4 Contrast via information structure

On topic development with German *aber* in post-initial position

Regina Zieleke

In order to distinguish different relations of contrast, research on German *aber* ('but') also takes into account its syntactic position. In post-initial position, i.e. between prefield-constituent and finite verb ('Forefield particle' in Sæbø 2003) which is generally associated with signaling a topic shift (cf. Breindl 2011), *aber* is said to express one of the contrastive relations defined via information structural properties (cf. e.g. Sæbø 2003). As corpus data reveal, however, post-initial *aber* may also 'formally isolate' non-topical constituents such as comparative constructions (e.g. *noch weniger* ('even less')) and even sentence adverbials such as *tatsächlich* ('indeed/in reality'). Interestingly, such divergences from potential topicality also involve different contrastive relations commonly analyzed in terms of inferences instead of information structural properties. In this paper, we investigate how topic development, i.e. the topic potential of the prefield constituent, as well as the topic progression between the conjuncts, can be employed as a formal means to distinguish different kinds of contrast in corpus data: a Structural Contrast relying on specific patterns of topic development and a Non-Structural Contrast where topicality is not the primary level of contrast, but other formal means may be indicative.

1 Introduction

Much work on contrastive markers (i.e. 'proto-typical contrastive connectives' such as English *but,* German *aber,* French *mais*) is dedicated to identifying and describing different contrastive relations (e.g. Lakoff 1971, Blakemore 1989, Rudolph 2012). For example, Jasinskaja (2012) suggests three contrastive relations: "formal contrast or semantic opposition uses, illustrated in (1), highlighting the similarities and differences between two propositions; argumentative uses, as in (2), giving an argument and a counterargument for the same claim or suggestion (e.g. that we should buy the ring, in this case); and concessive, or denial of expectation uses in (3), where the second conjunct denies an inference suggested by the first" (Jasinskaja 2012: 1899, examples (1-3)):

(1)   *This ring is beautiful, **but** that one isn't.*   (formal contrast/opposition)

(2)   *This ring is beautiful, **but** expensive.*   (argumentative contrast)

(3)   *This ring is beautiful, **but** we won't buy it.*   (denial of expectation)

As the quote by Jasinskaja (2012) shows, researchers employ different properties and aspects of language for the description of different relations. Information structural properties of the contrasted conjuncts have been widely discussed for 'formal contrast/opposition' uses in terms of parallel topic-comment- or topic-focus-structure (e.g. Sæbø 2003, Umbach 2005, and Breindl et al. 2014). For the other kinds of contrast, however, information structure becomes a secondary factor, since they are generally analyzed in terms of inferences (of a differentially weighted relevance of properties in (2) and an underlying expectation in (3), see e.g. Winterstein 2012 and König 1991, respectively).

In this article, I will investigate the potential of information structural aspects as a means to distinguish different contrastive relations, more specifically the topic development from first to second conjunct of a contrastive connection. The point of departure for this investigation is contrast with the underspecified German *aber* in post-initial position, i.e. the position between prefield-constituent and finite verb. This position is not only frequent in written data, it is also ascribed with the very specific function to formally isolate the prefield constituent and mark it as a 'shifted' sentence topic (Breindl 2011).

While the notion of topicality is a complex one with different values as to what counts as topical, there are certain linguistic expressions that are not typically considered as topics, such as sentence adverbials and focus particles. Yet, we find data where post-initial *aber* formally isolates such expressions that do not comply with the topic-marking function suggested in the

literature. Interestingly, this divergence from potential topicality also involves different kinds of contrast, compare (4) and (5): in (4), the prefield constituent *der andere* ('the other one') is a natural candidate for an aboutness topic; the contrast here resembles Jasinskaja's 'formal contrast'-example in (1) above. In (5), on the other hand, *aber* isolates the constituent *vor allem* ('above all') which cannot be considered as topical; the contrastive relation here resembles Jasinskaja's 'argumentative contrast' example in (2), instead.

(4)   *Dieser Ring ist schön, der andere **aber** (ist es) nicht.*
        'This ring is beautiful, but the other one is not.'

(5)   *Dieser Ring ist schön, vor allem **aber** ist er teuer.*
        'This ring is beautiful, but above all it is expensive.'

The goal of this article is to integrate such cases into one account of contrast: post-initial *aber* formally isolates the prefield constituent and marks it as an *alternative*. The interpretation as different contrastive relations depends on the topic-status of this constituent.

Section 3 will take a closer look at the topic-isolating function of German adverb connectives and contrastive *aber* in particular suggested by Breindl (2011) as well as the notion of topicality. In order to apply this notion to corpus data, I suggest to tease apart the topic potential of an expression, i.e. whether a constituent provides the features typically associated with aboutness- or frame-setting topics, and the relative topic status, i.e. the topic progression from one conjunct to the other. This distinction provides annotation criteria for corpus data with post-initial *aber* presented in section 4. The study reveals that topicality is indeed the relevant level of alternatives for the majority of contrast with post-initial *aber*, but not for all of the data. In fact, a surprisingly high number of constituents formally isolated by *aber* are not topical. As the discussion in section 5 shows, however, there are other formal means such as verb mode and simultaneity that indicate different kinds of contrast, leading to a proposal of Structural versus Non-Structural Contrast as identified via the analysis of topic development with German *aber* in post-initial position. In order to be able to incorporate these findings into the discussion of different kinds of contrast with *aber* as defined by information structural aspects, section 2 will start with a discussion of different relevant approaches to this topic.

2 Information structure and contrast with *aber*

In this section, I will (selectively) discuss approaches to contrastive relations defined in information structural terms. There are substantial differences between such approaches subject to, on the one hand, the (language-)specific contrastive marker analyzed and the variety of contrastive relations they can express[1] and, on the other hand, the status of information structure within the description of contrast. What all approaches share is that contrast, in general, is defined in terms of *alternatives*: contrastive markers conjoin something positive and something negative (cf. e.g. Sanders et al. 1992) relative to a specific feature, depending on the contrastive relation described.

In terms of information structure, alternatives adhere to the notions of focus and contrastive topics. This section will therefore gather approaches that analyze contrast in terms of contrastive topics, foci, or both (Sæbø 2003 for the former with German *aber*, Umbach 2005 for the latter with English *but*, and Jasinskaja 2010, 2012 for a 'Question under Discussion' account). Subsequently, the status of information structure within the description of contrast will be addressed (for the afore-mentioned 'formal approaches', information structural aspects of the conjuncts are central to all contrastive relations, whereas neutral approaches such as Breindl et al. 2004 consider them as one set of features among many).

Sæbø (2003) analyzes German *aber* as a topic particle and ascribes contrast to contrastive topics. He argues that contrast is the result of *aber's* presupposition involving topic alternatives and negation: "The context entails the negation of the result of replacing the topic of the sentence by an alternative" (definition of 'Semantic Opposition (Contrast)', Sæbø 2003: 262). In his example shown in (6), the alternative topic *(für) mittlere* ('for intermediate-size (companies)') replaces *(für) kleine Betriebe* ('for small companies') "in the sense that if we substitute the latter for the former, a contradiction arises" (Sæbø 2003: 261).

(6) *[Für kleine Betriebe]T1 hält sich der Schaden noch in Grenzen;*
*[für mittlere]T2 wird er **aber** allmählich ruinös.*
'For small companies, the harm is yet limited; for intermediate-size companies, however, it is becoming ruinous.'

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[1] For example, both English *but* and French *mais* have a corrective use as in *Peter didn't go to Paris, but to Rome*, whereas German and Spanish, for example, use a different contrastive marker specified for the corrective relation (*sondern* and *sino*, respectively). In Russian, in turn, the marker for correction *a* ('and/but') is also used for 'formal contrast / opposition' as in (1), whereas *no* ('but') is reserved for the other contrastive relations (see e.g. Malchukov 2004, Jasinskaja 2012). Moreover, the contrastive markers behave differently in terms of their syntactic integrability – as will become relevant for German *aber*, cf. section 3.1 below.

According to the author, such an "alternativeness relation between the topic and the alternative" is given when the two alternative expressions denote "individuals, places, times, worlds, or sets of sets of such entities" or "are ordered along some scale" (Sæbø 2003: 268). In cases where the alternativeness is not given a priori, the use of the contrastive marker triggers the accommodation of 'implicit topics', i.e. the hearer has to identify a relevant parallel triggering an implicature of 'Concession' or 'Denial of Expectation' (Sæbø 2003: 266). Sæbø shows this with the example in (7), where *steil* ('steep') and *kurz* ('short') have to be identified as alternatives (2003: 266, example (29a)).

(7)   *Die Waldwege sind steil, **aber** kurz.*
        'The forest paths are steep, but short.'

Such a parallel interpretation, the author underlines, entirely "depends on what is relevant in the utterance situation and essentially on world knowledge" (Sæbø 2003: 267).

Alternativeness of the elements contrasted in conjunctions with *but* or *aber* is also central for Umbach's (2005) focus-based analysis of English *but*. Drawing attention to the similarity between *aber*/*but* and focus-sensitive particles such as German *auch* ('too') or English *only*, the author argues that the particularity about the contrastive markers is that they require a (semantic or pragmatic) negation. She calls this characteristic, which also separates *but* from additive *and*, the "confirm+deny condition": two sentences conjoined by *but* respond to a common *quaestio* as in (8) with "yes ...but no ..." (Umbach 2005: 7/8, example (12a)).

