

## **CONTRASTIVE MARKERS AND DIALOGICALITY**

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### **Abstract**

Typically, contrastive relations occurring at various levels of the text are explicitly marked by discourse markers. The specific type of contrast these markers signal, however, is to be negotiated by the context. The contrast may involve 'the (propositional) content domain', 'the epistemic domain (the speaker's beliefs)', or 'the speech act domain'. In academic discourse contrastive markers serve as text-organizing devices, and they may extend their scope to function as markers of intertextuality and dialogicality introducing other 'voices' in the written as well as spoken monologue.

### **1 Introduction<sup>a</sup>**

The relations of contrast and concession<sup>b</sup> rank among the "most informative semantic relations" (Kortmann 1991), i.e. they require much co-/ contextually substantiated evidence or general knowledge on the part of the reader to be identified as the semantic relation obtaining between the units concerned. Therefore, they tend to be explicitly signalled in the text. These relations occur at various levels, from modifiers within phrases up to paragraphs and indeed entire texts. We shall deal with clausal and higher levels only here, examining on the one hand the means of expressing these relations, and trying to specify the focus of contrast on the other.

### **2 Material and method**

Three types of texts were analysed, all of them from the field of academic discourse: spoken monological lectures and dialogues from the MICASE corpus<sup>c</sup> (referred to as mono 1 – 4 and dial 1 – 4, respectively, in the examples), and our own corpus of articles from American academic journals (written 1 – 7). The sub-fields comprise biological and health sciences, medical anthropology, chemistry, physics, and environmental research. The size of the three subcorpora was 30 000 words each.

The texts were searched automatically for well-established markers of contrastive and concessive relations, and subsequently analysed manually to recover those relations that are either unmarked or signalled in a less predictable manner.

The number of contrastive and concessive relations in the three types of texts is given in Table 1. Table 1 presents also the basic syntactic distinction between two types of markers: they link segments that are in a hypotactic or paratactic relation. As expected, there is a marked difference between the proportion of paratactic and hypotactic relations in spoken and written discourse, with parataxis being characteristic of spoken dialogue, and hypotaxis of written texts. While the hypotactic relations are always marked by a conjunction (*although, while, etc.*), the paratactic link may be marked by a conjunction (*and, but*), a conjunct (*however, by contrast, etc.*) or unmarked (although this does not mean total absence of a semantic clue, as will be shown below, cf. also Pípalová 1993). As far as the proportion of types of paratactic markers, Figure 1 suggests a difference between written texts on the one hand, and spoken discourse, both monological and dialogical, on the other. From the morphological point of view, the contrastive devices comprise conjunctions (*but*), adverbs (*conversely*) and prepositional phrases (*on the other hand*).

	total	hypotaxis		parataxis	
	$\Sigma$	$\Sigma$	%	$\Sigma$	%
written text	127	38	29.9	89	70.1
monologue	206	16	7.8	190	92.2
dialogue	228	4	1.8	224	98.2

Table 1: Contrastive markers in the three subcorpora (written texts, monological and dialogical spoken discourse)

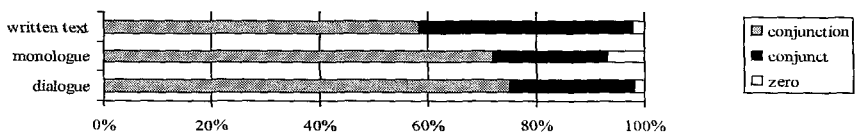


Figure 1: Contrastive markers in paratactic relations

### 3 Contrastive conjunctions and conjuncts as discourse markers

As mentioned above, we shall be concerned only with the relations obtaining at clausal and higher levels. The main reason for this limitation consists in the fact that at this level the marker “relates two separate messages” (Fraser 1999: 940) (ex. 1) while below this level it “functions purely as a conjunction within a single message” (Fraser 1999: 939) (ex. 2).

- (1) If recruitment had already begun, workers kept arriving at the baits, **but** removal of workers decreased their numbers at baits and allowed other species a greater chance of obtaining a portion of the resource. (written 5)
- (2) there are other and better ways **but** very much more expensive ways (mono 1)

Such delimitation is necessary also in view of the function of contrastive conjunctions and conjuncts as discourse markers. It is the fact that these expressions relate two separate messages that Fraser considers "a *sine qua non* of discourse markers".

