### **Contrastive Focus**

# Malte Zimmermann Humboldt University

The article puts forward a discourse-pragmatic approach to the notoriously evasive phenomena of contrastivity and emphasis. It is argued that occurrences of focus that are treated in terms of 'contrastive focus', 'kontrast' (Vallduví & Vilkuna 1998) or 'identificational focus' (É. Kiss 1998) in the literature should not be analyzed in familiar semantic terms like introduction of alternatives or exhaustivity. Rather, an adequate analysis must take into account discourse-pragmatic notions like *hearer expectation* or *discourse expectability* of the focused content in a given discourse situation. The less expected a given content is judged to be for the hearer, relative to the Common Ground, the more likely a speaker is to mark this content by means of special grammatical devices, giving rise to emphasis.

Keywords: contrastive focus, emphasis, discourse expectability

#### 1 Introduction

According to Tomioka (2006), the notion of contrastivity is connected to diverse linguistic phenomena, such as, e.g., exhaustive answers in question-answer pairs (cf. 1a), contrastive statements (cf. 1b), or instances of corrective focus (cf. 1c):

- (1) a. Q: Who did you invite? A: PAUL, I invited (but nobody else).
  - b. I did not invite PETER, but PAUL.
  - c. A: You invited PETER? B: No, I invited PAUL.

While all the contrastive elements in (1) form instances of contrastive focus in an intuitive sense, there is considerable disagreement concerning the correct

analysis of contrastive focus in intonation languages. The central questions are the following: Does contrastive focus constitute an information-structural (IS-) category of its own, independent of the more basic notion of focus as evoking a set of contextually salient alternatives (Rooth 1985, 1992)? And if so, are there any reliable pragmatic and/or prosodic clues for its identification? Prosodic evidence from intonation languages suggests that contrastive focus is not fully independent of focus, as contrastive foci differ only gradually in intonation from information foci (see Hartmann, to appear, and references therein). In contrast, evidence from languages such as Hungarian or Finnish, in which 'contrastive' elements are realized in a particular syntactic position, suggests the opposite (É. Kiss 1998, Vallduví & Vilkuna 1998). This raises the question of what constitutes the set of characteristic semantic or pragmatic features of contrastive foci in these languages. A prominent line of research argues that contrastive foci are characterized on the basis of semantic features, such as exhaustiveness, and can therefore be diagnosed by looking at genuine semantic phenomena, such as the logical relations between sentence pairs (Szabolcsi 1981, É. Kiss 1998).

The present article argues that contrastivity is best approached as a discourse-pragmatic phenomenon with grammatical reflexes, perhaps exempting Hungarian: contrastivity in this sense means that a particular content or a particular speech act is unexpected for the hearer from the speaker's perspective. One way for the speaker to direct the hearer's attention, and to get him to shift his background assumptions accordingly, is to use additional grammatical marking, e.g., intonation contour, syntactic movement, clefts, or morphological markers. This special marking seems to correlate with what is often called *emphatic* marking in descriptive and typological accounts of non-European languages. Contrastivity defined in this way depends on the speaker's assumptions about what the hearer considers to be likely or unlikely, introducing a certain degree of subjectivity. It follows that models for diagnosing contrastive

foci must be more elaborate, containing not only information on the state of the linguistic and non-linguistic context as such, but also on the background assumptions of speaker and hearer.

#### 2 Four Observations

Let us start with four observations, mostly from West Chadic: First, Hausa and Bole (West Chadic) show a clear tendency to leave information focus on non-subjects unmarked, whereas a formal marking of non-subject foci (Hausa: movement, Bole: morphological marker) correlates with contrastive uses as illustrated in (1); cf. (2) from Bole:

(2) Q: What did Lengi do? A: Léngì kàpp-ák  $(y\acute{e}) \ mor[\acute{o}]$ . Lengi plant-PERF.F.AGR FOC millet  $-y\acute{e}$ : 'Lengi planted MILLET.'  $+y\acute{e}$ : 'It was millet that L. planted!'

The formal marking of information focus and contrastive focus in these languages thus differs not only gradually, but categorically: the notion of contrast has a real impact on the grammatical system (Hartmann, to appear).

Second, Gùrùntùm uniformly marks all kinds of foci by means of the focus marker *a*, typically preceding the focus constituent (Hartmann & Zimmermann 2006). However, non-subject foci can additionally be highlighted by fronting them to sentence-initial position, using a cleft-like relative structure:

(3) Q: What did Audu catch? A: [Á gàmshí] mài Áudù náa.

