On the roles of anaphoricity and questions in free focus*

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Abstract

The sensitivity of focus to context has often been analyzed in terms of focus-based anaphoric relations between sentences and surrounding discourse. The literature, however, has also noted empirical difficulties for the anaphoric approach, and my goal in the present paper is to investigate what happens if we abandon the anaphoric view altogether. Instead of anaphoric felicity conditions, I propose that focus leads to infelicity only indirectly, when the semantic processes that it feeds — in particular, exhaustification and question formation — make an inappropriate contribution to discourse. I outline such an account, in line with Roberts (1996) and incorporating recent insights from Büring (2019) and Fox (2019). This account, which I motivate on conceptual grounds, has no anaphoric conditions on focus placement and has only an economy condition as a potential felicity condition on focus. However, there are cases where the fine control offered by anaphoricity seems needed, either to block deaccenting that would be licensed by a question or to allow local deaccenting that is not warranted by a question. Such cases challenge non-anaphoric accounts such as the present one and appear to support recent anaphoric proposals such as Schwarzschild (2020), Wagner (2020), and Goodhue (2022). I argue that this potential motivation for anaphoricity is only apparent and that to the extent that anaphoric conditions on focus from the literature are not inert they are in fact harmful.

1 Free focus

Free (or pragmatic) focus is the descriptive name sometimes used to refer to focus that does not have an overt associating operator (such as 'only'). The following illustrates

*Acknowledgments: To be added.

(here and below with context-setting sentences in parentheses and with the word receiving pitch accent indicated by ALL CAPS):[1]

(1) (She brought an expensive convertible.) No, she brought a $[\text{CHEAP}]_F$ convertible

The felicity of free focus depends heavily on the surrounding discourse. In the context provided in (1) accent is acceptable on 'cheap' but not on 'convertible'. If the context had been "She brought a book" instead, accent on 'convertible' would have been acceptable but accent on 'cheap' would have been odd.

Following Jackendoff (1972) and much later work I will take focus to be represented in the syntax through a syntactic feature, notated as F, that can appear on constituents in the sentence. F-marking has both prosodic and semantic reflexes. Prosodically, F-marking often results in prominence, though the mapping between F-marking and prosody, which I will refer to as F-TO-ACCENT, is complex. For the purposes of the discussion of sentences like (1), I will assume that if the adjective ('cheap') is F-marked but the head noun ('convertible') is not (as in the F-marking indicated for the sentence), accent will fall on the adjective; and I will also assume that various other F-marking possibilities of relevance (including different configurations in which the head noun is F-marked but also a parse with no F-marking at all) will result in accent falling on the head noun. Beyond that I will mostly set aside F-TO-ACCENT in what follows. Semantically, F-marked constituents can be replaced with various substitutions, giving rise to a set of alternatives, a mapping that I will refer to as F-TO-SEMANTICS. In (1), for example, the F-marking on the adjective 'cheap' leads to the sentence having alternatives such as "She brought an expensive convertible".

The present paper concerns the distribution of F-marking in English. I will argue that — with the possible exception of an economy condition — there are no felicity conditions that govern the distribution of F-marking directly. Rather, F-marking can only affect the acceptability of a sentence in a given context indirectly, through the semantic processes that associate with it and have access to the focus alternatives it gives rise to (as in F-TO-SEMANTICS). These processes include exhaustification, and, especially, question formation. Section 2 presents the view that I will argue for in more detail, section 3 illustrates it, and section 4 provides a conceptual argument for it. Finally, section 5 defends the proposal in the face of the challenge of so-called local anaphoric deaccenting. Before that, in the remainder of the introduction, I will discuss earlier work that will help contextualize my proposal.

[1] See Halliday (1967), Chomsky (1969), Bolinger (1972), Dretske (1972), Jackendoff (1972), von Stechow (1981), Selkirk (1984), Rochemont (1986), Rooth (1992), Williams (1997), and Schwarzschild (1999), among many other works. For recent overviews and further developments see Büring (2016) and Wagner (2020).

1.1 ANAPHORICITY

According to a long tradition, free focus is governed by various felicity conditions, and specifically by an *anaphoric* requirement. Roughly, if we treat F-marked elements as wildcards, certain constituents — usually including the whole sentence and often various other nodes as well — should match constituents in prior discourse. Illustrating with the entire sentence "She brought a [CHEAP]$_F$ convertible" in (1), *She brought a x convertible* (with x marking the wildcard status of the F-marked 'cheap') successfully matches the discourse-given "She brought an expensive convertible". I will refer to this anaphoric requirement as WILDCARD, and I will refer to the view that F-marking is governed by WILDCARD (among other conditions) as ANAPHORICITY. For proposals regarding how WILDCARD is implemented and which constituents are subject to it see Schwarzschild (1999), Sauerland (2005), and Büring (2012), among others.

It is often assumed within ANAPHORICITY that F-marking must be minimal while still satisfying WILDCARD, a requirement that I will refer to as MINIMALITY. For Schwarzschild (1999), whose account is the basis for my presentation of ANAPHORICITY here, MINIMALITY concerns the number of F-marked constituents, but I will follow Sauerland (2005)'s discussion of Schwarzschild's system in also taking F-marking on smaller constituents to be preferable to F-marking on bigger ones, all else being equal. The F-marking in (1) satisfies MINIMALITY: the only more minimal F-marking is no F-marking at all, in which case the sentence would not satisfy WILDCARD (since the sentence as a whole does not appear in full in the context). F-marking on 'convertible' alone (resulting in the odd placement of accent on 'convertible') would be as minimal as the F-marking on 'cheap' in (1) but would not satisfy WILDCARD (since satisfying WILDCARD with F-marking on 'convertible' would require finding an anaphoric antecedent of the form *She brought a cheap x*, and no such antecedent is available) and is therefore correctly ruled out. F-marking on the entire DP (perhaps along with the adjective and the head noun), resulting in accent on the head noun, would satisfy WILDCARD (since the context does provide an anaphoric antecedent of the form *She brought x*) but is correctly ruled out by MINIMALITY.

While MINIMALITY is usually discussed within the context of ANAPHORICITY it might also be relevant for non-anaphoric theories of focus placement, as I will discuss below.

1.2 Wagner (2006)'s challenge and local contrast

Wagner (2006, 2012) noted a challenge to ANAPHORICITY as described so far. The following, slightly modified from Wagner's original examples, illustrates:

(2) (She brought an expensive convertible.) # No, she brought a [RED]$_F$ convertible

From the perspective of ANAPHORICITY, (1) and (2) seem identical. Why then is the former good and the latter bad?

Wagner suggests that the appearance of formal identity between (1) and (2) is misleading and that in (2) the sentence does not, in fact, satisfy the requirements of ANAPHORICITY. This is so because, according to Wagner, ANAPHORICITY requires not just anaphoric matching, as in WILDCARD, but also very local *contrast*: in the configuration $[A_F\ B]$, the context must provide a salient antecedent $[A'\ B]$ that contradicts it in some sense. Specifically, [cheap convertible] successfully contrasts with [expensive convertible] (since if something is a cheap convertible it cannot also be an expensive one), so ANAPHORICITY is satisfied for [cheap$_F$ convertible] in (1); on the other hand, [red convertible] fails to contrast with [expensive convertible] (since the same individual can be both a red convertible and an expensive one), so ANAPHORICITY is not satisfied for [red$_F$ convertible] in (2). I will refer to the idea that a sentence must contrast with its anaphoric target (either locally, as in Wagner 2006's proposal, or more globally, as discussed in several more recent proposals such as Wagner 2020 and Goodhue 2022), as CONTRAST.[2]

1.3 A non-anaphoric alternative

A different, non-anaphoric account of Wagner's observations is provided in Katzir (2013, 2014). According to this alternative explanation, what makes (1) good and (2) bad is that the former constitutes coherent discourse while the latter does not. Specifically, "She brought a [CHEAP]$_F$ convertible" can be understood *exhaustively*, with the entailment that she brought a cheap convertible and did not bring an expensive convertible. The inference successfully corrects the context-setting sentence, and the result is a coherent discourse move. On the other hand, "She brought a [RED]$_F$ convertible" cannot be understood as denying the context-setting sentence: even when understood exhaustively, it implies nothing about whether she brought an expensive convertible (though it can easily be understood, for example, as implying that she did not also bring a blue convertible).