(8)   *Did John clean up his room and wash the dishes?*
        [YES] *John cleaned up his ROOM, **but** [NO] he didn't wash the DISHES.*

The alternatives presented in the confirmation and in the denial are analyzed in terms of information focus, as indicated by the accent on *room* and *dishes* in (8), respectively. Umbach (2005) further points out that *but*-conjunctions may contain more than one pair of alternatives and distinguishes 'simple contrast' from 'double contrast'. Cases of 'simple contrast' as in (8), involve one pair of alternatives to be contrasted, expressed by the (contrastive) sentence foci, i.e. *to clean up the room* and *to wash the dishes*. Cases of 'double contrast' as in (9), in turn, involve two pairs of alternatives, contrastive topics ('theme foci') such as *John* and *Bill* and contrastive foci ('rheme foci') (Umbach 2005: 11, example (19)).

(9)   *John cleaned up the ROOM, **but** Bill did the DISHES.*

The author points out that the alternatives do not have to be presented in a parallel manner, but "may also be "crossed", one of them relating to a contrastive topic and the other one to a rheme focus" (Umbach 2005: 10).[2] Like Sæbø (2003), Umbach (2005) ascribes other uses of *but* or *aber* to an implicature: since "any *but*-sentence involves a negation […], just like simple negated sentences, *but*-sentences trigger the expectation that the corresponding affirmative holds" (Umbach 2005: 14). The interpretation of 'concession', then, is the result of a "causal over-interpretation" that is also available in conjunctions with *and* (ibid.).

The correlation between information structure and the quaestio, or 'Question under Discussion' (QuD, cf. Roberts 1998), has led to a variety of analyses of information structure in general (e.g. Riester et al. 2018). It is also central to Jasinskaja's (2010) comparative account of contrast. Among the five different contrastive relations postulated by the author, two rely on formal aspects of the conjuncts (which is why, in Jasinskaja 2012, she summarizes these two relations under the term 'formal contrast'): contrastive comparison as in (10) and opposition as in (11).

(10)   *John likes basketball, **but** Mary likes tennis.*
(11)   *John likes football, **but** Bill doesn't.*

In both cases, the author points out, "the conjoined propositions differ along two dimensions at least" (Jasinskaja 2010: 437). In the case of contrastive comparison, this dimension involves "two (or more) constituents, e.g. the subject and the object of liking in [(10)], leading to a contrastive topic-focus structure" (Jasinskaja 2010: 436). In the case of opposition, the values of one of the two dimensions do not only have to be different, but polar. The polarity may be semantic, i.e. in form of lexical antonyms or positive and negative sentence polarity, or pragmatic in nature, i.e. "one conjunct confirm[ing] and the other den[ying] a contextually salient proposition", as in (12) (Jasinskaja 2010: 437, example (9)).

(12)   A: *John and Peter both live in Amsterdam, don't they?*
       B: *No. John lives in Amsterdam, **but** Peter lives in Rotterdam.*

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[2] She illustrates such 'crossed' versions, which according to her "are perfectly natural and occur frequently" in German but "seem to occur rarely" in English (cf. endnote 12, Umbach 2005: 22), with the English example in (i) and its German equivalent in (ii):
 (i)   *John cleaned up the ROOM, **but** the dishes were washed by BILL.*
 (ii)   *John hat AUFGERÄUMT, **aber** abgewaschen hat BILL.*

The contrastive topic-focus structure is mirrored in the QuD that is central for Jasinskaja's analysis of contrast (building on Jasinskaja & Zeevat 2008). In this approach, contrastive conjunctions are answers to complex QuDs, different in number and type of question variables. Contrastive comparison cases answer a "multiple wh-question" (Jasinskaja 2010: 442), i.e. *Who likes what?* in the case of (10). Opposition cases, in turn, answer a "wh-yes/no-question" (Jasinskaja 2010: 443), i.e. *Who does and doesn't like football?* in the case of (11). Both variables in the question identify the information structural entities in the conjunct, the first corresponding to contrastive topics, the second to contrastive foci.

Other uses of contrastive markers, the author argues, are the result of specific manifestations of the question variables. The argumentative contrast in (2), above, for example, answers a "why-yes/no-question", i.e. *Why should or shouldn't we buy the ring?*.

For the three approaches to contrast discussed so far, contrast relies on the notion of information structural alternatives as expressed by contrastive topics, foci or both. This formal contrast is taken as the basic function, whereas other uses of contrastive markers such as argumentation or denial of expectation "are treated as special cases under additional assumptions" (Jasinskaja 2012: 1900). With this, they are to be distinguished from what Jasinskaja (2012) calls 'inferential approaches to contrast'. The latter "appeal to world knowledge and deep inferential processing" and "take the denial of expectation […] or the argumentative function […] as basic deriving formal contrast as a special case" (Jasinskaja 2012: 1900). Proponents of these approaches are e.g. Blakemore (1989) or Anscombre and Ducrot (1977).[3]

Finally, there are approaches that do not consider one of the different contrastive relations expressed by underspecified contrastive markers to be the base for enrichment for the other types of contrast. One such example is Breindl et al. (2014) who describe five different uses of German *aber* as co-existing variants, 'contrastive comparison', 'concessive', 'restrictive', 'argumentative', and 'weak contrast'. The 'concessive' use, for example, simply co-exists with the 'contrastive evaluation' use of *aber*. Among those five contrastive relations, two are defined

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[3] Building on the latter, Winterstein (2012), for example, ascribes an argumentative function to all *but*-conjunctions. His approach is based on the concepts of the argumentative force of a proposition and their respective argumentative goals: the second conjunct containing the contrastive marker possesses a higher argumentative force for its goal (Winterstein 2012: 1870). In (2) above, for example, the first conjunct argues for the goal H *we will buy the ring*, while the second conjunct argues for ¬H *we won't buy the ring*. Based on the presented order of the two conjuncts, ¬H receives a stronger argumentative force, making it most likely that the ring be bought. Winterstein argues that information structural properties of the conjuncts, i.e. a parallel topic-focus-structure, directly influence the make-up of the argumentative goals H and ¬H, leading to the 'mechanical goals' H_{unique} (goals "that convey that the focus is the only one of its kind") or H_{other} (goals "that convey that the focus is not the only one of its kind, i.e. that there is at least one alternative to the focus that shares the property of the focus" in the first conjunct, cf. Winterstein 2012: 1877). B's answer in (14) above, for example, can be analyzed in terms of H_{other}.

via information structural properties: 'contrastive comparison (or: semantic opposition)' *aber* as in (13) and 'weak contrast' *aber* as in (14) (Breindl et al. 2014: 524-532, examples (18) and (44), respectively).

(13)   *Ihren Ruf verspielte die UNO in den Augen der Malaysier, als sie Kuwait geholfen, die Moslems in Bosnien **aber** im Stich gelassen habe.*
       'The UN forfeited their reputation in the eyes of the Malaysians when they helped Kuwait, but deserted the Muslims in Bosnia.'

(14)   *Damit verließ er uns. Wir **aber** schauten ihm nach und beneideten ihn.*
       'With this, he left us. We, in turn, followed him with our eyes and envied him.'

According to the authors, in its 'contrastive comparison (or semantic opposition)' use, *aber* relates conjuncts with a parallel topic-comment-structure: the topics are contrastive (*Kuwait* ('Kuwait') in the first conjunct and *die Moslems* ('the Muslims') in the second conjunct in (13)), i.e. they can be regarded as parts of a superordinate topic (e.g. 'groups of people the UN might have helped'). The respective comments to these topics can be regarded as antonyms or contradictive in the given context (i.e. *helfen* ('to help them') and *im Stich lassen* ('to turn their back on them') in (13)). The authors point out that the comments do not necessarily have to be lexical oppositions or contrastive foci but are often marked by a similar prosodic contour (Breindl et al. 2014: 522/523). They also observe that, in this use, the contrastive marker can be omitted, since the comparative interpretation relies on the parallel topic-comment-structure. 'Weak contrast' as in (14) involves a topic shift not otherwise specified 'without a concomitant contrast of the predicates in the comments' (Breindl et al. 2014: 532)[4]. In (14), the topic of the second conjunct *wir* ('we') shifts from *er* ('he') in the first. What is striking in this use is that the topic of the second conjunct, in contrast to the topic in (13), is given in the comment of the previous conjunct (*uns* ('us')) and is not necessarily interpreted as contrastive to *er* (neither are the comments).[5]

With a lack of contrastive alternatives as pivotal for this use of *aber*, 'weak contrast' seems to be the odd one out. Yet, this use of *aber* also relies on specific information structural properties of the conjuncts, i.e. a specific type of topic progression. If we want to maintain an alternative based account of (information structurally defined) contrast, we may argue that here, too,

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[4] Original quote in German: „ohne dass damit eine Kontrastierung der Prädikate verbunden ist" („schwacher Kontrast", Breindl et al. 2014: 532).