The definitions of discourse markers (as well as the terms used to refer to these devices) are varied. We shall adhere to Fraser's approach here (Fraser 1999). He defines discourse markers as "a class of lexical expressions", which "signal a relationship between the interpretation of the segment<sup>d</sup> they introduce, S2, and the prior segment, S1" (Fraser 1999: 31). The markers do not 'display' a relationship but rather "impose on S2 a certain range of interpretations, given the interpretation(s) of S1 and the meaning of the discourse marker" (ibid.: 942). Therefore, "the analysis of discourse markers is part of the more general analysis of discourse coherence – how speakers and hearers jointly integrate forms, meaning, and actions to make overall sense out of what is said." (Schiffrin 1987: 49)

#### 4 Signals of contrast

Hypotactic contrastive relations are always explicitly marked, for paratactic relations the absence of a marker seems to be rather exceptional<sup>e</sup>. The hypotactic conjunctions in our corpora comprised: *although, even iff/ though, except (that), in spite of, though, whereas, while*. In spoken monologue the repertoire of these subordinators was the most varied; the limited choice, including only *although* and *whereas*, in dialogue is linked with the overall preference for parataxis. Paratactic contrastive relations were again signalled by the most varied means in spoken monologue, the repertoire being most limited in dialogue. The lecturers have available to them both the more formal means typical of written academic texts (*on the other hand, conversely, yet*), and those they share with more informal dialogue (*actually, and*) as well as some not attested in the other subcorpora: *after all, by contrast*, cf. Table 2 (the monologue and its overlaps with the other subcorpora are marked in grey).

	written	spoken discourse			written	spoken discourse	
		dialogue	monol.			dialogue	monol.
and	-	+	+	in contrast	+	-	-
actually	-	+	+	instead	+	-	-
after all	-	-	+	nevertheless	+	-	-
alternatively	+	+	+	nonetheless	+	-	-
anyhow	-	+	-	on the other hand	+	-	+
anyway	-	+	+	still	+	+	+
but	+	+	+	though	-	+	+
by contrast	-	-	+	yet	+	-	+
conversely	+	-	+	well	-	-	+
however	+	-	+				

Table 2: Discourse markers for paratactic contrastive relations

As mentioned above, contrastive relationships rarely remain explicitly unmarked (cf. Taboada 2006). At the same time, the lack of an explicit discourse marker does not entail the absence of a semantic relation. Conjunctions and conjuncts are not the only means of marking these relations: a contrast may be signalled using antonymous expressions in the contrasted segments (ex. 3). Lexical oppositeness may be used within a parallel pattern of contrast (contrasting two experimental situations in ex. 4) marked by conjunctions and conjuncts. Extralinguistic clues, such as laughter (ex. 5), may be provided as signals of contrast.

- (3) S1: ... now, we've had strange weather, we've had some cold mornings, we've had some hot mornings. um, in the morning, if you're cold, what do you do?  
 S2: drink coffee drink coffee...  
 S5: dress warmer  
 S1: dress warmer. what about on a hot day what do you do on a hot day?  
 S5: (get) naked (mono 1)
- (4) *C. clypeatus* bait occupation **started out high, but decreased over time** when *B. obscurior* were allowed access to baits; it **remained high** when *B. obscurior* were excluded. Conversely, *B. obscurior* bait occupation increased over time regardless of whether *C. clypeatus* were allowed access to baits. (written 5)
- (5) SU-M: looks pretty straight to me. <LAUGH> i don't know. (dial 3)

## 5 The scope of contrastive discourse markers

The scope of the connective "is not intrinsic to the connective, or the particular use of the connective, but a consequence of processing" (Unger 1996: 429). At the same time, Unger points out that paragraph boundaries in written texts and pauses in spoken discourse preceding the segment-initial marker may indicate a scope of contrast wider than the immediately preceding clause or sentence. However, our data do not suggest any convincing link between the scope and the presence (and length) or absence of pauses or hesitation and filler words preceding the contrastive marker. The scope of contrast signalled by the contrastive marker may be limited to the preceding clause within a sentence (ex. 1 above); alternatively, segment 2 may be contrasted with an adjacent preceding segment (ex. 6) across sentence boundary.