As noted by Katzir (2013), this pattern of inference is exactly as expected given current theories of exhaustification, on the common assumption that exhaustification is a focus-sensitive operation and has access to the focus alternatives given by F-TO-SEMANTICS. This assumption is in line with early observations by Dretske (1972) and is developed more explicitly by Rooth (1992), Krifka (1995), Fox (2004, 2007), Fox and Hackl (2006), Spathas (2010), Fox and Katzir (2011), Chierchia et al. (2012), Fox and Spector (2018), Bade and Sachs (2019), and Bar-Lev and Fox (2020), among others. I will refer to the assumption that exhaustification is a focus-sensitive operation, similar to the effect of the overt focus-sensitive operator 'only', as F-TO-EXHAUSTIFICATION, and where useful I will follow Fox (2007) and much subsequent work in taking exhaustification to arise from an actual, covert focus sensitive operator, notated as *Exh*. Significantly for accounting for the difference in the observed inferences of (1) and (2) is the fact that, as argued extensively by Fox (2007), exhaustification avoids making arbitrary choices between al-

[2]For early observations regarding contrast and a proposal that incorporates a contrastive requirement on focus see Jackendoff (1972, pp. 242–5).

ternatives (see also Groenendijk and Stokhof 1984 and Sauerland 2004): it only negates alternatives that are *innocently excludable* given the assertion and the set of alternatives. Informally, an alternative is innocently excludable given the assertion and the set of alternatives if negating the alternative while affirming the assertion does not affirm other alternatives. For the current examples, the focus alternatives for (1) and (2) would be $Alt = \{$"She brought a cheap convertible", "She brought an expensive convertible", "She brought a red convertible", "She brought a blue convertible", "She brought a big convertible", "She brought a small convertible", $\dots\}$. To keep the discussion simple I will restrict my attention to $\{$"She brought a cheap convertible", "She brought an expensive convertible", "She brought a red convertible", "She brought a blue convertible"$\}$. In the case of (1) we can safely negate "She brought an expensive convertible" consistently with the assertion ("She brought a cheap convertible") and without affirming either of the other two alternatives ("She brought a red convertible", "She brought a blue convertible"). In other words, "She brought an expensive convertible" is innocently excludable given the assertion and the set of alternatives Alt. This, in turn, allows the exhaustified assertion to deny the context-setting sentence, as mentioned above.

Note that if every convertible is either red or blue then neither of the color alternatives is innocently excludable given the assertion: negating "She brought a red convertible" would affirm "She brought a blue convertible" and vice versa. And indeed, (1) cannot imply anything about whether she brought a red convertible or about whether she brought a blue one, though this does not prevent the sentence from denying the context-setting sentence. One might wonder whether contextual restriction might change this result. Perhaps the color blue is salient in the current discourse, for example, and the color red is not, so it might seem that of the two color-related alternatives in Alt only "She brought a blue convertible" would be a candidate for negation. If that were the case, (1) would have been able to imply that she brought a red convertible, contrary to fact. The observation that (1) cannot have this inference, however, is not surprising if one considers the arguments in the literature that while context can indeed restrict sets of alternatives in some ways, it does not do so freely. Specifically, Fox and Katzir (2011) provide evidence that when there are two *symmetric* alternatives — that is, two alternatives that cannot be jointly negated without contradicting the assertion though each of them individually can be — it is impossible for context to eliminate one without also eliminating the other. See Katzir (2014), Crnič et al. (2015), and Fox (2019), among others, for further discussion and various implementations of this idea, which I will refer to here as ALLOWABLERESTRICTION. In the present case, the two color-based alternatives are symmetric with respect to the assertion, so ALLOWABLERESTRICTION prevents context from eliminating one color-based alternative while keeping the other.

It is worth noting that F-marking the DP instead of the adjective in (1) will lead to exhaustive inferences that deny the context-setting sentence (since those inferences will deny that she brought anything other than a cheap convertible and in particular that she brought an expensive one). Such F-marking will result in the odd placement of accent on the head noun, so a theory of focus should rule it out. For now — and for much of the

discussion below (though see section 3) — I will simply assume that MINIMALITY applies in the exhaustification-based account, along similar lines to the way it has been proposed within ANAPHORICITY. In the present case MINIMALITY will prefer F-marking on just the adjective to F-marking on any larger constituent.

Consider now what happens in the case of (2). Given the same set of focus alternatives Alt as before — and assuming that every convertible is either cheap or expensive — negating either of the two cost-related alternatives while affirming the assertion would affirm the other cost-related alternative. That is, neither alternative is innocently excludable given the assertion. And because of ALLOWABLERESTRICTION, neither cost-related alternative can be eliminated by context unless the other cost-related alternative is eliminated as well. Exhaustification, then, is correctly predicted to not help the assertion in (2) deny the context-setting sentence, and the discourse move is correctly predicted to be odd. (Differently from the case of (1), in the case of (2), "She brought a blue convertible" *is* innocently excludable, and indeed the sentence can be understood as denying that she brought a blue convertible, as noted above.)

1.4 Evidence against local CONTRAST

Katzir (2013)'s evidence against Wagner (2006)'s modified ANAPHORICITY-based account and in favor of a role for exhaustification comes from contexts that: (a) maintain the anaphoric profile of (1) and (2) and the absence of local contrast in (2), but (b) make the potential cost alternatives innocently excludable. Contexts of this kind can be constructed by embedding sentences like (2) under a universal operator. In such cases, as the following shows, accent on 'red' is no longer odd:

(3) (It is required that she bring an expensive convertible.) No, it is required that she bring a ✓[CHEAP]$_F$/✓[RED]$_F$ convertible.

The felicity of placing accent on either 'cheap' or 'red' in (3) is as expected by the exhaustification-based approach: the sentence (with either 'cheap' or 'red') can be understood, exhaustively, as denying that she is required to bring an expensive convertible. As before, this inference is predicted given Fox (2007)'s theory of exhaustification, here by considering the set of focus alternatives $Alt' = \{$"It is required that she bring a cheap convertible", "It is required that she bring an expensive convertible", "It is required that she bring a red convertible", "It is required that she bring a blue convertible"$\}$. Here, the universal operator 'require' ensures that given either assertion (with 'cheap' or with 'red'), all of the three remaining focus alternatives can be negated simultaneously consistently with the assertion. In other words, all three are innocently excludable given the assertion and Alt'. In particular, the alternative "It is required that she bring an expensive convertible" is innocently excludable and can be negated. Consequently, the result of exhaustification successfully denies the context-setting sentence. On the other hand, the pattern challenges Wagner's account in terms of local CONTRAST, since the felicity of the

assertion suggests that there is no inherent problem with [red$_F$ convertible] in the context of [expensive convertible].

1.5 Interim discussion

We are left with the following picture. The exhaustification-based approach accounts for (1)–(3) without making reference to ANAPHORICITY. The account is based on focus feeding exhaustification, which sometimes leads to inferences that contradict the context-setting sentence (in (1) and (3)) and sometimes does not (in (2)). The presence or absence of these inferences is directly detected in the examples above and readily predicted in terms of current theories of exhaustification. ANAPHORICITY, on the other hand, does not account for (1)–(3) on its own: the original version that does not rely on contrast fails to derive the oddness of (2), and Wagner (2006)'s notion of locally-checked CONTRAST fails to derive the acceptability of (3).

Note that the above does not show that ANAPHORICITY, with or without CONTRAST, must be abandoned. While we have seen that Wagner (2006)'s specific implementation of CONTRAST is not tenable, it is possible in principle to combine F-TO-EXHAUSTIFICATION either with a non-contrastive version of ANAPHORICITY, a direction explored recently by Schwarzschild (2020), or with a version that implements CONTRAST differently from Wagner (2006), as proposed by Wagner (2020) and Goodhue (2022). However, I believe that even on such implementations, ANAPHORICITY turns out to be at best unhelpful and sometimes actually harmful. And I believe that a better account is one in which focus has no felicity conditions that govern it other than, possibly, MINIMALITY. In such an account, what looks like infelicitous F-marking is simply what happens when focus feeds a semantic process (such as exhaustification in the examples above) and the result makes an unsuitable contribution to discourse. To show this, however, I will start by noting a slight variant of (1) about which the exhaustification-based approach currently has nothing to say. I will use this variant of (1) to motivate extending the exhaustification-based account so as to take into account the connection between focus and questions.

2 QUESTIONS

2.1 A missing ingredient

The exhaustification-based account fails to predict that in (4), F-marking is obligatory on the adjective and impossible elsewhere.

(4) (It was an expensive convertible.) No, it was a [CHEAP]$_F$ convertible

Differently from the otherwise very similar correction in (1), in (4) the context-setting sentence is already denied by the assertion regardless of exhaustification (since if it was a cheap convertible it could not have been an expensive one), leaving exhaustification

with no work to do. As far as exhaustification is concerned, then, the sentence should be acceptable with no F-marking at all. This, presumably, would lead to default prosody (with prominence on 'convertible' rather than the actually observed accent placement on 'cheap'), which would in fact be odd in the context provided. Factors other than exhaustification, then, must be responsible for the obligatory F-marking on 'cheap'. What might these factors be?