[5] Interestingly, the authors attest 'weak contrast' with a topological preference of *aber* for the post-initial position between prefield constituent and finite verb as in (14). For the four other contrastive relations they describe, *aber's* position is only marginally relevant. The topological positions possible with *aber* will be introduced in section 3.1.

alternatives are at play – albeit on a more abstract, structural level. The unspecified topic shift may yield an interpretation of the two conjuncts as alternatives regarding the topical progression in a discourse, the second conjunct displaying an alternative choice of topic.

From this short discussion of some representative analyses of information structural aspects of contrast with the underspecified contrastive markers *but* and *aber* we can retain the following observations: First, central to such approaches to contrast is the notion of alternatives. This relates to contrastive topics or contrastive foci or both, and may even extend to an abstract structural level in terms of alternative topic choice in discourse. Second, information structure is most, if not only, relevant for the description of *some* uses of the contrastive markers. Even in what Jasinskaja (2012) called 'formal approaches' that take information structural properties of the conjuncts as a starting point for the description of contrast, they become secondary for other uses of *but* and *aber*. For Sæbø (2003), the identification of 'implicit topics' relies on relevance implicatures and world knowledge; for Jasinskaja (2010), the QuD changes from *wh*-questions to the causal *why*. Umbach's (2005) analysis is more robust in this regard, considering that 'all-rheme sentences' such as in (15) still provide two focus alternatives, albeit less straight forward and with recourse to inferential enrichment and 'causal over-interpretation' (Umbach 2005: 10, example (18a)).

(15)   *[It is RAINING]$_F$,* **but** *[we are not going to stay at HOME]$_F$*

A final observation to be drawn from the discussion in this section is that the interplay of contrast, information structure, and the position of German *aber* might prove insightful for the discussion of contrastive relations and their characteristics.

3   Post-initial *aber* and topicality

The previous section has shown the central role of information structural alternatives for contrast with *but* and *aber*. The proto-typical German and English markers of contrast were treated as equal throughout the discussion with greater attention paid to whether contrastive topics or foci (or both) are taken as fundamental for the relation(s) of contrast. But the two markers differ not only in the number of relations they can express (cf. footnote 1), but also in their syntactic behavior. In contrast to English *but*, which as a conjunction is restricted to the Coord-position outside the sentence frame, *aber* is what Breindl et al. (2014) call 'conjunct-

integrable', i.e. it can occupy different syntactic positions within the German sentence frame with different effects on the interpretation. The post-initial position, i.e. the position between the prefield constituent and the finite verb as in (14) above, is particularly interesting for the discussion of information structural alternatives and contrast. Section 3.1 will class post-initial *aber* among the marker's possible topological positions and describe Breindl's (2011) approach that associates this position with topicality. In section 3.2, I will discuss theoretical implications for the distinction of different contrastive relations and how to integrate them into the general discussion of topicality in the literature.

3.1 German *aber* in post-initial position

As an adverb connective, German *aber* is positionally mobile in that it can occur in different syntactic positions in the German sentence structure. Sæbø (2003: 261) discusses three positions for *aber*, "a particle left adjoined to the Middle Field, a particle right adjoined to the Forefield, [and] a conjunction (left of the Forefield)". This goes in hand with Breindl et al. (2014) who categorize not only the meaning but also the syntactic positions of German connectives. In their terminology, *aber* is eligible for 'middlefield position' ("Mittelfeld", cf. (16d)), 'post-initial position' ("Nacherst", cf. (16c)), and 'zero position' ("Nullstelle"[6], cf. (16a)), respectively. The only positional restriction concerns the 'prefield position' ("Vorfeld"), where *aber* is ungrammatical as the only element preceding the finite verb, cf. (16b) (Breindl et al. 2014: 1173).

(16)   *Sie ging hinaus in die Welt,*
    a.   ***aber** er blieb daheim.*
    b.   ****aber** blieb er daheim.*
    c.   *er **aber** blieb daheim.*
    d.   *er blieb **aber** daheim.*
    'She went out into the world, but he stayed at home.'

Breindl et al. (2014) observe that *aber* shows different syntactic preferences along the different contrastive relations. Post-initial position, for example, is felicitous for 'contrastive

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[6] Note that, the term 'zero position' comprises two syntactic positions, the Coord-position typical for conjunctions as in (a) and a syntactically and prosodically disintegrated position between the two conjuncts. The latter is usually marked by separating intonation or punctuation such as a comma or a colon: (i) *Ich möchte gern spazieren gehen. Aber: Heute regnet es leider.* ('I would like to go for a walk. But: Unfortunately, it will be raining today'). This position is infelicitous in (16). Many researchers ascribe a shift in scope to this disintegrated position; Imo (2017), for example, argues that connectives in this position scope over speech acts and are thus to be analyzed as discourse markers (cf. Imo 2017: 50, see also Blühdorn 2017).

comparison' and 'weak contrast', but is infelicitous for 'concessive' or 'contrastive evaluation' uses of *aber* (cf. Breindl et al. 2014: 526-533). However, the syntactic positions do not correlate with *aber's* different uses in the sense that a certain position is indicative of a certain use. Both, 'concessive' and 'contrastive evaluation', for example, are equally felicitous with zero and middlefield positions.

Similarly, Sæbø (2003) deliberates that, in most cases, the syntactic position of *aber* would not make a difference but it may in some: "in particular, the Forefield particle *aber* [= post-initial position as in (16c), RZ] seems to unambiguously identify the Forefield constituent as one for which the context should provide an alternative and contradict the result of substituting it" (2003: 261). This can also be observed in (16): the interpretations of (16a) and (16d) do not seem to differ, in both cases the predicates *hinaus in die Welt gehen* ('going out into the world') and *daheim bleiben* ('staying at home') are most relevant. In (16c), however, the contrast between *sie* ('she') and *er* ('he') is marked as more relevant for the comparison.[7]

And indeed, the post-initial position is quite special in that regard. Breindl (2011) discusses in detail that German adverb connectives in post-initial position, in general, have two functions: a) to signal their encoded semantic relation, i.e. contrast in the case of *aber*, and b) to formally isolate the (initial) prefield constituent as the topic, thereby signaling a topic shift (Breindl 2011: 17). An example with two instances of adverb connectives in post-initial position is provided by Breindl (2011: 2, example (2)) shown in (17):

(17)   *Wir ließen den Stadtochsen vorsichtig wieder hinunter und wollten beim nächsten Versuch auch die Weiber zu Hilfe holen. [Zu diesem Versuch] **aber** kam es nicht. [Unser Stadtochse] **nämlich** – war tot!*
'We carefully let the town ox down again and wanted to get help from the women for the next attempt. This attempt, however, did not happen. Our town ox, namely, – was dead!'

Here, both *aber* and *nämlich* ('namely/viz') isolate their preceding constituents, *zu diesem Versuch* ('to this attempt') and *unser Stadtochse* ('our town ox') and mark them as the sentence topics, respectively. Simultaneously, *aber* contributes its contrastive and *nämlich* its causal meaning to the conjunctions. Focal content, on the other hand, is not compatible with post-initial adverb connectives (cf. Breindl 2011: 26).

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[7] With matching intonation patterns, these preferences may be altered. As post-initial *aber* primarily relates to written German and this work will mainly be concerned with written corpus data, I will exclude this discussion from this paper.

As mentioned above, Sæbø (2003: 261) postulates that *aber* marks the 'isolated' topic constituent as contrastive. This goes in hand with other claims for contrastive markers in post-initial position, e.g. Lang & Adamíková (2007) who state that "*aber* and other 'adversative' connectors, if occurring in this position, overtly mark the preceding constituent as contrastive topic" (Lang & Adamíková 2007: 206). Breindl's (2011) view on the kind of topic that is formally isolated by post-initial adverb connectives, however, is more differentiated. Based on the four dimensions of topic-comment suggested by Jacobs (2001) (i.e. informational separation, predication, addressation, and frame-setting), Breindl (2011) distinguishes four types of topic: 'Familiarity (or 'Continuous') Topics', 'Shifting Topics', 'Contrastive Topics' in Büring's (1997) sense, and 'Frame-setting Topics'. In combination with adverb connectives in post-initial position, 'Familiarity Topics' are infelicitous, as shown in (18) (cf. Breindl 2011: 19; example is my own).

(18)   *[Maria]$_{T1}$ ist arm, * [sie]$_{T2=T1}$ **aber/nämlich** ist glücklich.*
         'Mary is poor, she however/namely is happy.'

The other three types of topics ('Shifting', 'Contrastive', and 'Frame-setting'), in turn, are all attested for adverb connectives in post-initial position. 'Shifting Topic' as in (19) is defined in reference to Givón (1983) as "newly introduced, newly changed or newly returned to" (Givón 1983: 8, cited by Breindl 2011: 20). As Breindl (2011: 20) points out, such topics are either newly established topics in the sense of Daneš's (1970) linear progression, i.e. the topic of the second conjunct takes up (a part of) the comment in the first conjunct, as with *uns* ('us') – *wir* ('we') in (14) above, or 're-established' after a sequence of discontinuity with other topics ("Rethematisierung", Breindl 2011: 20), as in my introspective example in (19). As in Breindl et al. (2014), Breindl (2011) points out that the comments do not have to be contrastive or interpreted as such – none of the preceding sentences provides a contrastive alternative to leaving Mary's brother alone in the line to buy popcorn.