FOC crocodile REL Audu catch
'Audu caught A CROCODILE.'

The continued presence of the focus marker a on the moved constituent suggests that contrastive foci are just special kinds of foci. This conclusion squares up

with the fact that information and contrastive focus differ only gradually in intonation languages.

Third, a number of languages that allow for movement to the left periphery (e.g., Hausa, German) exhibit the phenomenon of partial focus movement. Only the most relevant part of the focus constituent moves; cf. (4) from Hausa (Hartmann & Zimmmermann (2007):

(4) A: What happened? Q: B'àràayii nèe su-kà yi mîn saatàa! [S-focus] robbers PRT 3PL-REL.PERF do to.me theft 'ROBBERS have stolen from me!'

This suggests that movement of (part of) the focus constituent is not so much triggered by its focus status per se, but by additional semantic or discourse-pragmatic considerations.

Fourth, and most important, there is no absolute correspondence between a certain focus use (information, corrective, selective, etc.) and its being grammatically marked, or emphasized, in languages as diverse as Finnish and Hausa (Molnár & Järventausta 2003, Hartmann & Zimmermann 2007). While information foci in answers to *wh*-questions are typically *unmarked*, they can sometimes be marked as well. And while corrective foci in corrections are typically *marked*, they can sometimes go unmarked as well; cf. (5) from Hausa:

(5) A: You will pay 20 Naira. B: A'a, zâ-n biyaa shâ bìyar nèe. no FUT-1SG pay fifteen PRT 'No, I will pay fifteen.'

It is therefore impossible to predict the presence or absence of a contrastive marking on a focus constituent  $\alpha$  just on the basis of its inherent properties, or its immediate discourse function (answer, correction). Rather, the presence or absence of a special grammatical marking on  $\alpha$  depends on specific discourse

requirements at a specific point in the discourse. These are influenced by the intentions of the speaker and her assumptions about the knowledge state(s) of the hearer(s). It follows that a wider range of pragmatic factors pertaining to such knowledge states and to particular discourse goals must be considered in analyzing contrastivity. A promising formal account of relevant pragmatic factors is found in Steedman's (2006) analysis of German and English.

## 3 Towards a Formalization: Steedman (2006) on Intonational Meaning

The main purpose of this rough sketch of Steedman's system is to demonstrate that it is possible, in principle, to develop a formally precise analysis of discourse phenomena such as the ones considered here. Steedman's (2006) main point is that pitch accents and boundary tones in German and English serve to mark more IS- and discourse-related distinctions than just the *theme-rheme* contrast, where *theme* and *rheme* are not understood as *given* and *new*, or as *background* and *kontrast* (Vallduví & Vilkuna 1998), but as *context-dependent* and *context-independent* (Bolinger 1965), respectively; cf. (6). In many cases, the *rheme* of an utterance corresponds to the notion of focus as used in this article. The pitch accents themselves indicate the existence of a contextually salient set of alternatives (Bolinger 1961, Rooth 1992).

Besides the theme-rheme distinction, pitch accents and boundary tones are taken to express information at a separate level of *discourse structure*: The kind of pitch accent chosen indicates whether an information unit is *common ground* (H\* family) or not (L\* family). Different boundary tones mark an information unit as *speaker's supposition* (L% family) or as *hearer's supposition* (H% family). Different tones thus convey information concerning the status of an information unit (theme or rheme) as being in the common ground or not, and concerning the epistemic attitudes of speaker/hearer relative to this information.

Without going into too much detail, the following examples will help to give a preliminary idea of the discourse-semantic effects of L%/H% boundary tones and L\*/H\* pitch accents on otherwise identical clauses:

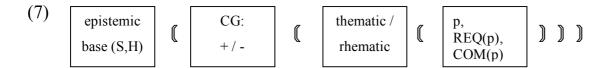
- (6) a. You put my TROUSERS in the MICROWAVE! ( $\rightarrow$  You did that.)