One possibility is that F-marking serves the purposes of ANAPHORICITY, possibly as an addition to the exhaustification-based account. In (4), F-marking on 'cheap' or higher is needed to allow the sentence to match the context-setting sentence and satisfy WILDCARD given that 'cheap' is not anaphoric, and neither is any constituent that contains it. From among the possibilities that satisfy WILDCARD, only F-marking on 'cheap' alone satisfies MINIMALITY. This might seem like a reason to maintain ANAPHORICITY.

2.2 Extending question-answer congruence

However, there is an alternative explanation for the F-marking on 'cheap' in (4) that in principle at least does not depend on ANAPHORICITY. This alternative explanation relies on the tight connection between focus and *questions*: in an answer to an explicit *Wh*-question, the constituent corresponding to what was asked is generally F-marked. In the following, for example, only the indicated F-marking is acceptable:

(5) (Who brought a convertible?) $[\text{KIM}]_F$ brought a convertible

(6) (What did Kim bring?) Kim brought $[\text{a CONVERTIBLE}]_F$

This tight connection between focus and questions, sometimes referred to as *question-answer congruence*, has often been extended to cases that do not involve responses to explicit *Wh*-questions. In such cases, the F-marking of a sentence can be seen to correspond to an implicit question, and one might expect that the felicity of sentences in discourse will depend at least in part on whether the implicit question induced by the sentence is good and whether the sentence answers it well. I will say more about this expectation in a moment. For now, and still on an entirely informal level, note that by F-marking 'cheap' in (4), the speaker can be taken to indicate that they are addressing the question of whether it was an expensive or a cheap convertible. This seems like a sensible question to address given the context, and the assertion answers this question adequately. Other possibilities of F-marking would correspond to questions that seem less appropriate in the given context.

Following Rooth (1992), question-answer congruence is often understood in terms of a close semantic connection between focus and questions. Specifically, the focus alternatives of a sentence (as in F-TO-SEMANTICS) are the same kind of semantic object as the denotation of questions in theories such as Hamblin 1973 and Karttunen 1977. This semantic connection, in turn, can be used to state question-answer congruence as a requirement that the question denotation be a subset of the focus alternatives of the answer

(see Rooth 1992, 1996 and much later work), a requirement that can be extended beyond explicit question-answer pairs, as done by Roberts (1996) and others and as assumed in the present work.

I will restate the proposal of Rooth (1992), Roberts (1996), and others as follows: a suitably-chosen subset of the focus alternatives of a sentence corresponds to a question; and the sentence itself is taken as an answer to this question. I will refer to this restatement as F-TO-QUESTION. As to the pragmatics, I will follow Roberts (1996), Katzir and Singh (2015), and others in making the following twin assumptions, already briefly mentioned above, which I will refer to jointly as Q-A-FELICITY: (a) that a question induced by the assertion, as in F-TO-QUESTION, be a good question in the given context;[3] and (b) that the assertion be a good answer to this question. I will use the name QUESTIONS for the current view, where F-marking feeds various semantic processes such as exhaustification (F-TO-EXHAUSTIFICATION) and question formation (F-TO-QUESTION), and where the felicity of F-marking reflects the appropriateness of those semantic processes (as in Q-A-FELICITY) rather than any special appropriateness conditions on focus marking in discourse.

Obviously the sketch above leaves many important details unspecified. For example, which subsets of the focus alternatives are allowed as questions? What makes a question good in a given context? When does an assertion answer a question well? In section 2.3 I will review several observations and proposals from the literature which provide some of the missing details and help in accounting for examples such as the ones discussed above, though this is by no means an attempt to fully characterize good questions and good answers. I hope that the current approach to F-marking will hold also when integrated into a more comprehensive theory of questions and answers and their relation to broader discourse. After the brief discussion in section 2.3 of conditions on good questions and answers, I will proceed, in section 3, to illustrate the proposal with several examples. The illustration will support Büring (2019)'s view that questions are the correct context in which the appearance of contrast should be understood. It will also further strengthen the case against anaphoric CONTRAST, not only in the local version of Wagner (2006, 2012) but also in more sophisticated versions such as the ones advocated by Wagner (2020) and Goodhue (2022). After that, in section 4, I will present a conceptual argument for QUESTIONS and against ANAPHORICITY. In a nutshell, the ingredients of QUESTIONS are arguably shared by all accounts, including anaphoric ones, so it would take empirical evidence to justify further adding the stipulations of ANAPHORICITY. Such evidence, I will suggest, is not currently available. In fact, to the extent that the stipulations of ANAPHORICITY make an empirical difference, they do more harm than good. The discussion in section 4 will set aside a major potential source of empirical support for ANAPHORICITY: the appearance of local anaphoric deaccenting. Addressing this worry is the topic of section 5, in which I will follow Büring (2019) in maintaining that what looks like local anaphoric deaccenting is better analyzed in terms of narrow questions, without reference

[3]The roots of this assumption go back at least to Jackendoff (1972, p. 246).

to ANAPHORICITY. Büring (2019)'s account raises several concerns that may seem to open the door again to ANAPHORICITY. However, I will suggest that these worries can all be addressed by allowing sentences to address an accommodated target of correction.

2.3 Some properties of good questions and good answers

The question under discussion (QUD; see Roberts 1996, Beaver and Clark 2008, and many others) is presumably a good question quite generally. However, QUESTIONS makes it possible in principle for other, non-salient questions to be good as well.[4] For example, in correcting an utterance in previous discourse, as in the examples above, questioning a node in the structure seems to be good even if that question has not been previously raised. More broadly, a non-salient question about something is often good if that thing is itself salient. One central way to make something salient is to mention it in the immediate linguistic context. However, examples by Chafe (1974) and Stevens (2014), among others, show that a question about something that is contextually salient but has not been explicitly mentioned linguistically can also be good. For example, if a third convertible in a row zooms by, you may felicitously say "I HATE convertibles," without prior mention of convertibles.

The above should not be taken to suggest that good questions are free for the taking. Indeed, the literature provides a range of constraints on what counts as a good question. One such constraint, which will be central in what follows — and, in particular, will account for contrast effects in focus, of the kind discussed in section 1 above and illustrated further in section 3 below — is PARTITION-BY-EXHAUSTIFICATION, proposed and argued for by Fox (2019). PARTITION-BY-EXHAUSTIFICATION says that for a question to be good, its elements, once exhaustified, should partition the context set.[5] I will shortly illustrate this condition and discuss its interaction with other conditions on questions. For further discussion of PARTITION-BY-EXHAUSTIFICATION see Fox (2020) and Bar-Lev and Fox (2022). The implication of PARTITION-BY-EXHAUSTIFICATION will be this: for a question induced by the F-marking of the sentence to be good, the context set will need to satisfy PARTITION-BY-EXHAUSTIFICATION, and this will often require accommodation; and the plausibility of the necessary accommodation will affect the felicity of the sentence.[6]

[4] As far as I can tell, Roberts (1996)'s original account is fully compatible with the kinds of non-salient questions assumed here. More recently, Büring (2019) provides an explicit argument that non-salient questions can be focal targets.

[5] As usual, a partition of a set S is a set of nonempty, disjoint sets — sometimes referred to as *cells* — whose union is S.

[6] Büring (2019) proposes a different condition on good questions that I believe aims at capturing a very similar intuition to that expressed by PARTITION-BY-EXHAUSTIFICATION. In terms of technical implementation, Büring (2019)'s condition differs from PARTITION-BY-EXHAUSTIFICATION in disallowing entailment between elements of the question denotation and therefore rules out questions such as {"She saw some of the convertibles", "She saw all of the convertibles"}. This is problematic in view of arguments in the literature that entailment relations are possible between the elements of question denotations and

Other constraints on good questions have been proposed in the literature, often stated as informal pragmatic requirements. For example, Katzir and Singh (2015) suggest that a question is bad if the hearer was not in a position to be interested in it. Similarly, Büring (2019) suggests that a question should be both identifiable by the discourse participants and relevant to them (in the informal sense of mattering to the interests of the participants).

As to answers, I take it that they should be relevant in the sense of Groenendijk and Stokhof (1984), Lewis (1988), and others given the question that they address. A question defines a partition, with cells corresponding to all the consistent assignments of truth values to the alternatives in the question denotation. To be relevant, the answer should denote a union of cells in this partition. For example, if the question denotation is {"She brought a cheap convertible", "She brought an expensive convertible"}, then the cells in the partition are: (1) the worlds where she brought a cheap convertible and did not bring an expensive one; (2) the worlds in which she did not bring a cheap convertible and did bring an expensive one; (3) the worlds in which she brought both; (4) and the worlds in which she brought neither. Given this question, the unexhaustified "She brought a cheap convertible", whose denotation is the union of cells (1) and (3), is relevant, and therefore a good (partial) answer. If the answer is exhaustified, it will denote cell (1) and be a good complete answer. On the other hand, "She brought a red convertible" is not relevant, since its denotation is not a union of cells in the partition. For other suggestions regarding good answers see Katzir and Singh (2015), Anvari (2021), and others.