- (6) The sex of red-eared slider turtles is temperature-dependent and embryos incubated at female-producing temperatures have higher levels of aromatase activity in the brain than those incubated at male temperatures. **However**, embryos incubated at male-producing temperatures treated in ovo with Aroclor 1242 showed a significant increase in brain aromatase activity during the temperature sensitive period of sex determination. (written 3)

In a similar manner, the adjacent turns in a dialogue may be contrasted (ex. 7).

- (7) SU-F: it did look a little darker  
 SU-F: **but**, did you t- you said it had like a longer beak too **though**. (dial 3)

It may be noted in this connection that there seems to be a tendency to shift inter-turn contrast into an intra-turn one, which may serve as a face-saving device. The speaker briefly indicates agreement with the previous turn (*yeah*) only to refute it using a *but*-initiated segment (ex. 8).

- (8) SU-M: the, the young ones are brown.  
 SU-F: **yeah but**, [SU-M: (xx) ] they were all the same and they were flocked so there had to be some adults there. (dial 3)

In ex. 9 *but* relates the segment it introduces with the whole preceding paragraph rather than with just the immediately preceding segment.

- (9) this also has an important corollary, which follows directly from here, and that is, the growth responses, the surplus is going to be inversely related to the metabolic response, for a given amount of food available and remember, food is typically, limiting. in other words, if the metabolic rate increases, there will be a smaller surplus. conversely, if the animal behaves in such a way as to lower its metabolic rates by choosing an appropriate habitat for example, the surplus can increase. **but** there's inverse relationship between, growth and metabolism. (mono 1)

The segments related by a discourse marker need not be adjacent. The link between the contrastive segments may be interrupted by an inserted parenthetical segment (ex. 10)

- (10) and there in particular there's one culprit we're very concerned with mercury. okay and i'm going to be doing an illustration with mercury H-G, uh in a moment, **but** it is not the metal that actually is in the water that's the concern it's the metal ions. (mono 3)

## 6 The meaning of contrastive discourse markers

Discourse markers have a procedural rather than conceptual meaning, i.e. they relate two discourse segments, specifying "how the segment they introduce is to be interpreted relative to the prior" (Fraser 1999: 944). They do not contribute to the propositional meaning of either segment. Therefore, as shown above, the omission of a discourse marker, where syntactically possible, does not affect the propositional content of the segments. "However, where the discourse markers are not present, the hearer is left without a lexical clue as to the relationship intended between the two segments." (ibid.) The clue consists in the 'core' meaning of the discourse marker. Thus contrastive markers signal that the interpretation of segment two contrasts with an interpretation of segment one.<sup>f</sup> Depending on the context (both linguistic and non-linguistic), the contrastive relationship may involve 'the (propositional) content domain', 'the epistemic domain (the speaker's beliefs)', or 'the speech act domain' (ibid.: 946).

The contrastive relations attested in our monological corpora included the content relations, illustrated by most of the above examples, but also other types of contrast. They seem to have text-organizing functions in academic discourse: in ex. 10 above the *but*-initiated segment serves to specify the main topic/ concern (*metal ions*), contrasting it with the one suggested before (*mercury*). Likewise, in ex. 11 *but* is a topic-changing signal.<sup>g</sup> Frequently, the marker is used to indicate the speaker's return to a temporarily abandoned topic, contrasting it with the digression (ex. 12). The scope of the 'correction' may be narrower – in ex. 13 *but* serves as a marker of self-correction. In its textual function, the contrastive markers thus indicate a beginning of a segment which the speaker considers the appropriate way to continue (as contrasted with the previous segment: a mistake, digression or an inappropriate topic).

- (11) um, we um, should be treated to some of that humor today, uh **but** the main thing i want to say to you is, on behalf of the University, (mono 4)

- (12) factors in the environment can also influence the way fishes respond in time, particularly seasonally, for reproduction, for parental care, for migration, and those kinds of things. these again involve energy expenditures. um, i'm told that uh, sex requires a lot of energy perhaps you could advise me sometime, <SS LAUGH> um ... that energy sort of has to come from somewhere. hence the preseduction meal perhaps, that we were talking about the other day, <SS LAUGH> um, **but anyway**, uh uh i- as you can see there there are energetic consequences though in preparing animals in time, for various events that are happening in the environment in their life, and again, this energy is entirely the ener- the energy use is entirely predictable (mono 1)
- (13) where the metabolic scope is largest, the, fish have the largest amount of energy that they can make available, a surplus energy, no i shouldn't use surplus cuz i use that for growth **but** the largest amount of energy in which they can deal with environmental change. (mono 1)

Example 14 differs from the above examples in that *but* is used to relate the explicit interpretation of segment two (*I'll do my best and I ask you ...*) to a non-explicit interpretation of segment one (i.e. the lecture is not prepared to my satisfaction so it is likely that it will not be so easy for me to present it and for you to follow it). The speaker's beliefs are implied and contrasted with his effort to compensate for the negative implication.