(19)   *[Maria]$_{T1}$ geht mit ihrem kleinen Bruder ins Kino, um den neuen Spider-Man zu sehen. [Die Schlange vor den Kassen]$_{T2}$ ist sehr lang, denn [alle]$_{T3}$ freuen sich auf den Film. [Er]$_{T4=F3}$ hat sehr gute Kritiken bekommen und verspricht aufwendige Spezialeffekte und viel Action. [Maria]$_{T5=T1}$ **aber** lässt ihren Bruder allein in der Schlange, um schon mal das Popcorn zu kaufen.*

'Mary is going to the cinema with her little brother to watch the new Spider Man. The checkout-queue is very long, because everyone is forward to the movie. It got great reviews and promises elaborate special effects and a lot of action. Mary, in turn, leaves her brother alone in the queue to get some popcorn.'

'Contrastive Topics' are defined in Büring's (2006) sense as non-exhaustive alternatives in reference to a(n overt or covert) pertinent question that is "not resolved by the answer" (Büring 2006: 7).[8, 9] This function of "contrastive topics to indicate a strategy of incremental answering" of an overt or covert QuD (Krifka 2008: 268) can also be applied to (20) with *aber* in post-initial position, assuming a covert question along the lines of *Who wants to see the new Spider-Man?*, where the foci, while not alternatives in the classic, i.e. semantic sense, are also interpreted as contrastive.

(20) *[Alle]CT1 wollen den neuen Spider-Man sehen. [Maria]CT2 **aber** interessiert sich nicht für Superheldenfilme.*
'Everyone wants to see the new Spider-Man. Mary, in contrast, doesn't care for super hero movies.'

Finally, Breindl (2011) discusses 'Frame-setting Topics' as possible candidates for the formally isolated constituent with post-initial adverb connectives. As the author points out, 'Frame-setting Topics' represent a category supplementary to the other topic types: the formally isolated frame may represent 'Contrastive Topics' as in (21) (cf. Breindl 2001: 24; example (26) is mine) or a 'Shifting Topic' as in her example in (22), where the local adverbial *dort* ('there') takes up the local description *an den Schildsee* ('to the Schildsee [proper name of a lake]').

(21) *[Draußen]F1 scheint die Sonne. [Im Kino]F2 **aber** ist es angenehm kühl.*
'Outside, the sun is shining. In the cinema, in turn, it is pleasantly cool.'

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[8] Note that Büring, too, uses the term 'shifting topic' addressing phenomena as in (i): (i) *(Where did Fritz buy this book? –) BertieCT bought it at HartliebF's.* (example (15b) in Büring 2006: 7). This is a very different notion of 'shift', as the 'shifted' topic is not informationally given, but shifts from one of the contrastive alternatives (Fritz, in this case) to another (i.e. Bertie).

[9] A frequently used example for contrastive topics is (ii) A: *What do your siblings do? – B: [My [SISter]Focus]Topic [studies MEDicine]Focus, and [my [BROther]Focus]Topic is [working on a FREIGHTship]Focus*, as discussed e.g. by Krifka (2008: 268). For him, the alternativeness results from focus marking within the (aboutness-)topics. Cf. also discussion of double contrast in section 2 above, e.g. example (9).

(22)   *Der Meister Dudel sollte am nächsten Morgen durch Schilda ziehen, mit seiner Flöte die Ratten und Mäuse an sich locken und sie danach [an den Schildsee]$_{F1}$ hinausführen. [Dort]$_{T2=F1}$ **aber** werde ein Boot bereitstehen [...].*

‘The next morning, Master Dudel was supposed to wander through Schilda, allure the rats and mice with his flute, and then bring them to the Schildsee. There, in turn, a boat was to wait for him […].’

In all of the above cases, the topic status of the prefield constituent is independent of the adverb connective isolating it. *Aber* and other adverb connectives in post-initial position thus mark what is already there in terms of a pragmatic marker that facilitates processing.

3.2 Topic potential and contrastive relation

From Breindl's (2011) discussion we can retain the following observations: German adverb connectives in post-initial position require a topic shift – and I mean this here in the most basic sense of the term, i.e. the topic of the second conjunct is not identical to the topic of the first. This shift comes about in one out of two ways: a) the new topic (the one immediately preceding the post-initial connective) is a non-exhaustive alternative to an element in the previous conjunct, or b) it is (re-)established from given previous context. Since I find Breindl's (2011) use of the term ‘Shifting Topic’ for the latter not quite befitting (after all, both involve a topic ‘shift’), I suggest to use the term *Topic Promotion* here. For the first kind of topic progression, I will continue to use the fitting and well-established term *Contrastive Topics*. Now, in both kinds of topic progression, the constituent formally isolated by the post-initial adverb connective may either be referential, i.e. what researchers usually refer to as ‘aboutness’-topics (cf. Krifka 2008 who states that the topic is the "entity or set of entities under which the information expressed in the comment constituent should be stored in the CG content"; Krifka 2008: 265), *or* frame-setting adverbials, i.e. frame-setting topics.

The necessity to distinguish type of topic progression (Contrastive Topics vs. Topic Promotion), on the one hand, and topic type (aboutness vs. frame-setting), on the other, becomes particularly pertinent for the contrastive *aber*. Recall that Breindl et al. (2014) distinguish two kinds of contrast based on these two different topic progressions: ‘contrastive comparison’ with Contrastive Topics and ‘weak contrast’ with Topic Promotion (cf. section 2 above).

The status of frame-setting adverbials as sentence topics is, however, not uncontroversial. The main argument for Breindl (2011) to consider them as potential topics in correlation with post-initial adverb connectives is based on her observations regarding German: the German prefield position is argued to be the prototypical topic-position and, besides the sentence subject, frame-setting adverbials are the most frequent type of constituent in the German prefield (Breindl 2011: 24). Other researchers (considering other languages) such as Krifka (2008), on the other hand, restrict the notion of topic to referential aboutness-topics, cf. also Kiss (2002) for whom "[a] topic constituent must be [+referential] and [+specific]" (Kiss 2002: 11). Frame-setting adverbials, in turn, are not referential in the same sense, nor need they be specific.

Krifka (2008) points out that frames are associated with alternativeness since "[t]hey choose one out of a set of frames and state that the proposition holds within this frame" (Krifka 2008: 269).[10] This conceptualization by itself is similar to Jacobs' (2001) definition of frame-setting according to which frames choose "a domain of (possible) reality to which the proposition expressed […] is restricted" (Jacobs 2001: 656), only that for him, frame-setting and aboutness are two possible manifestations of topicality. Jacobs (2001) underlines the similarities between frames and his other dimensions of topicality e.g. by instancing morphological topic-marking in Korean with *-nùn* which is possible on frame-setting adverbials (cf. Jacobs 2001: 655) and by observations concerning patterns of syntactic topic-constructions in German with frame-setters, such as left-dislocation.

For Krifka (2008), the correlation between frames and alternatives brings about similarities between frame-setters and *contrastive* topics:

> What contrastive topics and frame setters have in common is that they express that, for the communicative needs at the current point of discourse, the present contribution only gives a limited or incomplete answer. In the case of contrastive topics, the current CG management contains the expectation that information about a more comprehensive, or a distinct, entity is given; contrastive topic indicates that the topic of the sentence diverges from this expectation. With frame setters, the current CG management contains the expectation that information of a different, e.g., more comprehensive, type is given, and the frame setter indicates that the information actually provided is restricted to the particular dimension specified. (Krifka 2008: 270)

Krifka (2008) subsumes the common alternative-based function of contrastive topics and frames under the concept of *delimitation*. The idea that such a delimitating function can be associated with typically topical and non-topical elements alike goes in hand with Büring's (1997, 2016) discussion of contrastive topics ('CT'). He observes that CT-marking, which involves prosodic marking in terms of a hat contour, also applies to cases such as (23), where

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[10] In the often-quoted example *(i) A: How is John? – B: {Healthwise/As for his health}, he is [FINE]Focus* ((Krifka 2008: 269, example (47)), John being fine can only be said regarding his health – financially, for example, John may not be fine at all.

the negation particle *nicht* ('not') – which is usually not regarded as a topical element – is CT-marked (example (23) in Büring 2016: 10).

(23)   *Ich habe NICHTCT getrunken, weil ich TRAURIGF bin.*
         'I didn't drink because I'm sad.'

Büring's (2016) conclusion from examples such as this and his discussion of contrastive topics in general is that "the notion of 'topic' (without 'contrastive') should be used with great caution" or, in fact, not at all (Büring 2016: 25).[11]

This struggle also applies to the very narrow phenomenon of German *aber* in post-initial position. Even if we follow a broad notion of topic as a 'point of departure' in Jacobs' (2001) or Chafe's (1976) sense and determine that "the topic sets *a spatial, temporal, or individual framework* within which the main predication holds" (Chafe 1976: 50), we find examples where the prefield constituent formally isolated by post-initial *aber* is neither. For example, Büring's (2016) example in (23) above can quite uncontroversially be altered to include post-initial *aber* as in (24):

(24)   *Ich trinke, weil ich Durst habe, NICHT **aber**, weil ich traurig bin.*
         'I drink because I'm thirsty, but not because I'm sad.'