3 Illustrating QUESTIONS

3.1 Elaboration focus

Consider the following example, with focus serving as part of an elaboration — rather than a correction, as was the case in the examples so far — of previous discourse:

(7) (It was a convertible. Yes, in fact . . .) it was a [CHEAP]$_F$ convertible

The focus alternatives in this case are $Alt'' = \{$"It was a cheap convertible", "It was an expensive convertible", "It was a red convertible", "It was a blue convertible", "It was a big convertible", "It was a small convertible", . . . $\}$. Recall that according to QUESTIONS, potential questions must all be subsets of this set. So, for example, {"It was a cheap convertible", "It was a yacht"} is not a potential question. Consider first the maximal set that is a potential question, namely $Q1 = Alt''$. $Q1$ can be expected to be bad in any natural context. To see this, consider what it would take for $Q1$ to satisfy PARTITION-BY-EXHAUSTIFICATION. In a relatively neutral context, there is a fair amount of overlap between the alternatives in $Q1$. For example, as long as prior discourse does not settle

that it is only in the pragmatics that these entailment relations are eliminated (see Fox 2019 and references therein). PARTITION-BY-EXHAUSTIFICATION is a principled way to avoid this worry while maintaining Büring (2019)'s view that questions are how contrast effects in focus should be understood.

the color of the convertible under consideration, "It was a cheap convertible" overlaps both with "It was a red convertible" and with "It was a blue convertible". Moreover, this overlap remains even if the alternatives are exhaustified. In fact, exhaustification will not be able to strengthen any of the alternatives, for reasons that are familiar from the discussion in section 1.3. For example, the two color-related alternatives are symmetric with respect to "It was a cheap convertible", so ALLOWABLERESTRICTION prevents context from eliminating one while keeping the other; and if both are kept, innocent exclusion prevents exhaustification from negating either. Similar considerations apply to the other alternatives. So for $Q1$ to satisfy PARTITION-BY-EXHAUSTIFICATION, the context should be such that if it was a cheap convertible then it was not blue or red, and it was not big or small, and similarly for other alternatives. Even if such a context can be imagined, it is a highly unusual one, and it seems unreasonable for the speaker to assume that the hearer will simply accommodate it. $Q1$ can therefore be ruled out except in highly unusual contexts.

Consider now $Q2 = \{$"It was a cheap convertible", "It was a red convertible"$\}$, which, like $Q1$, I take to be bad except in very unusual contexts. First, note that if ALLOWABLERESTRICTION discussed above for exhaustification applies not only to the alternatives for exhaustification but also to question denotations (see Fox 2019, fn. 23 and Fox 2020 sec. 4.2), $Q2$ will not be a licit restriction of the focus alternatives: "It was a cheap convertible" and "It was an expensive convertible" are symmetric alternatives, but the restriction of Alt'' to $Q2$ keeps the former and eliminates the latter; and similarly for the two color-related alternatives. But even if ALLOWABLERESTRICTION does not apply to question denotations, $Q2$ will require a highly unusual context: to satisfy PARTITION-BY-EXHAUSTIFICATION, the context will need to be such that if it was a convertible then it was either cheap and not red or red and not cheap. To the extent that such a context can be made plausible, $Q2$ would be expected to be acceptable, but it strikes me as unreasonable to expect discourse participants to accommodate such a context under neutral circumstances.

A question that is more promising than $Q1$ and $Q2$ is $Q3 = \{$"It was a red convertible", "It was a blue convertible"$\}$. This set satisfies ALLOWABLERESTRICTION (which, again, may or may not apply to question denotations). Moreover, to satisfy PARTITION-BY-EXHAUSTIFICATION, the context can be quite neutral. All that is needed is the assumption that if it is a convertible then it is either red or blue: if this assumption holds, the two alternatives in $Q3$ will partition the context set (and since they do not overlap, no exhaustification is needed). Even if this assumption is not already established in prior discourse, accommodating such an assumption seems fairly straightforward. So far, then, $Q3$ seems appropriate. However, while $Q3$ is a good question, the answer provided ("It was a cheap convertible") fails to settle it and is therefore a bad answer to it. Since Q-A-FELICITY requires sentences to be good answers to good questions that they induce, $Q3$ is ruled out.

Finally, consider $Q4 = \{$"It was a cheap convertible", "It was an expensive convertible"$\}$. $Q4$ satisfies ALLOWABLERESTRICTION, just like $Q3$. Also similarly to $Q3$, satisfy-

ing PARTITION-BY-EXHAUSTIFICATION for $Q4$ requires accommodating a plausible assumption: for $Q4$, the assumption is that if it was a convertible then it was either a cheap one or an expensive one. And, again, since the elements of the question do not overlap, no exhaustification is needed. But unlike $Q3$, now the sentence itself adequately answers the question. Differently from $Q1$–$Q3$, then, $Q4$ is expected to be good, and indeed, this is the question that (7) is felt to address.

3.2 Other F-marking possibilities?

What about other conceivable F-marking possibilities in (7)? The observed accent placement suggests that the preferred, perhaps only acceptable parse for the sentence has F-marking on the adjective alone. If this is correct, what blocks F-marking on the head noun instead of the adjective, for example? Or on the entire direct object?

Consider first F-marking on the head noun alone, which would result in the following focus alternatives: $Alt''' = \{$"It was a cheap convertible", "It was an cheap book", "It was a cheap pony", "It was a cheap yacht", $\dots\}$. It is hard to see how any subset of this set of alternatives might be a question that the discourse participants would be interested in resolving. For example, given that it was already accepted that it was a convertible, why would the hearer accept that they and the speaker are now trying to settle whether it was a cheap convertible or whether it was a cheap pony? In terms of PARTITION-BY-EXHAUSTIFICATION, this would require making the rather fantastic accommodation that if it was a convertible then it was either a cheap convertible (that was not also a cheap pony) or a non-cheap convertible that is somehow also a cheap pony. It seems unreasonable to expect discourse participants to make this accommodation. Similar comments apply to the F-marking of other nodes that do not dominate the adjective.

As to what rules out F-marking on nodes that do dominate the adjective but are higher than the adjective itself, such as the entire direct object, one possibility is MINIMALITY: since a narrower F-marking is available for the same discourse purpose (here, for raising and settling the matter of whether it was an expensive convertible or a cheap one), a broader F-marking is ruled out. If so, then MINIMALITY is one felicity condition that does apply to F-marking. Another possibility, however, is that the questions resulting from such F-marking are bad. Consider, for example, F-marking on the DP, which would result in the following focus alternatives: $Alt'''' = \{$"It was a cheap convertible", "It was an expensive convertible", "It was a red convertible", "It was a blue convertible", "It was a convertible", "It was a cheap pony", "It was a yacht", $\dots\}$. Many restrictions of this set would result in bad questions for reasons of PARTITION-BY-EXHAUSTIFICATION and the restrictions on the context set that it forces discourse participants to accommodate, similarly to the cases discussed above. In fact, as in the earlier discussion, it is arguably only $Q4 = \{$"It was a cheap convertible", "It was an expensive convertible"$\}$ that would be sensible in a natural context. If for some reason restricting the full Alt'''' to $Q4$ is disallowed, this will account for the impossibility of F-marking the DP (or larger constituents) without talking directly about F-marking. While the choice between MINIMALITY governing F-marking

and a constraint on restricting question denotations strikes me as significant, I do not have arguments for one choice over the other, and in what follows I will keep making reference to MINIMALITY.

3.3 Elaboration focus with an active role for exhaustification

Consider now a variant of the elaboration focus in (7) where exhaustification is *not* inert:

(8) (She brought a convertible. Yes, in fact ...) she brought a [CHEAP]$_F$ convertible

The focus alternatives now are the same as for (1) and (2) above: $Alt = \{$"She brought a cheap convertible", "She brought an expensive convertible", "She brought a red convertible", "She brought a blue convertible", "She brought a big convertible", "She brought a small convertible", ...$\}$. The counterparts of $Q1$–$Q3$ above are ruled out in the present case for the same reasons that they were for (7). In order to rule in the counterpart of $Q4$, though, we need to take into account exhaustification: the question is $Q4' = \{$"She brought a cheap convertible", "She brought an expensive convertible"$\}$, and in many natural contexts the two alternatives will overlap (since it is conceivable that she brought both a cheap convertible and an expensive one) and therefore not form a partition. But PARTITION-BY-EXHAUSTIFICATION is still satisfied, since if we are willing to accommodate that she did not bring both a cheap convertible and an expensive one, the *exhaustified* version of the elements of $Q4'$ will partition the context set, which is all that PARTITION-BY-EXHAUSTIFICATION demands. $Q4'$ is therefore expected to be good, and the utterance answers it well. As with (7), other F-marking possibilities for the utterance are ruled out, and for the same reasons: F-marking that does not dominate the adjective leads to bad questions, while F-marking nodes that strictly dominate the adjective (e.g., the entire direct object of the verb phrase) violates MINIMALITY (or perhaps, as mentioned above, the appearance of MINIMALITY might be reducible to other felicity considerations that do not directly refer to F-marking).