- (14) so it's it's it's not prepared to my satisfaction **but** i'll do my best and i ask you for a certain amount of clemency, and uh, in delivering this. (mono 4)

## 7 Discourse markers and dialogicality

Discourse markers can thus be "viewed as forms which establish textual as well as interactional or interpersonal relations" (Georgapoulou and Goutsos 2004: 95). The interactional and interpersonal relations in a text bring into focus the presence (and degrees of) dialogicality in texts. Drawing on Bakhtin, Fairclough (2003: 42) points out that "texts are inevitably and unavoidably dialogical in the sense that 'any utterance is a link in a very complexly organized chain of other utterances' with which it 'enters into one kind of relation or another'. But ... texts differ in their orientation to difference, i.e. in respect of 'dialogization'".

According to Fairclough (2003: 47) "for any particular text or type of text, there is a set of other texts and a set of voices which are potentially relevant, and potentially incorporated into the text. ... Where other texts are intertextually incorporated in a text, they may or may not be attributed." Considering academic discourse, the speaker/ writer enters a permanent dialogue with other researchers in the field, whether letting their voices be heard in his/ her text directly, through

quotations, or more indirectly. "When the speech or writing or thought of another is reported, two different texts, two different voices, are brought into dialogue, and potentially two different perspectives, objectives, interests and so forth. ... There is always likely to be a tension between what is going on in the reporting text, including the work which the reporting of other texts is doing within that text, and what was going on in the reported text." (Fairclough 2003: 48-49) This is where, as we shall try to demonstrate below, the contrastive discourse markers may widen their scope to exceed a single text, and function as markers of intertextuality, and dialogicality, in a monologue.

The voices of others may be introduced in the monologue as direct quotations including the use of contrastive markers typical of dialogues. Example 15 represents a case of intertextuality but the discourse does not really display features of a dialogue between the speaker and other voices. Similar intertextual links may be found in written academic texts, where contrasting views may be introduced in the text, the writer not directly entering the dialogue (ex. 16).

- (15) the epidemiologists were going in there and saying well look we have to see how much risk there really is here, and the anthropologists said yeah **but**, how do you define risk and risky to whom? (mono 2)
- (16) Natural and synthetic estrogens have been shown to induce ovarian development at male-producing temperatures (sex-reversal) in the red-eared slider (*Trachemys scripta*) (Bergeron et al., 1999; Sheehan et al., 1999), the American alligator (*Alligator mississippiensis*) (Crain et al., 1997; Lance and Bogart, 1994), and the sea turtle (*Lepidochelys olivacea*) (Merchant-Larios et al., 1997). **However**, Merchant-Larios et al. (1997) noted that E<sub>2</sub>-induced ovaries were smaller than temperature-induced ovaries. (written 3)

It is when other voices enter the monologue and the speaker interacts with them that we can speak of actual dialogicality in an otherwise monological discourse. In this way, in lectures the expected reactions of the actual listeners (marked by the second person pronoun) may be contrasted with the speaker's views (marked by *but* in ex. 17).

- (17) you might think what in the world does technology uh on an airstrip have to do with uh with obstetrics **but** uh **but** it really had tremendous effects (mono 2)

The orientation to difference resulting in dialogicality does not, however, need to be associated with a particular 'opponent'. In ex. 18 it is rather the 'generally accepted' evaluation (*it is not funny*) that is contrasted with the view taken by the speaker and signalled by the marker *but*. The 'opponents' of the speaker may be delimited as a particular group (ex. 19). The contrasting points of view may also be attributed to a particular person, the speaker siding with the latter view in ex. 20.