One could argue, in line with Sæbø (2003: 262, footnote 6), that the ellipsis typical for *aber*-conjunctions blurs the lines between the syntactic positions in that *aber* might not actually be in post-initial position in (24). However, we also find corpus examples such as the following where *aber* is unambiguously post-initial, but the prefield constituents *tatsächlich* ('indeed') in (25) and *vor allem* ('above all') in (26) are neither temporal, spatial, or individual frame, nor likely to be analyzed as topical at all:

(25)   *"Girl-Power" sollte ein konsumierbarer Feminismus sein, der endlich gut aussieht und niemandem zu nahe tritt. […] Tatsächlich **aber** bremste die "Girl-Power" die Gleichberechtigung.*

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[11] The general frustration with the notion of topicality is also described by Molnár et al. (2019) who ascribe definitional difficulties to the fact that "a satisfactory theoretical and empirical analysis of topichood presupposes that both the interplay of discourse and grammar and the relation between universal topic features and cross-linguistic variation are taken into consideration" (Molnár et al. 2019: 31).

'"Girl power" was meant to be a consumable form of feminism that, finally, looks attractive and doesn't offend anyone. […] Indeed/In reality CONN, "girl power" curbed equality.'

DeReKo; Z14/JAN.00188 Die Zeit (Online-Ausgabe), 09.01.2014, "1994"

(26)   *Weil die Datenträger mechanisch rotieren, sind sie anfällig für mechanische Fehler […]. Vor allem **aber** verbrauchen sie viel Energie.*
'Since the data storage devices rotate mechanically, they are susceptible to mechanical defects […]. Above all CONN, they spend a lot of energy.'
Z14/APR.00389 Die Zeit (Online-Ausgabe), 17.04.2014, „Von Stanford nach Halle"

What is most interesting about these examples, is that their interpretation seems to change to other types of contrast altogether. In (25), the contrast is of the Denial of Expectation kind: the violation of the expectation that the concept of "girl power" would become an accessible form of feminism is even encoded in the modal *sollte* ('should have/was meant to be'). In (26), the comparison of two disadvantages of vinyl as a data storage device prompts an interpretation as Argumentative Contrast. While approaches such as Winterstein's (2012, cf footnote 3 above) assume all instances of contrast to be argumentative, the contrastive evaluation is much more accessible in (26) than in e.g. (20) or (21) above. This may be due to *vor allem* ('above all') already encoding an evaluation, just as the modal *sollte* in (25) already encodes a violated expectation. However, it may also be that the non-topicality of the constituents isolated by *aber* already indicates a change in type of contrast.

The discussion of post-initial *aber* and topicality in this section raises interesting theoretical questions. Is formal contrast defined by certain types of topic development? How do cases with constituents formally isolated by post-initial *aber* that fall outside of any notion of topicality fit into the theory? Can we use the topic potential of post-initial *aber*'s prefield constituents as a means to formally distinguish different uses of *aber*? In the next section, I will discuss a corpus study that addresses these questions.

4   Topic progression with *aber* in post-initial position

The discussion in the previous section has shown that contrast, post-initial *aber*, and topicality are linked in an interesting interplay. Section 2 has shown that contrast is defined in terms of alternatives that information structurally manifest themselves as contrastive topics, foci, or

both. Section 3 has shown that post-initial *aber* is prone to mark the formally isolated prefield constituent as a shifted topic (or 'delimitator' in Krifka's (2008) terminology). This topic discontinuity may involve Contrastive Topics or Topic Promotion. Crucially, however, the topic status of the isolated constituent is a point of discussion: next to expressions denoting (sets of) entities that may form aboutness topics, frame-setting adverbials frequently occur in this position and may be analyzed as frame-setting topics. Moreover, the prefield constituent may be an expression not usually analyzed as potential sentence topics, such as sentence adverbials. At first sight, the difference between potentially topical (aboutness expressions and frame-setting adverbials) and non-topical expressions that are formally isolated by post-initial *aber* may indicate different types of contrast altogether.

The goal of this section is to provide corpus data with post-initial *aber* in order to find out whether we can use the topic potential of post-initial *aber*'s prefield constituents as a means to formally distinguish different uses of *aber*. For this, 200 cases of post-initial *aber* are annotated for the prefield constituent's topic potential and the type of topic progression if applicable.

4.1 Corpus data

The data consist of 200 occurrences with post-initial *aber* randomly extracted from the tagged DeReKo newspaper sub-corpus *Die Zeit*. The search request was formulated such that *aber* is followed by a finite verb. In order to exclude elliptical sentences without a prefield constituent while also allowing for prefield constituents of varying size and complexity, *aber* had to be preceded by a minimum of one and a maximum of five words counted from the beginning of the sentence.[12]

Since the conjuncts linked by adverb connectives such as *aber* do not have to be juxtaposed (cf. e.g. Miltsakaki et al. 2004, Asher & Vieu 2005) and may vary in size (cf. e.g. Fetzer 2012, Breindl et al. 2014), the extracted preceding context contained at least five sentences. The external conjunct was identified among this preceding context following the criteria by Miltsakaki et al. (2004). Incomprehensible or incomplete conjuncts (e.g. due to ellipsis), as well as those that comprised more than one sentence were excluded from analysis such that 200 occurrences remained.

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[12] The full search request entered in the web-based application COSMAS II (archive *tagged-T2*, corpus *die Zeit*) reads as follows: "<sa> /+w1:5 aber MORPH(VRB fin)".

4.2   Annotation of topic status and progression

As discussed in section 3, the analysis of topicality in association with post-initial *aber* requires the distinction between the potential type of topic (aboutness, frame-setting or non-topic) from the type of topic progression (Contrastive Topics vs. Topic Promotion).

The constituent preceding post-initial *aber* is thus first annotated for topic potential. This is done in accordance with the characteristics for the different notions of topic discussed above: a potential aboutness topic is a constituent denoting (sets of) entities, morpho-syntactically in keeping with DPs such as proper names and pronouns or (referential) PPs. Unlike e.g. Kiss (2002) mentioned above, however, I also consider kind-denoting and non-referential expressions such as the generic *Gold* ('gold') in (27) or indefinite pronouns such as *einige* ('some') or *andere* ('others') as potential aboutness topics. Potential frame-setting topics are adverbs or adverbial PPs that indicate a spatial or temporal frame or domain[13] (in line with e.g. Chafe 1976 cited above), such as the temporal *im Winter* ('in/during winter') in (28).

(27)   *Papiergeld wurde schon öfter in der Geschichte wertlos. [Gold]$_{AT}$ **aber** kann man immer gegen irgendwas eintauschen.*
        'Throughout history, banknotes have become worthless from time to time. Gold CONN is always exchangeable for something.'
        Z14/MAR.00266 Die Zeit (Online-Ausgabe), 20.03.2014; Es geht wild hin und her

(28)   *Im Sommer geht es geografisch noch gerecht zu: [...]. [Im Winter]$_{FT}$ **aber** herrscht ein Ungleichgewicht: [...].*
        'In summer, things are equitable geografically […]. In winter CONN there is an imbalance: […]'
        Z14/FEB.00133 Die Zeit (Online-Ausgabe), 13.02.2014; Olympiateilnehmer

Temporal adverbs that do not denote temporal frames in the strict sense such as *zugleich* or *zeitgleich* ('at the same time') form an exception, as will be discussed in section 5. Finally, the topic status of the prefield constituent preceding post-initial *aber* may be a non-topic. This category corresponds to a 'none of the above'-category and comprises sentence adverbials as in (25) above and infinitival constructions, but also focal constituents marked by focus particles such as *nur* ('only') or *auch* ('too') (cf. Molnár's 1998 concept of focus restriction, see also Molnár et al. 2019).

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[13] I use the term 'domain' here to include e.g. concessive, final or modal adverbials.

(i) **Annotation of topic status**
   A) Potential aboutness topics (DPs/PPs denoting (sets of) entities) [AT]
   B) Potential frame-setting topics (adverbs/adverbial PPs denoting space, time, domain) [FT]
   C) Non-topics (sentence adverbials, infinitival constructions, focal constituents) [NT]

The second annotation criterion for the prefield constituent isolated by post-initial *aber* is the type of topic progression. Naturally, this is only applicable if the constituent is annotated as potential aboutness or frame-setting topic in the first place.

As discussed in the previous section, I distinguish two types of topic progression with post-initial *aber*: Contrastive Topics and Topic Promotion. Contrastive Topics are defined in Büring's (1996, 2016) sense in that the topic forms a non-exhaustive set of alternatives with the topic of the external conjunct. In (27) above, the potential aboutness topic *Gold* ('gold') is a non-exhaustive alternative to the topic of the external conjunct *Papiergeld* ('banknotes'), whereas in (28) the potential frame-setting topic *im Winter* ('in/during winter') is an alternative to *im Sommer* ('in/during summer'). The non-exhaustive alternative is not restricted to a certain information structural status in the external conjunct; cf. Umbach's (2005) 'crossed alternatives' or discussion in Breindl et al. (2014: 524) mentioned above. For the potential frame-setting topic *neuerdings* ('recently') in (29), for example, the non-exhaustive alternative is not the potential local frame topic *in der Türkei* ('in Turkey'), but the temporal adverbial *lange Zeit* ('for a long time') which is part of the external conjunct's comment.