3.4 Parsing answers with *Exh*?

Note that I assumed above that the utterances in (7) and (8) are not themselves parsed with Exh (associating with the F-marking on the adjective). It is possible, however, that such Exh is present, in which case the focus alternatives — and therefore also the elements of the question denotations — also include a similar instance of Exh. In (7) and (8) such double duty of F-marking, serving both Exh and question formation, does not add to what PARTITION-BY-EXHAUSTIFICATION already provides: in such cases, the question-based explanation subsumes the exhaustivity-based one. While it is possible that in more complicated cases parses with Exh will play a role, I will continue to focus on cases where such parses can be ignored.

3.5 An additive example

The next example, in (9), involves an additive context and poses a challenge to any attempt to maintain contrastive ANAPHORICITY.

(9) (Tell me more about the convertible you saw.) Well, it was a $[\text{RED}]_F$ convertible. And it was an $[\text{EXPENSIVE}]_F$ convertible.

For QUESTIONS, the felicity of (9) is unsurprising: each of the two sentences induces a good question and answers that question well. In the first sentence the question, identical to $Q3$ above, concerns the color of the convertible ({"It was a red convertible", "It was a blue convertible"}). The second sentence induces a question, identical to $Q4$ above, concerning its price range ({"It was an expensive convertible", "It was a cheap convertible"}). Both questions are sub-questions of the contextually-suggested question of what kind of convertible it was, and the explanation of why the questions and their answers are good in this context follows similar lines to the explanations in section 3. And — differently from the earlier cases of correction — the fact that exhaustification of 'red' cannot entail either the truth or the falsity of 'expensive' and that exhaustification of 'expensive' cannot entail either the truth or the falsity of 'red' in (9) does not hurt the discourse coherence of the current additive sentences in any way.

For contrastive ANAPHORICITY, on the other hand, (9) is problematic. Recall that (3) already argued against Wagner (2006, 2012)'s original notion of local CONTRAST. That example, however, was still compatible with less local notions of CONTRAST, a direction pursued by Wagner (2020) and Goodhue (2022). But (9) challenges contrastive ANAPHORICITY regardless of its locality: what notion of contrast would allow "It was a red convertible" and "It was an expensive convertible" to successfully contrast in additive contexts such as (9) but prevent them from doing so in corrective contexts of the kind seen in section 1 and further illustrated in (10)?

(10) (It was an expensive convertible.) #No, it was a $[\text{RED}]_F$ convertible.

3.6 Back to corrections

The examples I used in the current section to illustrate QUESTIONS involved the narrowing down of the context set, with sentences picking a cell in the question-induced partition of the context set. Corrections, as in (1)–(4), do not narrow down the context set in this way. Instead, they reject aspects of the previous context set. In (1), for example, the context-setting sentence attempts to establish that we are in a world in which she brought an expensive convertible, but the utterance then rejects this and maintains that while she indeed brought a convertible, it was a cheap convertible rather than an expensive one. As far as I can see, this poses no major difficulty for QUESTIONS. Specifically, for PARTITION-BY-EXHAUSTIFICATION to be satisfied in the case of (1), with the question $Q4' = \{$"She brought a cheap convertible", "She brought an expensive convertible"$\}$, the

context set must be partitioned between worlds where she brought an expensive convertible and did not bring a cheap one and worlds where she brought a cheap convertible and did not bring an expensive one (just as it was for (8)). Accepting $Q4'$, then, indicates a refusal to accept the context-setting sentence ("She brought an expensive convertible"); and the answer ("She brought a cheap convertible") explicitly rejects that sentence. Note that here, too, PARTITION-BY-EXHAUSTIFICATION allows us to set aside the issue of whether the utterance is parsed with Exh.

4 A conceptual case for QUESTIONS and against ANAPHORICITY

4.1 Everyone needs QUESTIONS

Having sketched an account of F-marking in several examples using QUESTIONS, I will now explain why this account is available even for approaches that rely on ANAPHORICITY, including proposals that do not explicitly discuss QUESTIONS. To make this point, I will review the main ingredients of QUESTIONS and try to show that all of them are needed anyway and would presumably be part also of anaphoric accounts.

Consider first F-TO-EXHAUSTIFICATION. As mentioned above, this ingredient is already part of current accounts of exhaustification, motivated in the literature by a range of facts that in many cases concern observed exhaustivity inferences — sometimes in the presence of an overt exhaustivity operator such as 'only' but often also in its absence — and do not rely on the felicity of prominence patterns considered here (see again the references mentioned in section 1.3). These accounts also support the specific aspects of exhaustification that the present account relied on, including (a) ALLOWABLERESTRICTION as a condition on the contextual restriction of alternatives, and (b) the inability of exhaustification to negate alternatives that are not innocently excludable given the assertion and the set of alternatives. Similar comments apply to PARTITION-BY-EXHAUSTIFICATION, which has been argued for by Fox (2019, 2020) and later work based on possible readings of explicit questions, among other considerations, and was not originally motivated by prominence patterns.

The claim that the ingredients of QUESTIONS are needed anyway is also straightforward for the properly pragmatic aspects of the proposal. In particular, it is hard to see how requirements such as that questions and answers be good or that corrections deny their target could be objectionable. As to MINIMALITY, this ingredient may or may not turn out to be an irreducible stipulation of QUESTIONS (see discussion in section 3.2), but as mentioned above MINIMALITY is part of anaphoric theories as well.

Turning to F-TO-QUESTION, the last central ingredient of QUESTIONS, here it might at first seem as if an anaphoric grammar of prominence could derive the connection between focus and questions: ANAPHORICITY could make the F-marking in answers match the place of the *Wh*-element in questions without requiring (as F-TO-QUESTION does)

that the focus alternatives of the answer relate in any particular way to the denotation of the question. Indeed, one of Schwarzschild (1999)'s key accomplishments is showing what a derivation of this kind could look like. However, Schwarzschild also notes nontrivial challenges for any attempt to reduce the dependence of questions on focus to anaphoricity (pp. 165–6). For example, he discusses cases such as the following ((12) is modified from an example suggested to me by Aya Chayat, p.c.):

(11) (Was it a cheap convertible or was it an expensive convertible?) It was a $[\text{CHEAP}]_F$ convertible

(12) (You said that it was a cheap convertible, but I suspect that it was actually an expensive convertible. No, trust me ...) it was a $[\text{CHEAP}]_F$ convertible

In both (11) and (12), F-marking on 'cheap' is called for even though the context-setting question makes the entire answer given. This seems unremarkable if the focus alternatives constrain question formation, as in F-TO-QUESTION. In both cases, the question is identical to $Q4$ discussed for (7) above, namely {"It was an expensive convertible", "It was a cheap convertible"}. And in both cases this question is good and the assertion answers it well in the given context, for reasons that are similar to those already discussed.

On the other hand, deriving the accent on 'cheap' in (11) and (12) seems less straightforward for a question-agnostic grammar of prominence, such as a version of ANAPHORICITY that does not also adopt QUESTIONS: the answer in both (11) and (12) satisfies WILDCARD regardless of F-marking (since the whole sentence is given), and MINIMALITY would lead us to expect that no F-marking will be possible. The (arguably obligatory) F-marking on 'cheap' is therefore unexpected. Indeed, Schwarzschild (1999)'s discussion of (11) accords a special role for questions in the distribution of focus, and the same is true for Sauerland (2005) and (in a different way, relying on the fact that answers in examples like (11) are understood exhaustively) for Schwarzschild (2020), both of whom also consider similar cases. I follow these works in taking the connection between F-marking and questions to be irreducible to any considerations of focus anaphoricity, which I implement by the stipulation that focus feeds question formation (F-TO-QUESTION).

4.2 Evaluating ANAPHORICITY

If the above reasoning is correct, then, the ingredients of QUESTIONS are all independently supported and are not reducible to anaphoric conditions on focus marking. ANAPHORICITY, meanwhile, amounts to a special grammar of focus marking in discourse with its own stipulations — specifically, some version of WILDCARD, sometimes with further constraints such as CONTRAST — and would require clear empirical motivation. This means that the real choice is not between QUESTIONS and ANAPHORICITY but rather between QUESTIONS on its own and a combination of QUESTIONS and ANAPHORICITY.

So is there empirical reason to adopt the extra stipulations of ANAPHORICITY? I will argue that, at least as currently implemented in the literature, the answer is no.