  H\* LL%
  - b. You put my TROUSERS in the MICROWAVE?  $(\rightarrow I don't believe it!)$ L\* LL%
  - c. You put my TROUSERS in the MICROWAVE? ( $\rightarrow$  You really did that?) H\* LH%

The falling declarative statement (6a) expresses the speaker's contention that the hearer's ill-treatment of her trousers should be known or acceptable to both discourse participants, and thus be part of the common ground. The all-low declarative (6b), on the other hand, expresses the speaker's unwillingness to accept the content of (6b) as part of the common ground, thus expressing an element of disbelief. The rising declarative question (6c), finally, indicates that the hearer can safely assume the proposition expressed to be entertained by both him and the speaker, as the speaker has reason to believe that this is indeed the case; cf. also Gunlogson (2003) for related ideas.

What is important is that the coding of differences in the suppositions of speaker and hearer about the common ground serves an important discourse-structural function: it sets the scene for subsequent discourse moves aimed at smoothing out the assumed differences, e.g., additional explanation on the part of the speaker, or accommodation on the part of the hearer. Notice that entire utterances can be rhematic, corresponding to wide focus on the sentence. In addition, not only (asserted) propositions (p), or parts of propositions, but also

speech acts, such as requests (REQ) and commands (COM), can be qualified as parts (or non-parts) of the common ground (CG) relative to the speaker's or hearer's knowledge base. Depending on the chosen intonation, these will be interpreted as more or less polite by the hearer. The hierarchical organization of the various layers of information expressed by intonation is schematized in (7):



Summing up, Steedman's system provides a formal account of the meaning contribution of tones in intonation languages. These are used to express information at the two levels of information structure (IS) and discourse structure (DS): (i.) They distinguish themes from rhemes (IS); (ii.) they indicate whether the themes or rhemes are common ground (DS); (iii.) they indicate the epistemic base for this evaluation (DS). What the proposed system cannot do, though, is to account for contrastivity effects as illustrated in (1), which – in intonation languages – arise in connection with a more articulated pitch contour (higher target, steeper increase) or with fronting, as in scrambling or topicalization (Frey 2004).

# 4 Extending the Analysis: Semantic Effects of Contrastive Focus Marking

Taking Steedman's framework as the basis for exploring the nature of contrastive focus, let us assume that contrastive foci are used to convey information concerning the hearer's suppositions about the common ground, i.e.,

Contrary to what is assumed here, Steedman (2006) does not take contrastivity to single out a specific subclass of rhemes or foci. For him (2006: 8), *contrastive focus* is the same as *kontrast* (Vallduví & Vilkuna 1998). It is triggered by any occurrence of pitch accent indicating the existence of a contextually salient set of alternatives. This is the very function typically attributed to *focus* in Rooth's *Alternative Semantics*.

information at the level of discourse structure. The semantic import of contrastive focus marking is stated in (8):

# (8) Contrastive Focus Hypothesis:

Contrastive marking on a focus constituent  $\alpha$  expresses the speaker's assumption that the hearer will not consider the content of  $\alpha$  or the speech act containing  $\alpha$  likely to be(come) common ground.

Contrary to what is often assumed in the literature, contrastive foci thus do not mark a contrast between explicit or implicit alternatives to  $\alpha$  in the linguistic context. Rather, they express a contrast between the information conveyed by the speaker in asserting  $\alpha$  and the assumed expectation state of the hearer: a speaker will use contrastive marking on a focus constituent  $\alpha$  if she has reason to suspect that the hearer will be surprised by the assertion of  $\alpha$ , or by the speech act containing  $\alpha$ . Because of this, the speaker uses a non-canonical, i.e., marked, grammatical form to direct the hearer's attention, and to shift his common ground in accordance with the new information provided. This is best shown by looking at the typical and atypical patterns observed with contrastive focus marking towards the end of section 2.

# 4.1 Contrastive focus marking: Typical patterns

Contrastive focus marking is typically absent in answers to *wh*-questions, cf. (9a), and typically present in correcting statements, cf. (9b):

(9) a. Q: What did you eat in Russia? A: We ate pelmeni.

This discourse-oriented use of the term *contrastive* differs radically from the one found in Büring's (1997) analysis of *contrastive topics*. Büring's notion of contrastivity is semantically much weaker, simply indicating the presence of alternatives in the form of alternative subquestions that have not yet been answered.

b. A: Surely, you ate *pelmeni*! B: No, *caviar*, we ate! / No, we ate ↑ *caviar*! (↑= raised pitch)

The absence of contrastive focus marking in (9a) is predicted by (8): the most likely speech act following on a *wh*-question is an answer providing the required information. The speaker can also assume that the hearer will not be surprised by the choice of pelmeni as her common staple in Russia, and therefore will have no problems with updating the common ground accordingly. Hence, no need for contrastive marking. In (9b), in contrast, it follows from hearer A's assertion that she does not expect to be contradicted. Also, speaker B can assume that the hearer will not consider caviar a very likely food to be had (even in Russia), and she expresses this accordingly by using a contrastive focus.