(29)   In der Türkei verfolgte der Staat lange Zeit rachsüchtig nur die eigenen Bürger.
       Neuerdings **aber** verfolgt der Staat auch sich selbst.
       'In Turkey, the state has vindictively persecuted its own citizens for a long time.
       Recently CONN, the state also persecutes itself.'
       Z14/JAN.00104 Die Zeit (Online-Ausgabe), 02.01.2014; Die Dämonen, die er rief

Because of this latitude as to the information structural status of the explicit alternative, it is not strictly necessary to analyze the potential topic constituent of the external conjunct. Added to that, we find instances where the non-exhaustive alternative is not mentioned explicitly at all. Following Erteschik-Shir (1997, 1999, cited by Lahousse 2007), Lahousse (2007: 1) argues that "spatio-temporal topics, or *stage topics*, can also be implicit". From this it follows that a potentially topical constituent may be analyzed as contrastive via accommodation of a covert, i.e. implicit, non-exhaustive alternative in the preceding conjunct. Lahousse (2007) observes

that such implicit frames are more likely to be temporal, since the assumption of "a covert stage topic amounts to saying that [the] clause is linked to the previous context" (2007:4) as formally expressed in verbal tense-marking (2007: 5). This applies to cases such as in (30), where the attempts at academic reformation are marked as past, which contrasts with the present tense and the temporal adverb *jetzt* ('now') in the second conjunct. In this study, however, I consider the possibility to accommodate implicit contrastive alternatives to the potential topic isolated by post-initial *aber* more broadly. For the isolated frame *am Arbeitsplatz* ('at work') in (31), for example, we can accommodate the generic alternative 'everywhere else'.

(30) *Unzählige akademische Reformversuche […] haben die hierarchische Struktur der Universität nicht aufbrechen können. [Jetzt]$_{FT}$ **aber** gibt es Anzeichen, dass sich das ändern könnte.*
'Myriads of attempts at academic reformation could not breach the hierarchical structure of universities. Now CONN there are signs of change.'
Z14/MAR.00205 Die Zeit (Online-Ausgabe), 13.03.2014; Forschung aus fairer Produktion

(31) *Die Pflanze braucht Wasser und Luft und vielleicht etwas Liebe. [Am Arbeitsplatz]$_{FT}$ **aber** gibt es tausend wichtigere Dinge als Wasser und Luft und vor allem Liebe.*
'The plant needs water and air and maybe some love. At work CONN there are a thousand things more important than water and air and, particularly, love.'
Z14/APR.00149 Die Zeit (Online-Ausgabe), 10.04.2014, Zucht und Ordner

The third and final type of topic progression annotated is Topic Promotion, i.e. 'Shifting Topics' in Breindl's (2011) terminology or 'linear progression' in Daneš's (1970), as shown in (32). As mentioned above, the two conjuncts do not have to be juxtaposed; therefore, cases where a referent was re-introduced after one or more intermediate sentences also counts as Topic Promotion.[14]

(32) *Die Staatsanwältin wirft dem Verteidiger$_i$ einen Schauprozess vor. [Der$_i$]$_{AT}$ **aber** bekommt Szenenapplaus von den Zuschauerbänken.*
'The attorney accuses the defending lawyer$_i$ of a show trial. He$_i$ CONN receives acclamations from the spectator bench.'
Z14/MAI.00418 Die Zeit (Online-Ausgabe), 22.05.2014; Beifall für den Angeklagten

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[14] Cf. example (17) above, where the constituent *der Stadtochse* isolated by causal *nämlich* is introduced not in the conjunct immediately preceding, but in the one before that, and example (19).

(ii) **Annotation of topic progression**
  (i) Contrastive Topics (explicit alternative)
  (ii) Accommodated Contrastive Topics (implicit alternative)
  (iii) Topic Promotion
  (iv) Non-topics (therefore not applicable)

4.3 Results

Figure 1 shows the results of the annotation of the constituent isolated by post-initial *aber* for topic status and topic progression. The height of the bars indicates the absolute frequency of the different potential topic types. With 81 instances (40.5%) potential aboutness topics are most frequent, followed by 73 cases of potential frame-setting topics (36.5%). Constituents that do not fall under the category of topicality make up 46 occurrences (23%). The grayscale filling of the bars indicates the annotation of topic progression for the two potential types of topic. Non-topical constituents were not applicable for annotation of topic progression. Overall, (explicit) Contrastive Topics (shown in white) is the type of topic progression annotated most frequently with 79 instances (51.2% of the cases where topic progression was annotated, i.e. excluding the non-topical instances). 31 cases were annotated as Accommodated Contrastive Topics (20.1%, shown in light grey). Finally, Topic Promotion (shown in darker grey) was annotated in 44 cases overall (28.6%).
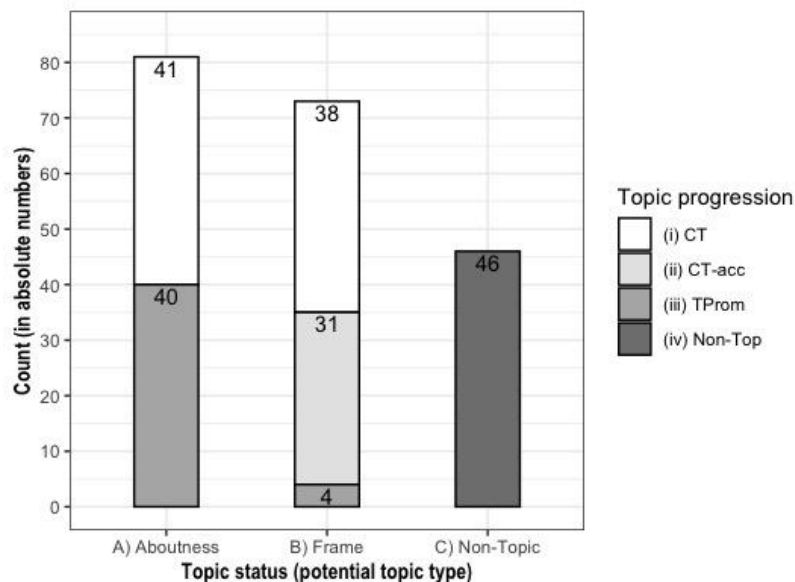

Figure 1 Annotation of Potential Topic Type and Topic Progression

As predicted by Lahousse (2007) and in spite of a broader conception of implicit topics, accommodation of Contrastive Topics was exclusively annotated for potential frame-setting

topics (temporal and local). Combined with explicit Contrastive Topics, we find that frame-setting adverbials that are formally isolated by post-initial *aber* predominantly constitute non-exhaustive alternatives (94.5% as compared to 5.5% Topic Promotion). Expressions denoting (sets of) entities, on the other hand, are split between progressions with (explicit) Contrastive Topics and Topic Promotion (50.7% and 49.3%, respectively). Since the latter is considered a common discourse strategy to 'properly' introduce discourse referents (*Let me tell you something about Paul. He is such a nice guy*.), it is to be expected that it should primarily occur with potential aboutness topics.

Given that, according to Breindl (2011), post-initial *aber* only isolates topical elements, the high frequency of non-topical constituents in the corpus data is most striking. Regardless of the notion of topicality one wants to adopt – sentence adverbials, focus particles and expressions of simultaneity fall outside of that. In section 3, we have seen examples discussed by Büring (2016) who shows with (28) that the negation particle *nicht* may also be CT-marked, i.e. highlighted as (part of) a non-exhaustive alternative by prosodic means. While the corpus data consist of newspaper articles and therefore do not provide prosodic information, none of the non-topical data can felicitously be read with a CT-intonation, i.e. hat contour. With this, instances with post-initial *aber* isolating non-topical constituents do not behave in the same way as the instances with potentially topical constituents – neither potential aboutness or frame topics, nor Contrastive Topics or Topic Promotion.

5 Discussion: structural versus non-structural contrast

The results of the corpus study presented in the previous section show that the overall majority (77%) of constituents isolated by post-initial *aber* are potentially topical. The distinction between potential topic type (aboutness or frame), on the one hand, and type of topic progression ((accommodated) Contrastive Topics or Topic Promotion), on the other, reveals that both types of topic progression occur with both types of potential topics.

Both, expressions denoting (sets of) entities and frame-setting adverbials, can denote a non-exhaustive alternative to an overt, or in the case of frame-setters also covert, alternative in the first conjunct. The effect of such formally marked alternatives is the same for both types of constituents, cf. Krifka's (2008) notion of delimitation mentioned in section 3 or Büring's (2016) view that CT-marking is not restricted to a certain type of constituent. As discussed in section 2, this effect, i.e. the implicature of comparability involved with contrastive topics, is

central for (information structurally defined) contrast, cf. 'formal contrast/opposition' (Sæbø 2003, Umbach 2005, Jasinskaja 2012) or 'contrastive comparison' (Breindl et al. 2014). Hence, the corpus examples in (27) and (28) above do not differ in that regard, i.e. they both provide points of comparison (of two payment methods in (27) and two seasons in (28)).