I will do so by considering what I take to be the main motivation for ANAPHORICITY: the fine control over prominence offered by its additional stipulations, which allows it on the one hand to block otherwise acceptable prominence shifts (e.g., through additional conditions of contrast) and on the other hand to license otherwise unmotivated prominence shifts (e.g., through local anaphoric deaccenting). Above I already discussed CONTRAST and argued that it does not play a role in F-marking. Below, in section 5, I turn to apparent local anaphoric deaccenting. At first blush, a combination of QUESTIONS and ANAPHORICITY will indeed seem to have an empirical advantage over the simpler non-anaphoric baseline of QUESTIONS. If correct, this could argue for ANAPHORICITY and justify the additional stipulations that it involves. As Wagner (2006)'s original data show, however, local anaphoric deaccenting does more harm than good, and I will adopt Büring (2019)'s view that what looks like local anaphoric deaccenting is in fact an answer to a narrow question. (I will argue, though, that this view should be accompanied with the accommodation of an expectation.) In other words, as far as current anaphoric implementations are concerned, an account of accent placement is better off with just the non-anaphoric baseline of QUESTIONS, not just conceptually but also empirically. My conclusion will be that, with the possible exception of MINIMALITY, there are no felicity conditions that govern F-marking as such; rather, F-marking is felicitous to the extent that the semantic processes it feeds, such as exhaustification and question formation, result in an acceptable contribution to discourse.

Before proceeding, two clarifications are in order. First, I wish to emphasize that my claim against ANAPHORICITY is a claim against anaphoric conditions on F-marking and does not concern possible roles for anaphoricity elsewhere in the theory of focus. For example, Rooth (1992) famously argued for an anaphoric mechanism mediating between the focus alternatives of a sentence and focus-sensitive operations such as exhaustification. (See von Fintel 1994, Krifka 2004, and Beaver and Clark 2008, among others, for further discussion of this proposal.) Rooth's proposal, even if correct, is compatible with my point that F-marking itself is not subject to anaphoric conditions. Similar comments apply to anaphoric conditions on deaccenting that do not reference F-marking. For example, in Büring (2019)'s account, salience is required to licence deaccenting. Such a condition may indeed be justified as an addition to QUESTIONS, but since it concerns prosodic realization and not the felicity of F-marking, it is in principle compatible with my claim.

The second clarification concerns the conceptual argument that I presented in the present section in favor of QUESTIONS and against ANAPHORICITY. This argument applies to QUESTIONS as developed in section 2 above, but it is not automatically applicable to other question-based accounts of focus. A case in point is Büring (2019)'s proposal, which the present account is otherwise very close to. Büring (2019) analyzes free focus within the framework of *unalternative semantics* developed in Büring (2015). Within unalternative semantics, the alternatives are somewhat different from those in standard alternative semantics. For example, differently from alternative semantics, a sentence such as "Sue brought a CONVERTIBLE" does not have "Sue crashed a convertible" as an alternative in unalternative semantics (see Büring 2015, p. 555). Meanwhile, a sentence such

as "Sue BROUGHT a convertible" *does* have "Kim crashed a convertible" as an alternative in this framework (p. 557), again differently from alternative semantics. But this means that whatever merits unalternative semantics might have in terms of free focus, it does not yield the correct alternatives for exhaustification: when taken as an answer to "What happened yesterday?" or to "What did Sue do yesterday?", "Sue (only) brought a CONVERTIBLE" can, in fact, imply that she did not crash a convertible; and regardless of the question, "(It's only the case that) Sue BROUGHT a convertible" *cannot* imply that Kim did not crash a convertible. As currently implemented, then, Unalternative semantics divorces free focus from association with focus. Consequently, and differently from QUESTIONS, Büring (2019)'s proposal cannot in its current statement use association with focus (as in exhaustification and question formation) to support his account of free focus.

5 Local anaphoric deaccenting?

5.1 The challenge

I now turn to what is perhaps the main empirical motivation for ANAPHORICITY in the literature, namely its ability to handle so-called local anaphoric deaccenting: the deaccenting of material that is available in discourse but does not, intuitively, correspond to the background of a contextually-relevant question. The following illustrates:[7]

(13) (She has many expensive convertibles. Guess what she brought...)
  a. She brought a CHEAP convertible
  b. # She brought a cheap CONVERTIBLE

Differently from (1), where the context includes a sentence of the form *She brought an x convertible*, here the contextually provided question — of the form *She brought x* — seems to require F-marking on the entire direct object in the answer, which in terms of prosodic realization would correspond to the odd accent on the noun 'convertible' in (13b) rather than the acceptable accent on the adjective 'cheap' in (13a). There is a mismatch, then, between the broad, DP-level F-marking that seems to be required by the contextually-given question and the narrow, adjective-level F-marking suggested by the actual prosodic prominence.

A common intuition reported in the literature (see Chafe 1974, Allerton 1978, Ladd 1980, and many others) and implemented formally within a comprehensive anaphoric framework of F-marking by Schwarzschild (1999, 2020) is that the presence of 'convertible' in the discourse allows it to be deaccented.[8]

[7] In the present section the examples are provided without F-marking so as to avoid prejudging the question of whether the adjective, the noun, or both are F-marked.

[8] A different and much-discussed illustration of apparent local anaphoric deaccenting is Rooth (1992)'s *farmer*-example:

i. An AMERICAN/American farmer met a CANADIAN farmer

As pointed out by Wagner (2006) in his original discussion of the challenge for non-contrastive ANAPHORICITY, however, such local anaphoric deaccenting yields the wrong results when we change the adjective from 'cheap' to 'red':

(14) (She has many expensive convertibles. Guess what she brought...)
  a. # She brought a RED convertible
  b. She brought a red CONVERTIBLE

If we could combine F-marking on the DP (due to the question) with further local anaphoric deaccenting of 'convertible' (due to its presence in the context), why can we do so only in (13) and not in (14)? As mentioned above, Wagner (2006)'s solution is to impose a condition of local CONTRAST: [cheap convertible] contrasts with [expensive convertible] but [red convertible] does not. However, we already saw reasons to avoid imposing any kind of CONTRAST. In particular, the acceptability of [red convertible] in examples such as (3) shows that local CONTRAST is not tenable. And modified and less local notions of CONTRAST such as those of Wagner (2020) and Goodhue (2022) (in the present case, with respect to an accommodated antecedent, since no constituent larger than [expensive convertible] in the overt linguistic context would be a suitable target) are argued against by the evidence from additive contexts discussed in section 3.5 above.

We are left with a challenge. The contextually-provided question in (13) warrants focus on the DP (which would result in accent on the head noun), but the actual accent falls on the adjective. Local anaphoric deaccenting seems like an appealing explanation for the mismatch, but it cannot be maintained, not even if we equip it with CONTRAST.

5.2 A narrow question?

Büring (2019), who the current discussion follows in rejecting local anaphoric deaccenting, discusses ways in which mismatches of the kind we just saw can be taken at face

I will not attempt a full account of (i) here and will only mention that as far as I can see the support it offers to ANAPHORICITY is considerably weaker than it seems. An anaphoric approach, as outlined by Rooth (1992), could let the subject and the direct object be each other's anaphoric antecedents (possibly with material internal to each of these arguments serving as antecedents to material in the other). But if that were possible, consider what would happen if 'American' and 'Canadian' were absent. In that case, the two arguments would be identical, so if mutual antecedence were possible, each argument would be given by virtue of the other, and the sentence should have the accent pattern #"A farmer MET a farmer" (cf. "He SAW you"), contrary to fact. Note also that the accent pattern in (i) holds even if we change 'Canadian' to 'American' so as to make the entire direct object given, as in the following continuation of (i):

ii (The following evening...) an AMERICAN/American farmer met an AMERICAN farmer

Since the direct-object DP 'an American farmer' is given in (8), there is no need to F-mark 'American' for anaphoric purposes, so by MINIMALITY it should not be F-marked. And yet, F-marking of 'American' seems required in this case, just as it was in (i). I conclude that, appearances to the contrary notwithstanding, farmer-sentences do not furnish an argument for ANAPHORICITY, at least not as currently formulated in the literature.

value by identifying a non-anaphoric question. Applied to the present case (and using the current framework of QUESTIONS), it is conceivable that one simply reconstructs the narrow, adjective-level question of what kind of convertible she brought. In (13), a suitable narrow question might be {"She brought an expensive convertible", "She brought a cheap convertible"}, which is identical to $Q4'$ above. While the present context ("Guess what she brought") explicitly calls for a DP-wide focus, perhaps $Q4'$ is still acceptable. In (14), an attempted narrow question might be {"She brought an expensive convertible", "She brought a red convertible"}, which is very similar to $Q2$ above and can be ruled out for similar reasons to those discussed in section 3.