## 4.2 Contrastive focus marking: Atypical patterns

Atypical patterns are observed in connection with the presence of contrastive marking on focus constituents in answers to *wh*-questions, cf. (10), and with the absence of contrastive marking on corrective foci, cf. (5):

(10) Q: What did you eat in Russia? A: Caviar we ate. / We ate \( \frac{1}{2} \) caviar!

Even though an answer is expected in (10), the informational content of the focus constituent *caviar* is judged to be so unexpected by the speaker as to warrant a special contrastive marking on it. In the bargaining situation in (5), on the other hand, the situation is conventionalized such that the hearer can safely assume that the speaker will not be surprised by his rejecting the original price, nor by his offering a lower price. Hence, no need for contrastive marking.

There are other reasons for using contrastive focus marking in answers to wh-questions so as to explicitly reject a likely expectation on the side of the

hearer. For example, contrastive marking can be used to reject the assumption that more than one individual will satisfy the predicate in the question; cf. (11):

(11) Q: Who (all) did you invite? A: Peter, I invited (but nobody else).

The exhaustiveness implied by the contrastively marked answer in (11) is often taken to be a characteristic property of contrastive foci in general (É. Kiss 1998, Vallduví & Vilkuna 1998), whereas here it comes out as a special subcase of the more general case in (8). Notice that this is a desired outcome, for in practice it often proves difficult to demonstrate that a contrastively focused constituent has an exhaustive interpretation, the reason for this being that not all contrastive foci give rise to implicatures of exhaustiveness.

Notice incidentally that many languages have lexicalized at least some of the meaning facets of contrastive focus, or its implicatures, in the form of focus-sensitive particles, such as *only*, expressing exhaustiveness, or *even*, expressing the relative unlikelihood of the asserted proposition compared to the focus alternatives ordered on a scale (Karttunen & Peters 1979). This squares up nicely with the observation that such focus particles show a tendency to occur with contrastive foci as well (Tomioka 2006): both devices have the same semantic effect on the hearer.<sup>3</sup>

Finally, it is also possible to mark only part of the focus for contrastivity, giving rise to partial movement; cf. (4). Here, only part of the focus is taken to be unexpected for the hearer, and hence in need of contrastive marking.

In most cases, the ordering source for the scale will be a measure of (un)likelihood, but in certain cases it can also be assigned a special ordering source by the context. Extending this analysis to contrastive foci, one could argue that these, too, merely indicate the presence of a scalar ordering with the measure of (un)likelihood as its default value.

\_

The parallel between contrastive focus and the focus particle *even* might eventually pave the way to a further generalization of the meaning of contrastive focus. It has been argued that the presence of *even* does not necessarily indicate the relative unlikelihood of a proposition, but simply the presence of a scale in need of an ordering source (Kay 1990). In most cases, the ordering source for the scale will be a measure of (un)likelihood, but in

# 5 Typological Implications: Intonation and Tone Languages

As shown, both intonation languages and Chadic tone languages can and do express contrastivity in their respective grammars. The grammatical systems of the two language groups differ in another respect, though, with drastic effects on the perspicuity of contrastive foci in the two groups. Intonation languages obligatorily mark the existence of a contextually salient set of alternatives, i.e., focus, by using a pitch accent. As a result, every focus, contrastive or not, carries a pitch accent, often blurring the distinction between the two. The West Chadic languages, in contrast, need not grammatically mark the existence of alternatives, i.e., focus, on non-subjects (see Hartmann & Zimmermann, in press, on the restriction to non-subjects): focused non-subjects are only marked when contrastive, which makes contrastive focus relatively easy to identify in these languages. This difference in identifiability aside, both groups of languages have comparable grammatical means, i.e., contrastive focus marking, in order to achieve the same discursive end, namely discourse maintenance by ensuring a smooth update of the common ground in situations of (assumed) differences in the assumptions of speaker and hearer. Given that the latter process can be taken to form an integral part of any inter-human conversation, the universal availability of contrastive focus marking, or emphasis, is not surprising.

