accent on *ich* is possible but introduces a contrastive meaning which is not intended in this exchange. The same is true if (6B) is replaced by (6C); see the discussion of (1).

Krifka's interpretation of accented *auch* as focus of the sentence's affirmation in need of a contrastive topic is difficult to hold. The problem is first that there is no constituent in the sentence which could play the role of a contrastive topic, except for *Shin* or *ich* but then the difficulties just discussed reappear.

The example (7) shows even more clearly that *AUCH* does not affirm what is asserted in the sentence, since Mary did not get the job. The dialogue (also from Heim 1992) must be set in a

context in which John and Mary competed for a single job.²

- (7) John: *I got the job.*
Mary: *My parents think that I ALSO got it.*

In (6) and (7) *auch* (or *also*) is the only place the accent can be realized, without introducing an unwelcome contrast. To appreciate this claim, consider (8).

- (8) A: *Peter sagte, dass die Semantikprofessur gestrichen wird.*
'Peter said that the semantics professorship will be eliminated.'
B: *Und was sagte Pia über die Phonologieprofessur?*
'And what did Pia say about the phonology professorship?'
A': *Sie sagte, dass sie AUCH gestrichen wird.*
'She said that it will be eliminated, too.'

In (8A') the DP *sie* or *die Phonologieprofessur* is given, in Schwarzschild's (1999) sense: it is entailed by the preceding context. The same is true of the verb *wird gestrichen*: that a professorship will be eliminated is also given (see Féry & Samek-Lodovici 2006 for observations along these lines). What is not entailed by the context is the assertion expressed by (8A'), and the word *auch*. *Auch* is the only place where the necessary accent can be located.

Returning to (6) and (7), *auch* (or *also*) in these dialogues does not have any additive meaning, but just serves as a place for the accent. In this absence of *auch* or *also*, the only place where accent can be assigned is on *I*, the only part of the embedded clause which is not entailed by the context. But accenting *I* conveys an undesired contrastive touch between *Yukiko* and *ich* (or *John* and *I*), implying that Shin not *only* believes that I like sushi, but also that Yukiko does not like sushi (see (1)). The conclusion that imposes itself is that a particle like *auch* or *also* does not necessarily have an additive meaning, but can play the role of an accent holder.

Reexamining now the role of postponed *auch* in the earlier examples, consider (9), which replicates (4) in different guises. (9b) has a narrow focus on *Griechenland* and is readily interpreted as an exhaustive list, whereas (9c) leaves it open whether other countries were visited as well. (9d) is incongruent, because the exhaustive narrow focus on *Griechenland* contradicts the preceding sentence, which claims that we were also in Italy.

- (9) a. Welche Länder im Mittelmeerraum habt Ihr besucht?
(‘Which countries in the Mediterranean did you visit?’)
b. Wir waren in Italien. Auch GRIECHENLAND\ haben wir besucht.
(‘We were in Italy. We also visited Greece.’)
c. Wir waren in Italien. GRIECHENLAND/ haben wir AUCH\ besucht.
d. Wir waren in Italien. *GRIECHENLAND\ haben wir besucht.

In conclusion, to fully understand the role of postponed *auch* it is necessary to examine the other accents in the sentence, as Krifka proposes in his paper. However, to reduce its role to a single meaning may conceal other aspects which are still in need of analysis. Postponed *auch* often gets the final falling accent, which readily gets an interpretation of finality and exhaustivity. It may well be the case that the choice of putting this accent on *auch* simply reflects an avoidance of putting it on any other word in the sentence.

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² Heim does not propose a solution for these cases, and is only interested in the presupposition they introduce.

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