I believe that Büring (2019)'s proposal is a central part of the account of (13), but it cannot be the whole story. For one thing, even if a narrow question such as {"She brought an expensive convertible", "She brought a cheap convertible"} is possible, it remains unclear why this would be the preferred option. This, in turn, means that we are left without an explanation of why (13b) is odd. One might suspect that MINIMALITY plays a role here (though Büring 2019's account attempts to avoid such a condition; see also Büring 2015). However, data going back to Wagner (2006) and discussed in the context of Büring (2019)'s account by Goodhue (2022), show that invoking MINIMALITY in the present case is not entirely straightforward. Specifically, Goodhue (2022) notes that on Büring's proposal, the accent pattern in (13) should remain the same even if the adjective is 'expensive' instead of 'cheap'. This is so since in both cases the question can be the same minimal $Q'_4 = \{$"She brought an expensive convertible", "She brought a cheap convertible"$\}$ discussed above, and if Q'_4 is a good question in the original (13a), it is unclear why it should become bad when focus is on 'expensive'. In fact, however, responding with "She brought an EXPENSIVE convertible" is odd:

(15) (She has many expensive convertibles. Guess what she brought...)
   a. # She brought an EXPENSIVE convertible
   b. She brought an expensive CONVERTIBLE

Turning to (14a), while {"She brought an expensive convertible", "She brought a red convertible"} is indeed a problematic question, it is less clear what might rule out {"She brought a red convertible", "She brought a blue convertible"}. Büring (2019) suggests that what rules out the question in the case of (14a) to identifiability: perhaps the discourse participants cannot uniquely identify the question from the assertion. It is not clear to me whether identifiability is indeed a requirement on good questions, but in any event if we agree (as has been assumed here) that convertibles are either red or blue, identifiability should not be a problem in the case of (14a), so the oddness of the sentence requires a different explanation.

Further evidence that something is missing in Büring's account comes from the inferences of (13a). If all there is to the response in (13a) is a narrow, adjective-level question, the exhaustive inference we would expect from the sentence is just that she did not (also) bring an expensive convertible (similarly to the inference in (1)). But (13a) can also be understood as attempting to address the broader, context-given question of what she brought,

with the exhaustive inference that she did not bring anything (not a pony, not a book, not a yacht) other than a cheap convertible. This exhaustive inference suggests focus-marking at the level of the direct object, which raises the question of why the prosody of the sentence is as in (13a) rather than as in (13b). In other words, the mismatch between the expected broad, DP-level focus and the narrow, adjective-level focus indicated by the prosodic pattern returns.

5.3 Accommodating an expectation

So something is missing. What I believe is missing is the following: the context (which mentions that she has many expensive convertibles) gives rise to an expectation about the answer to the question. Namely, the expected answer would be η =[(Exh) she brought [an expensive convertible]$_F$], or some variant thereof, such as "I guess [(Exh) she brought [an expensive convertible]$_F$]" or "Probably [(Exh) she brought [an expensive convertible]$_F$]". (As before, I set aside the question of whether the answer is parsed with Exh or whether the exhaustivity inference arises through PARTITION-BY-EXHAUSTIFICATION.) In other words, the expected answer, understood exhaustively, is that what she brought is (probably) an expensive convertible and nothing else. If η had actually been uttered right after "Guess what she brought", (13a) would have been a felicitous way to object to it, and it would have had the same observed broad exhaustive inference that she did not bring a book, a yacht, etc.; meanwhile, (13b) would have been bad. The accent patterns in (14) and (15) would also remain the same if η had been explicitly uttered immediately after "Guess what she brought". The following summarizes, with η added explicitly to the linguistic context and marked in boldface, and with the only natural accent placement indicated in each case:

(16) (She has many expensive convertibles. Guess what she brought. **I guess / Perhaps / Probably/ . . . she brought an expensive convertible.**)
   a. She brought a CHEAP convertible
   b. She brought a red CONVERTIBLE
   c. She brought an expensive CONVERTIBLE

My proposal, then, is that there is a strong preference for accommodating η in (13)–(15) and that both the accent pattern in the responses and their exhaustive inferences reflect the fact that discourse may proceed as if η were actually there, similarly to (16). And once the possibility of accommodating η is taken into account, the appearance of local anaphoric deaccenting receives a global explanation, as I will now briefly review, using QUESTIONS and without recourse to problematic notions of ANAPHORICITY.

(13a), once η is accommodated, is a correction and is very similar to the correction in (1) above. As in (1), and as in Büring (2019)'s discussion of similar cases of apparent local anaphoric deaccenting, the question in (13a) is narrow. However, differently from

(1), in (13a) the target of correction — namely, η — has DP-wide F-marking and is understood exhaustively as denying other direct objects (not a yacht, not a pony, etc.). Since this aspect of the target is not challenged by the correction, these exhaustive inferences remain.[9] Assuming that η is accommodated and that the reply in (13) is understood as a correction, DP-wide F-marking as in (13b) is ruled out by MINIMALITY (or by whatever derives the appearance of MINIMALITY in similar cases, as discussed above). To the extent that (13b) can be acceptable, it is as a reply that ignores η (since, if it did try to correct η, it would violate MINIMALITY) and only attempts to answer the contextually-provided question. I suggest that ignoring η is odd in this case since doing so renders the context-setting sentence about her having many expensive convertibles irrelevant, which in turn makes the entire discourse less coherent than if η is corrected. (14a) is bad as a correction to η for the same reason that (2) failed to correct a similar target. (14b), like (13b), is a reply to the contextually-provided question. Differently from (13b), (14b) could not have served as a correction to η, so ignoring η in this case, while perhaps not entirely natural, is better than in (13b). (15a) cannot possibly be taken as a correction to η, and given that it was both expected and asserted that she brought an expensive convertible, it is hard to see why the question of whether she brought a cheap convertible or an expensive one might be of interest in this context (but see below for a slightly modified context in which the same question for the same assertion is of interest). (15b) is acceptable for the same reason that (14b) is.

5.4 Further support for accommodating an expectation?

We thus have an account of (13)–(15), one that does not rely on the problematic notion of local anaphoric deaccenting on the one hand and that builds on Büring (2019)'s insight about a narrow question but avoids the challenges to that idea on the other hand. The proposal required accepting the accommodation of an expectation, which is a non-trivial assumption. And while accommodation is part of many theories of focus placement (see, e.g., Roberts 1996, Wagner 2012, and Goodhue 2022), the move is not without complications and can easily lead to overgeneration.[10] In the discussion above, accommodating η was motivated by the handle it provided on the accent pattern in (13)–(15). However, I believe that there are additional reasons to think that η is indeed accommodated, as I will now discuss.

First, as pointed out to me by Raj Singh (p.c.), it is possible to target η directly. After the material in the context of (13) has been uttered, the hearer may felicitously respond

[9] As before, I set aside the possibility that the assertion is parsed with an exhaustivity operator. Specifically, it is conceivable that the assertion itself has an F-marker on the entire DP and an exhaustivity operator that associates with it, in addition to its question-related narrow F-marker on the adjective.

[10] In particular, Büring (2019) notes that naive accommodation of a question can lead to overgeneration. He uses such cases to support his claim that deaccenting requires a salient antecedent. As mentioned above, this claim is not about F-marking being anaphoric and is therefore compatible in principle with the present account.

with the presuppositional "Again!?", which in turn can be interpreted with reference to the implied η. On a theory that does not include the accommodation of η, this is surprising.

Second, the current proposal makes predictions about what happens when the expectation changes. For example, suppose that we are in a social context in which it is unacceptable to bring a present that is expensive relative to its kind. It is okay to bring a cheap book, a cheap pony, etc., but not an expensive one. In this social context η is not expected to be accommodated (despite the linguistic context). Instead, we might now plausibly accommodate $\eta' =$[(Exh) she brought [a cheap convertible]$_F$]. And we therefore expect the accent pattern in both (13) and (15) to be reversed, the explanation being entirely analogous to the one above. Meanwhile in (14), with 'red' as the adjective, nothing should change: the sentence cannot negate the expected η' any more than it could negate the expected η of the original setting, and as before the only acceptable possibility is to ignore the expectation altogether and simply answer the contextually-given DP question. As far as I can tell, this prediction is correct, and it is one that is not shared with proposals that do not rely on the accommodation of an expectation.

6 Conclusion

ANAPHORICITY has been known to face substantial problems in accounting for focus marking. Recent proposals such as Schwarzschild (2020), Wagner (2020), and Goodhue (2022) aim to amend ANAPHORICITY so as to overcome these problems. The present paper asked instead whether ANAPHORICITY can be eliminated altogether and whether the distribution of focus marking can be derived from the semantic processes that focus feeds — specifically, exhaustification and question formation — rather than from felicity conditions that target focus marking. I outlined such an account, QUESTIONS, in line with Roberts (1996) and incorporating recent insights from Büring (2019) and Fox (2019). I argued that the ingredients of QUESTIONS are needed even within anaphoric accounts. If correct, this means that QUESTIONS should be the null hypothesis and that maintaining ANAPHORICITY would require justifying its additional stipulations. I provided evidence that, at least as currently understood in the literature, those additional stipulations are not empirically justified and that in fact they are sometimes harmful. To the extent that the argument holds, labels such as free or pragmatic focus are misleading since, with the possible exception of MINIMALITY, focus marking is not subject to pragmatic conditions.