- (18) in North Carolina, a teenager was crushed to death this is not supposed to be funny. **but** it's funny, a teenager was crushed to death when a soft drink vending machine fell over on him, okay? (mono 2)
- (19) and gravitation is in the in today's physics still a very mysterious thing. we don't know much about it. the astronomers say they know a lot about it. **but but but but** they're just lying yeah? (mono 4)
- (20) we might have measured we could've measured a host of things to physically describe the environment, but we haven't. you should be grateful. um ... there's a technological view though, **but** the other view is to try and think of the environment the way the animal sees it, and to try and think about, an animal's eye view of the environment, and this is what Fred Fry tried to advocate. (mono 1)

In written monologue letting the actual reader enter the text is hardly a possibility. This does not mean, however, that dialogicality is excluded from this type of text. The views quoted and contrasted with those of the writer(s) may be attributed to a particular person (ex. 21). In that case it is often unnecessary to quote the counter-view in full, a reference prefaced by the contrastive marker may suffice (ex. 22). Alternatively, they may be presented as generally shared hypotheses, different from those of the writer(s) (ex. 23). It may be interesting to note that the 'other' voice may be the author's own, albeit representing his earlier research (ex. 24).

- (21) According to Nolan et al. (2001), the ovarian cavity is distinguished by its characteristic ciliated epithelial cell lining. **However**, in intersex fish, this lining sometimes appears on both dorsal and ventral edges of the ovarian cavity, whereas in normal females the lining occurs only on the ventral edge. (written 3)
- (22) There are relatively few detailed studies that accurately measure rates of nest predation while simultaneously determining the importance of different nest predators (**but** see Renfrew and Ribic, 2003 and Thompson and Burhans, 2003). (written 4)
- (23) It has also been suggested that Trp7 might stabilize the interaction of compstatin with C3 through a hydrogen bond. **However**, no direct experimental evidence has been obtained to support this hypothesis. In the present study, incorporation of 5-fluorotryptophan at this position resulted in an increase in the inhibitory activity, whereas incorporation of either 5-methyltryptophan or 1-methyltryptophan rendered compstatin inactive. (written 2)
- (24) It is also possible that incorporation of tryptophan analogues might change the structural features of compstatin and affect binding. **However**, we have previously reported that the substitution of valine with tryptophan and 2-naphthylalanine at position 4 on the structure of compstatin has negligible effect on its structure as examined by NMR. (written 2)

## 8 Conclusion

Based on their core meaning, contrastive discourse markers can signal various types of contrast. The fact that there is no straightforward correspondence between a marker and a type of contrast or scope supports Fraser's conclusions that contrastive discourse markers alone cannot mark a particular contrastive relationship. Their specific interpretation must always be negotiated by the context, which seems to include also considerations of genre.

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- mono 4: MICASE COL485MX069, Nobel Laureate Physics Lecture.
- dial 1: MICASE LAB175SU032, Biology of Fishes Field Lab.
- dial 2: MICASE DIS175JU081, Intro Biology Discussion Section.
- dial 3: MICASE LAB175SU026, Biology of Birds Field Lab.
- dial 4: MICASE MTG485SG142, Physics Research Group Meeting.

## Notes

- a This work was supported by the Ministry of Education of the Czech Republic as a part of the research plan MŠMT 206806.
- b In the present paper concession will be subsumed under *contrastive relations* since it may be understood as a special case of contrast, namely that between the expected/ usual causal relationship and the actual situation (cf. Dušková et al. 1988: 642; Fraser 1999: 947).
- c In MICASE transcription, comma indicates a brief (1-2 second) mid-utterance pause with non-phrase-final intonation contour while period indicates a brief pause accompanied by an utterance final (falling) intonation contour. They are not used in a syntactic sense to indicate complete sentences.
- d Following Fraser (1999: 938) we shall use 'discourse segment' "as a cover term to refer to 'proposition', 'sentence', 'utterance' and 'message' unless more specificity is required".
- e The higher representation of zero marking in the monological spoken subcorpus seems to be due to the lecture 'mono 2' dealing with a contrast between two approaches, which constituted a regular pattern, and consequently did not require consistent explicit marking.
- f However, there is not a straightforward link between a discourse marker and its core meaning: while some markers are closely associated with contrast (*but, however*), others are vaguer and polyfunctional (*well, and*).
- g Topic-changing contrastive markers were attested also in the dialogue, e.g. S1: *whatever's that?* SU-F: *focaccia* S1: *yeah but where did you find it?* (dial 1)