Moreover, both, potential aboutness and frame topics isolated by post-initial *aber*, can provide a re-introduced or 'promoted' topic. While this type of topic progression clearly predominates with aboutness rather than frame topics (40 as compared to 4 instances, respectively), I do not detect a conceptual difference between cases with promoted aboutness topics such as in (32) above and those with promoted frames as in (33) that go beyond the frame/aboutness-divide.

(33) *Seit der Jahrtausendwende stagnierte der Umsatz der Branche, während er sich im Internet$_i$ alle fünf Jahre verdoppelte. [Dort$_i$]$_{FT}$* **aber** *will der Riese Amazon den Markt für sich haben und verzichtet dafür auf einige kurzfristige Gewinne.*
'Since the turn of the millennial, the branch's turnover stagnated, while it doubled every five years on the internet$_i$. There CONN the giant Amazon wants to monopolize the market, dispensing with short-term profits.'
Z14/JAN.00454 Die Zeit (Online-Ausgabe), 23.01.2014, Bloß schnell raus

As we have seen in section 2, Breindl et al. (2014) distinguish contrast with *aber* that involves Contrastive Topics from what they call 'weak contrast' involving Topic Promotion. As I have argued above, however, the similarities become more apparent when keeping in mind the central aspect of contrast: alternatives. In the case of Contrastive Topics, the alternatives are part of the denotations; in the case of Topic Promotion, the alternatives lie on a more abstract – or rather: formal – level, displaying an alternative choice of topic. The common feature of the data where the prefield constituent formally isolated by post-initial *aber* is potentially topical is that this constituent is marked as an alternative topic, be it contrastive or promoted, aboutness or frame. With this, these cases can not only be subsumed under one information structurally defined notion of contrast, they also clearly dissociate from the data with isolated non-topical constituents that do not allow for either interpretation of alternatives.

Making up almost a quarter of the data, non-topical constituents isolated by post-initial *aber* are no peripheral matter. The question is what post-initial *aber* does in these cases if it does not

mark alternatives on an information structural level. A closer (qualitative) look at these data provide interesting insights, with two kinds of constituents sticking out.[15]

The first group, which makes up 16 cases, contains sentence adverbials such as *tatsächlich* ('indeed/in reality'), *vielleicht* ('maybe') or *wundersamerweise* ('astonishingly'). In all of these cases, the interpretation of contrast is that of Denial of Expectation, as in (25) discussed in section 3.2. As I have argued there, the violated expectation that "girl power" become an accessible form of feminism is encoded by further formal means, i.e. the modal verb *sollte* ('should have'). For Blühdorn (2008: 220), the interaction between connectives and linguistic devices encoding epistemic modality such as modal verbs, epistemic particles and verb modus (indicative vs. conjunctive) is related to an epistemic interpretation of the connection. And indeed, the other cases with formally isolated sentence adverbials contain such markers in the first conjunct, e.g. a shift from conjunctive *hätten gebraucht* ('would have needed') to the indicative *war* ('was') in (34):

(34) *"Wir hätten", sagt sie, "einen neutralen Vermittler gebraucht. Je früher, desto besser." [Vielleicht]NT **aber** war das Projekt Piz Tschütta von Anfang an zum Scheitern verurteilt.*

'"What we would have needed", she says, "was a neutral mediator. The earlier, the better." Maybe CONN the project Piz Tschütta was doomed to fail from the beginning.'

Z14/FEB.00089 Die Zeit (Online-Ausgabe), 06.02.2014, Licht aus!

According to Blühdorn (2008), this indicates a sentence connection on the epistemic level (cf. Sweetser 1990), i.e. the connection of two epistemic states: something that might be or might have been and something that is or was. Since in our case, the connective is the contrastive *aber*, these two states are interpreted as non-compatible alternatives, i.e. an assumption or expectation and its violation. Interestingly, this also falls in line with Sæbø's (2003: 268) formulation that the alternatives may be "individuals, places, times, *worlds* [emphasis mine, RZ], or sets of sets of such entities" as mentioned above. My proposal would be that the shift from alternative individuals and frames to alternative worlds involves a shift to Denial of Expectation contrast.[16]

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[15] The non-topicality of the two cases that do not fall into either group is due to a focus particle (cf. focus restriction Molnár 1998): *nur zwei Drittel der Schüler* ('only two thirds of the students') and *so eisig-realistisch* (' so cold-heartetdly realisitic'). How such cases fit into the picture painted here remains an open question for future research.
[16] A suggestion for how to formalize this kind of contrast is given in Zieleke (2021), where I use the terminology 'generic contrast'.

The second group, which makes up 28 cases, contains expressions of comparison such as *noch weniger* ('even less') and the dominant *vor allem* ('above all', 16 instances). The latter in particular, which encodes an evaluation, prompts an interpretation as contrastive evaluation or Argumentative Contrast, as discussed for (26) in section 3.2 above. In (26), two (co-existing) features of vinyl are compared to each other in two conjuncts. *Vor allem aber* strongly advocates that the feature described in the second conjunct be evaluated as more relevant. Again, we find a connection to Sæbø's (2003) thoughts on the make-up of contrastive alternatives in that he also states that they can be "ordered along some scale" (2003: 268). Again, my proposal here is that expressions of such an ordering involve a shift from information structural to argumentative alternatives, leading to Argumentative Contrast.

The evaluative comparison of two co-existing aspects is also prevalent in cases with expressions of simultaneity isolated by post-initial *aber*, as e.g. *zugleich* ('at the same time') in (35)[17]:

(35)   *Betriebswirtschaftlich ist das heikel. Zwar spricht das Prädikat "mild" jene Ziel-*
         *gruppe an, die Wert auf "mild" legt. [Zugleich]NT **aber** schreckt es alle anderen ab.*
         'Economically, this is precarious. Admittedly, the predicate "mild" attracts the
         target group. At the same time CONN all other potential customers are put off.'
         Z14/MAR.00326 Die Zeit (Online-Ausgabe), 20.03.2014; „Mild"

Both observations are in line with Corminboeuf's (2014) discussion of alternative ways to mark contrastive relations in French. In particular, he analyzes morpho-syntactic means that distinguish between what Anscombre (2002, cited by Corminboeuf 2014) calls 'direct and indirect counter-argumentation' ("la contre-argumentation « directe » et la contre-argumentation « indirecte »", Corminboeuf 2014: 2370): opposing polarity, modality, and aspectuality in the conjuncts in the case of 'direct' contrast (2014: 2371/2372), and scalar markers such as the superlative or quantifiers in the case of 'indirect' contrast (2014: 2374). As the examples for 'direct' and 'indirect counter-argumentation' in (36) and (37) show, respectively (examples (13) and (15) in Corminboeuf 2014: 2370), these relations correspond to Denial of Expectation and Argumentative Contrast in our terminology.

(36)   *Les autruches sont des oiseaux, **mais / pourtant** elles ne volent pas.*
         'Ostriches are birds, but / yet they don't fly.'

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[17] An additional hint that isolated expressions of simultaneity invoke the same argumentative interpretation as expressions of comparison is *zwar* ('admittedly') in the first conjunct in (35), cf. Leuschner & van den Nest (2012) who discuss the construction *zwar ... aber* as an indicator for Argumentative Contrast.

(37)   *Je ne prends pas de dessert : j'adore le sucré, **mais** ça fait grossir.*
       'I won't have dessert: I love sugar, but it's fattening.'

As this discussion has shown, the 23% of the data where post-initial *aber* formally isolates a non-topical constituent are no unaccountable exceptions to a construction otherwise marking topicality. Rather, we have to redefine the function of post-initial *aber*, on the one hand, and the formal features of different kinds of contrast, on the other. My proposal is as follows: Post-initial *aber* formally isolates the prefield constituent and marks it as an *alternative*. This matches well with both, the general concept of contrast and the overall (albeit abstracted) function of German post-initial adverb connectives. A possibility to consolidate the different approaches to topicality discussed in section 3 might be to use Krifka's (2008) term of delimitation which incorporates alternativeness: post-initial *aber* marks the prefield constituent as a delimitator, referring to aboutness-topics, frames, worlds or scales.

The formal features of these isolated constituents then make up different kinds of contrast. Constituents that have topic potential, i.e. expressions denoting (sets of) entities and frame-setting adverbials, provide information structural alternatives. I suggest to call this information structurally defined contrast that relies on a specific topic development *Structural Contrast*. Constituents that do not have topic potential, in particular focal elements, sentence adverbials, and expressions of comparison, provide alternatives on a different level. Accordingly, I suggest the term *Non-Structural Contrast*. As we have seen, further formal features such as the type of expression formally isolated and expressions of epistemic modality in the conjuncts in general then allow for a distinction between Denial of Expectation (by reference to alternative worlds) and Argumentative Contrast (by reference to an ordered scale). Which of these further formal means are crucial and how this can be integrated into a theory of contrast remains to be analyzed with bigger data sets.