References

Allerton, D.J. 1978. The notion of givenness and its relations to presupposition and to theme. *Lingua Amsterdam* 44:133–168.

Anvari, Amir. 2021. Cell effability and apparent redundancy effects. Ms., June 2021.

Bade, Nadine, and Konstantin Sachs. 2019. EXH passes on alternatives: A comment on Fox and Spector (2018). *Natural Language Semantics* 27:19–45.

Bar-Lev, Moshe E., and Danny Fox. 2020. Free choice, simplification, and innocent inclusion. *Natural Language Semantics* 28:175–223.

Bar-Lev, Moshe E., and Danny Fox. 2022. On fatal competition and the nature of distributive inferences. Ms., TAU and MIT, December 2022.

Beaver, David, and Brady Clark. 2008. *Sense and sensitivity: How focus determines meaning*. Oxford: Blackwell.

Bolinger, Dwight. 1972. Accent is predictable (if you're a mind-reader). *Language* 48:633–644.

Büring, Daniel. 2012. What's given (and what's new) in the theory of focus? In *Proceedings of BLS 34, February 8–10 2008*, ed. Sarah Berson *et al.*, 403–424. Berkeley, CA: Berkeley Linguistics Society.

Büring, Daniel. 2015. Unalternative semantics. In *Proceedings of SALT 25*, ed. Sarah D'Antonio, Mary Moroney, and Carol Rose Little, 550–575.

Büring, Daniel. 2016. *Intonation and meaning*. Oxford University Press.

Büring, Daniel. 2019. Focus, questions and givenness. In *Questions in discourse*, ed. Klaus von Heusinger, Edgar Onea, and Malte Zimmermann, volume 36 of *Current Research in the Semantics / Pragmatics Interface*, 6–44. Holland: Brill.

Chafe, Wallace L. 1974. Language and consciousness. *Language* 50:111–133.

Chierchia, Gennaro, Danny Fox, and Benjamin Spector. 2012. Scalar implicature as a grammatical phenomenon. In *Semantics: An international handbook of natural language meaning*, ed. Paul Portner, Claudia Maienborn, and Klaus von Heusinger, volume 3, chapter 87, 2297–2331. Mouton de Gruyter.

Chomsky, Noam. 1969. *Deep structure, surface structure, and semantic interpretation*. Indiana University Linguistics Club.

Crnič, Luka, Emmanuel Chemla, and Danny Fox. 2015. Scalar implicatures of embedded disjunction. *Natural Language Semantics* 23:271–305.

Dretske, Fred I. 1972. Contrastive statements. *The Philosophical Review* 81:411–437.

von Fintel, Kai. 1994. Restrictions on quantifier domains. Doctoral Dissertation, University of Massachusetts, Amherst, MA.

Fox, Danny. 2004. Implicatures and exhaustivity, class 1. Handout for a seminar given at USC, November 2004.

Fox, Danny. 2007. Free choice disjunction and the theory of scalar implicatures. In *Presupposition and implicature in compositional semantics*, ed. Uli Sauerland and Penka Stateva, 71–120. Palgrave-Macmillan.

Fox, Danny. 2019. Partition by exhaustification: Comments on Dayal 1996. In *Proceedings of Sinn und Bedeutung*, ed. Uli Sauerland and Stephanie Solt, volume 22, 403–434.

Fox, Danny. 2020. Partition by exhaustification: towards a solution to Gentile and Scharwarz's puzzle. Ms., February 2020.

Fox, Danny, and Martin Hackl. 2006. The universal density of measurement. *Linguistics and Philosophy* 29:537–586.

Fox, Danny, and Roni Katzir. 2011. On the characterization of alternatives. *Natural Language Semantics* 19:87–107.

Fox, Danny, and Benjamin Spector. 2018. Economy and embedded exhaustification. *Natural Language Semantics* 26:1–50.

Goodhue, Daniel. 2022. All focus is contrastive: On polarity (verum) focus, answer focus, contrastive focus and givenness. *Journal of Semantics* 39:117–158.

Groenendijk, Jeroen, and Martin Stokhof. 1984. Studies in the semantics of questions and the pragmatics of answers. Doctoral Dissertation, Universiteit van Amsterdam, Amsterdam.

Halliday, Michael A. K. 1967. Notes on transitivity and theme in English, Part II. *Journal of Linguistics* 3:199–244.

Hamblin, C. L. 1973. Questions in Montague English. *Foundations of Language* 10:41–53.

Jackendoff, Ray. 1972. *Semantic interpretation in generative grammar*. Cambridge, MA: MIT Press.

Karttunen, Lauri. 1977. Syntax and semantics of questions. *Linguistics and Philosophy* 1:3–44.

Katzir, Roni. 2013. A note on contrast. *Natural Language Semantics* 21:333–343.

Katzir, Roni. 2014. On the roles of markedness and contradiction in the use of alternatives. In *Semantics, pragmatics, and the case of scalar implicatures*, ed. Salvatore Pistoia Reda, 40–71. Palgrave-Macmillan.

Katzir, Roni, and Raj Singh. 2015. Economy of structure and information: Oddness, questions, and answers. In *Proceedings of Sinn und Bedeutung 19*, ed. Eva Csipak and Hedde Zeijlstra, 302–319.

Krifka, Manfred. 1995. The semantics and pragmatics of polarity items. *Linguistic Analysis* 25:1–49.

Krifka, Manfred. 2004. Focus and/or context: A second look at second occurrence expressions. In *Context-dependence in the analysis of linguistic meaning*, ed. Hans Kamp and Barbara Partee, 187–207. Elsevier.

Ladd, Robert D. 1980. *The structure of intonational meaning*, chapter 3–4. Indiana University Press.

Lewis, David. 1988. Relevant implication. *Theoria* 54:161–174.

Roberts, Craige. 1996. Information structure in discourse: Towards an integrated formal theory of pragmatics. In *Papers in semantics*, ed. Jae-Hak Yoon and Andreas Kathol, volume 49 of *Working Papers in Linguistics*, 91–136. The Ohio State University.

Rochemont, Michael. 1986. *Focus in generative grammar*. Amsterdam, The Netherlands: John Benjamins Publishing Company.

Rooth, Mats. 1992. A theory of focus interpretation. *Natural Language Semantics* 1:75–116.

Rooth, Mats. 1996. Focus. In *Handbook of contemporary semantic theory*, ed. S. Lappin, 271–297. Oxford: Blackwell.

Sauerland, Uli. 2004. Scalar implicatures in complex sentences. *Linguistics and Philoso-*

phy 27:367–391.

Sauerland, Uli. 2005. Don't interpret focus! Why a presuppositional account of focus fails, and how a presuppositional account of givenness works. In *Proceedings of Sinn und Bedeutung 9*, ed. Emar Maier, Corien Bary, and Janneke Huitink, 370–384. Nijmegen: University of Nijmegen.

Schwarzschild, Roger. 1999. GIVENness, AvoidF and other constraints on the placement of accent. *Natural Language Semantics* 7:141–177.

Schwarzschild, Roger. 2020. The representation of focus, givenness and exhaustivity. In *Making worlds accessible. essays in honor of Angelika Kratzer*, ed. Rajesh Bhatt, Ilaria Frana, and Paula Menendez Benito, 167–192.

Selkirk, Elisabeth. 1984. *Phonology and syntax : the relation between sound and structure*. Cambridge, Mass.: MIT Press.

Spathas, Giorgos. 2010. Focus on anaphora: Accent placement and the syntax and semantics of anaphors. Doctoral Dissertation, Universiteit Utrecht.

von Stechow, Arnim. 1981. Topic, focus and local relevance. In *Crossing the boundaries in linguistics*, ed. Wolfgang Klein and Willem J.M. Levelt, 95–130. Springer.

Stevens, Jon Scott. 2014. Against a unified analysis of Givenness and Focus. In *Proceedings of WCCFL 31*, ed. Robert E. Santana-LaBarge, 438–446.

Wagner, Michael. 2006. Givenness and locality. In *Proceedings of SALT 16*, ed. Jonathan Howell and Masayuki Gibson, 295–312. Ithaca, NY: CLC Publications.

Wagner, Michael. 2012. Focus and givenness: a unified approach. In *Contrasts and positions in information structure*, ed. Ivona Kučerová and Ad Neeleman, 102–147. Cambridge: Cambridge University Press.

Wagner, Michael. 2020. Prosodic focus. In *The Wiley Blackwell companion to semantics*, ed. Gutzmann Daniel, Lisa Matthewson, Cécile Meier, Hotze Rullmann, and Thomas Ede Zimmermann. Wiley-Blackwell.

Williams, Edwin. 1997. Blocking and anaphora. *Linguistic Inquiry* 28:577–628.