#### 6 Conclusion

Contrastive focus marking does not so much indicate the explicit or implicit presence of contrasting alternatives in the linguistic context, although this may be a side effect, but rather a contrast between the information conveyed by the speaker in asserting  $\alpha$  and the assumed expectation state of the hearer: the speaker marks the content of  $\alpha$  as – in her view – unlikely to be expected by the

hearer, thus preparing the scene for a swifter update of the common ground. The introduction of a measure of (assumed) unlikelihood adds a moment of subjectivity to the notion of contrastivity. In diagnosing contrastivity, it will therefore not do to just look at isolated sentence pairs and the logical relations between them. Rather, it is necessary – in corpus studies – to search elaborate corpora containing information on the knowledge states of the discourse participants as well, and – in elicitation – to work with more elaborate models that specify such knowledge states.

#### References

- Bolinger, Dwight. 1961. Contrastive Accent and Contrastive stress. *Language* 37: 83–96.
- Bolinger, Dwight. 1965. Forms of English. Cambridge, MA: Harvard University Press.
- Büring, Daniel. 1997. *The Meaning of Topic and Focus: The 59th Street Bridge Accent.* London: Routledge.
- É. Kiss, Katalin. 1998. Identificational Focus versus Information Focus. *Language* 74: 245–273.
- Frey, Werner. 2004. The Grammar-Pragmatics Interface and the German Prefield. *Sprache und Pragmatik* 52: 1–31.
- Gunlogson, Christine. 2003. True to Form: Rising and Falling Declaratives as Questions in English. New York: Routledge.
- Hartmann, Katharina. to appear. Focus and Emphasis in Tone and Intonation Languages. In *The discourse-potential of underspecified structures: Event structures and information structure*, ed. Anita Steube. Berlin: de Gruyter.
- Hartmann, Katharina & Malte Zimmermann. 2006. Morphological Focus Marking in Gùrùntùm (West Chadic). Ms., Humboldt University, Berlin.
- Hartmann, Katharina & Malte Zimmermann. 2007. In Place Out of Place: Focus in Hausa. In *On Information Structure, Meaning and Form*, eds. Kerstin Schwabe & Susanne Winkler. Amsterdam: Benjamins, 365–403.

- Karttunen, Lauri & Stanley Peters. 1979. Conventional Implicature. In *Syntax and Semantics* 11: *Presupposition*, eds. Ch.-U. Oh & D. A. Dinneen. New York: Academic Press, 1–56.
- Kay, Paul. 1990. Even. Linguistics & Philosophy 13: 59–111.
- Molnár, Valeria & Maria Järventausta. 2003. Discourse Configurationality in Finnish and Hungarian. In *Structures of Focus and Grammatical Relations*, eds. J. Hetland & V. Molnár. Tübingen: Niemeyer, 111–148.
- Rooth, Mats. 1985. Association with Focus. Doctoral Dissertation, University of Massachusetts, Amherst.
- Rooth, Mats. 1992. A Theory of Focus Interpretations. *Natural Language Semantics* 1: 75–116.
- Steedman, Marc. 2006. Evidence for a Semantics and Pragmatics of Intonation. Paper presented at the 2<sup>nd</sup> Conference on Linguistic Evidence, University of Tübingen, February 2006.
- Szabolcsi, Anna. 1981. The Semantics of Topic-Focus Articulation. In *Formal Methods in the Study of Language* 2, ed. Jeroen Groenendijk. Amsterdam: Mathematisch Centrum, 503–540.
- Tomioka, Satoshi. 2006. Contrastive Topics. Paper presented at the Conference on *Information structure between linguistic theory and empirical methods*. Potsdam University, June 2006. To be published in *Information Structure from Different Perspectives*, ed. Malte Zimmermann & Caroline Féry.
- Vallduví, Enric & Maria Vilkuna. 1998. On Rheme and Kontrast. In *The Limits of Syntax*, ed. Peter Culicover & Louise McNally. New York: Academic Press, 79–106.

Malte Zimmermann
Universität Potsdam, Inst. f. Linguistik
SFB 632 "Informationsstruktur"
Karl-Liebknecht-Straße 24-25
14476 Golm
Germany
malte.zimmermann@rz.hu-berlin.de
http://amor.rz.hu-berlin.de/~zimmermy/index.html