6 Summary

In this article, I set out to investigate German post-initial *aber* and its potential to mark contrast via information structural means. In order to find out whether post-initial *aber* formally isolates topic alternatives, we had to refine a notion of topicality that can account for similarities between different constructions. Admitting both, expressions denoting (sets of) entities and frame-setting adverbials, to be considered as topical in Chafe's sense in that "the topic sets *a*

spatial, temporal, or individual framework within which the main predication holds" (Chafe 1976: 50), allowed us to identify the similarities between them. The corpus data presented in section 4 showed that both types of potential topics correspond to information structural alternatives involving different kinds of topic development: Contrastive Topics with the alternatives as part of the denotations and Topic Promotion with the more abstract (discourse organizational) alternatives of topic choice.

This information structurally defined contrast that relies on a specific topic development, for which I suggested the term *Structural Contrast*, makes up 77% of the data with post-initial *aber*. In the other 23% of the data, the constituents formally isolated by post-initial *aber* are non-topical such as focal elements, sentence adverbials, and expressions of comparison. I suggested the term *Non-Structural Contrast*. As the discussion of the corpus data shows, however, this term should not imply that there are no relevant structural features – both sub-types of contrast, Denial of Expectation and Argumentative Contrast, display specific formal patterns involving a specific type of expression formally isolated by *aber* (indicating alternative worlds and alternatives ordered on a scale, respectively) and expressions of epistemic modality in the conjuncts. Rather, the alternatives evoked by contrast with post-initial *aber* do not lie on a structural level: in the case of Denial of Expectation, *aber* marks alternative epistemic states, whereas in the case of Argumentative Contrast it marks alternative evaluations of (co-existing) facts.

With its function to formally isolate the prefield constituent, German post-initial *aber* thus provides the possibility to distinguish different kinds of contrast via purely formal means. Future research will have to catalog these means and investigate their role in conjunctions with *aber* in other syntactic positions as well as their transferability to contrastive connections in other languages.

7 References

Anscombre, Jean-Claude & Oswald Ducrot. 1977. Deux mais en fran çais? *Lingua* 43(1). 23–40.

Asher, Nicholas & Laure Vieu. 2005. Subordinating and coordinating discourse relations. *Lingua* 115(4). 591–610.

Blakemore, Diane. 1989. Denial and contrast: A relevance theoretic analysis of" but". *Linguistics and Philosophy*, 15–37.

Blühdorn, Hardarik. 2008. Epistemische Lesarten von Satzkonnektoren – Wie sie zustande kommen und wie man sie erkennt. In Inge Pohl (ed.), *Semantik und Pragmatik – Schnittstellen*, 217–251. Frankfurt am Main: Lang.

Blühdorn, Hardarik. 2017. Diskursmarker: Pragmatische Funktion und syntaktischer Status. In Hardarik Blühdorn, Arnulf Deppermann, Henrike Helmer & Thomas Spranz-Fogasy (eds.), *Diskursmarker im Deutschen: Reflexionen und Analysen*, 311–336. Verlag für Gesprächsforschung Göttingen.

Breindl, Eva. 2011. 'Nach Rom freilich führen viele Wege': zur Interaktion von Informationsstruktur, Diskursstruktur und Prosodie bei der Besetzung der Nacherstposition. In Gisella Ferraresi (ed.), *Konnektoren im Deutschen und im Sprachvergleich: Beschreibung und grammatische Analyse* (Studien zur deutschen Grammatik 53), 17–56. Tübingen: Narr.

Breindl, Eva, Anna Volodina & Ulrich Hermann Waßner. 2014. *Handbuch der deutschen Konnektoren 2. Semantik der deutschen Satzverknüpfer*. Berlin: Mouton de Gruyter. doi:10.1515/9783110341447.

Büring, Daniel. 1997. *The meaning of topic and focus — the 59th street bridge accent*. London: Routledge.

Büring, Daniel. 2016. (Contrastive) Topic. In Caroline Féry & Shinichiro Ishihara (eds.), *The Oxford Handbook of Information Structure*, 64–85. Oxford University Press.

Chafe, Wallace L. 1976. Givenness, contrastiveness, definiteness, subjects, topics and point of view. In Charles N. Li (ed.), *Subject and Topic*, 27–55. Academic Press New York.

Corminboeuf, Gilles. 2014. L'identification des relations de discours implicites: Le cas de l'adversation. In *SHS Web of Conferences*, vol. 8, 2367–2382.

Daneš, Frantlšek. 1970. Zur linguistischen Analyse der Textstruktur. *Folia Linguistica* 4(1–2). 72–78.

Fetzer, Anita. 2012. Textual Coherence as a Pragmatic Phenomenon. In Keith Allan & Kasia M. Jaszczolt (eds.), *Cambridge Handbook of Pragmatics*, 447–467. Cambridge University Press.

Givón, Talmy. 1983. *Topic Continuity in Discourse*. Amsterdam/Philadelphia: Benjamins.

Imo, Wolfgang. 2017. Diskursmarker im gesprochenen und geschriebenen Deutsch. In Hardarik Blühdorn, Arnulf Deppermann, Henrike Helmer & Thomas Spranz-Fogasy (eds.), *Diskursmarker im Deutschen: Reflexionen und Analysen*, 49–72. für Gesprächsforschung Göttingen.

Jacobs, Joachim. 2001. The dimensions of topic-comment. *Linguistics* (39/4). 641–681.

Jasinskaja, Katja. 2010. Corrective contrast in Russian, in contrast. *Oslo Studies in Language* 2(2). 433–466.

Jasinskaja, Katja. 2012. Correction by adversative and additive markers. *Lingua* 122(15). 1899–1918.

Jasinskaja, Katja & Henk Zeevat. 2008. Explaining additive, adversative and contrast marking in Russian and English. *Revue de Sémantique et Pragmatique* 24(1). 65–91.

Kiss, Katalin É. 2002. *The syntax of Hungarian*. Cambridge University Press.

König, Ekkehardt. 1991. Concessive relations as the dual of causal relations. In Dietmar Zaefferer (ed.), *Semantic universals and universal semantics*, 190–209. De Gruyter.

Krifka, Manfred. 2008. Basic notions of information structure. *Acta Linguistica Hungarica* 55(3-4). 243–276.

Lahousse, Karen. 2007. Implicit stage topics. A case study in French. *Discours. Revue de linguistique, psycholinguistique et informatique. A journal of linguistics, psycholinguistics and computational linguistics* 1. 1–23.

Lakoff, Robin. 1971. *If's and but's about conjunction*.

Lang, Ewald & Marcela Adamíková. 2007. The lexical content of connectors and its interplay with intonation. An interim balance on sentential connection in discourse. In Andreas Späth (ed.), *Interfaces and Interface Conditions*, 199–230. Mouton/de Gruyter.

Leuschner, Torsten & Daan Van den Nest. 2012. Die *zwar... aber*-Relation im Gegenwartsdeutschen: Funktionsweise–Variation–Grammatikalisierung. *Deutsche Sprache* 40(1). 2–31.

Malchukov, Andrej. 2004. Towards a semantic typology of adversative and contrast marking. *Journal of Semantics* 21(2). 177–198.

Miltsakaki, Eleni, Aravind Joshi, Rashmi Prasad & Bonnie Webber. 2004. Annotating discourse connectives and their arguments. In *Proceedings of the Workshop Frontiers in Corpus Annotation at HLT-NAACL 2004*, 9–16.

Molnár, Valéria. 1998. On the Syntax, Phonology, Semantics and Pragmatics of the so-called "Contrastive Topic" in Hungarian and German. *Acta Linguistica Hungarica* 45(1). 89–166.

Molnár, Valéria, Verner Egerland & Susanne Winkler. 2019. Exploring the Architecture of Topic at the Interface of Grammar and Discourse. In Valéria Molnár, Verner Egerland & Susanne Winkler (eds.), *Architecture of Topic*, 1–43. De Gruyter.

Riester, Arndt, Lisa Brunetti & Kordula De Kuthy. 2018. Annotation guidelines for Questions under Discussion and information structure. In *Information structure in lesser-described languages. studies in prosody and synta*x, John Benjamins Amsterdam & Philadelphia.

Roberts, Craige. 1998. Focus, the flow of information, and universal grammar. In *The limits of syntax*, 109–160. Brill.

Rudolph, Elisabeth. 2012. *Contrast*. De Gruyter.

Sanders, Ted JM, Wilbert Spooren & Leo GM Noordman. 1992. Toward a taxonomy of coherence relations. *Discourse Processes* 15(1). 1–35.

Sæbø, Kjell J. 2003. Presupposition and contrast: German *aber* as a topic particle. *Proceedings of Sinn und Bedeutung* (7). 25–271.

Sweetser, Eve. 1990. *From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure*, vol. 54. Cambridge University Press.

Umbach, Carla. 2005. Contrast and information structure: A focus-based analysis of *but*. *Linguistics* 43(1). 207–232.

Winterstein, Grégoire. 2012. What *but*-sentences argue for: An argumentative analysis of *but*. *Lingua* 122(15). 1864–1885.

Zieleke, Regina. 2021. The incausality of 'dennoch' and 'trotzdem': Generic contrast. In *Proceedings of Sinn und Bedeutung*, vol. 25, 924–938.