Anaphora and Focus in Digo

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Abstract

In addition to pronominal affixes, independent pronouns and demonstratives, Digo (a Bantu language spoken in Kenya and Tanzania) has a further kind of referring expression consisting of a shortened form of an independent pronoun affixed to a conjunction. The most common form is *naye* which consists of *na* (and/with) and *ye* (3rd person singular pronoun). *Naye* plays an important discourse-pragmatic role as an indicator of either contrastive or parallel focus. In contrastive focus, the focused element contrasts with another, previously mentioned element of the same type (participant, event, state), whilst in parallel focus the focused element is notable for occurring in addition to another element of the same type. A study of narrative texts suggests that *naye* marks parallel or contrastive focus between two (or more) participants in a discourse, whereas the primary function of *naye* in hortatory discourse is to indicate parallel or contrastive focus between actions or states involving the same participant. The role of *naye* in anaphora resolution is therefore discourse-pragmatic rather than grammatical. In the concluding section, I use relevance theory to suggest how the way addressees process clauses containing *naye* results in the aforementioned focus effects.

1. Introduction

Digo (or Chidigo) is a Bantu language spoken in the coastal regions of Kenya and Tanzania between Mombasa and Tanga (it is one of the Mijikenda group and is classified E.73 by Guthrie and North-East Coast by Nurse). The following analysis uses natural texts (folk tales, first person factual narratives and hortatory discourse) collected by my colleagues Rodgers Maneno and Joseph Mwalonya.

A major participant in Digo discourse is commonly introduced using 'presentational articulation' (1b). The first time a participant is mentioned after the introduction (this is often the 'point of departure' of that participant on the event line of the story) it is usually referred to by a NP followed by a 'proximal' demonstrative (1c). All (unmarked) subsequent reference to a major participant consists of either a verbal affix, such as *a*- in (1d) or a 'distal' demonstrative followed by NP, e.g. *yuya mutu* ('that person').

- (1a) Hipho kare kpwakala na atu ambao kala anakuluphira windza kpwa chakurya chao.

 Long ago there were people who depended on hunting for their food.
- (1b) <u>Phachikala na mjeni</u> phapho phao laloni. There-was with stranger there their locality. Now there was a stranger at their place.
- (1c) Mjeni hiye kala kamanywa arivyo
 Stranger this was he-not-known how-he-was
 No one knew much about that stranger
- (1d) lakini <u>a</u>chikala <u>a</u>nahenda kazi sawa na but he-was he-doing work equal with but he worked just as hard as
- (1e) **ayae osi a hipho laloni.**his-fellows all of there locality.
 all his companions there in that locality.

In addition to the referring expressions mentioned above, many Digo texts contain the anaphor *naye* which consists of *na* (and/with) cliticised to *ye* (a short form of the independent 3rd person singular pronoun *iye*). Other referring expressions constructed in the same way are *nao* (3pl), *nami* (1s), *nasi* (1pl), *nawe* (2s) and *namwi* (2pl). In this presentation I will concentrate on the functions of *naye* but will make occasional reference to these non 3rd person singular expressions.

Naye can occur either as a discourse marker or as a purely grammatical connective. When naye functions as a connective, its occurrence is conditioned by grammar rather than by pragmatic factors and it is truth conditional (compare the examples below):

- (2a) **achimtuluza mzima achiphiya** <u>naye</u> **kaya.** they-took-him-out alive they-went with-him home *they got him out alive and took him home.*
- (2b) **achimtuluza mzima achiphiya kaya.** they-took-him-out alive they-went home. *they got him out alive and went home.*

Other instances of *naye* can be accounted for only by reference to their discourse function and to the genre of text in which they occur. I will look at the discourse functions of *naye* in narrative and hortatory texts respectively.

2. Narrative texts

In addition to its purely grammatical functions, *naye* functions as a discourse marker expressing either contrastive or parallel focus. In contrastive focus, the focused element contrasts with another, previously mentioned element of the same type (participant, event, state), whilst in parallel focus the focused element is notable for occurring in addition to another element of the same type.

The general function of *naye* in narratives is as a focus marker, indicating either contrastive or parallel focus *concerning two (or more) participants* in the discourse. Parallel or contrastive focus between any two (or more)

participants is possible regardless of discourse status (major or minor participants) and grammatical role (subject, object, etc.), so long as these participants have the same theta role (agent, patient etc.).

2.1. Parallel focus on two or more participants

Where there is parallel focus concerning two participants, both participants are presented as performing similar actions or being in similar states. The implication is that the first participant did something and the second participant ALSO did something. Occasionally this is made explicit, as in (3b) where *naye* is followed by *piya* (also, too), but more often *naye* alone communicates parallel focus (3e). (Neither occurrence of *naye* is necessary to determine reference, as the subject of each clause is named.)

(3a) Kama vyokala desturi ya atu hipho kare, mutu ka achikala tajiri ka n'lazima alole achetu anji. Phahi, mzee Mwazewe,

As was the custom of the people long ago, if a person was rich he had to marry many wives. So, elder Mwazewe,

- (3b) <u>naye piya</u> wa-lóla mchetu wa phiri. and-he also he-married wife of second. he too married a second wife.
- (3c) Yuya mchetu ariphogbwira mimba, wavyala mwana wa chilume achimuiha Mwiya.

 When that woman became pregnant, she gave birth to a boy and called him Mwiya.
- (3d) **Hiye mchetu mvyere ariphoona mchetu myawe**That wife elder when-she-saw wife her-fellow
 The senior wife when she saw that her co-wife
- (3e) <u>naye</u> akavyala mwana wa chilume, and-she she-had-born child of male, had (also) given birth to a son,
- (3f) wamanya hira mali indaganywa.

 she knew that the wealth would be shared.

 (it is known that the first wife already has a son)

2.1.1. Parallel focus on participants in object position

In the previous examples, *naye* referred to participants in subject position. The following example, taken from a translated text (Luke 20:11-12), illustrates parallel focus on participants in object position expressed through the use of *naye*. The previous clause described how a servant who was sent by the owner of a field to collect rent from tenant farmers was beaten and chased away, then the story continues:

(4a) Alafu wahuma mtumishi wanjina, lakini naye
Then he-sent servant another but and-him
ampiga piya, achimhenda mambo ga
they-beat-him also they-did-to-him things of
waibu na achimuusa mikono mihuphu.
shameful and they-removed-him hands empty
Then he sent another servant, but they beat him as
well; they mistreated him and sent him away empty
handed.

(4b) Yuya mchina-munda achihuma mutu wa hahu.
That owner-field he-sent person of third
Hiye naye ampiga na achimlumiza,
This-one and-him they-beat-him and they-hurt-him
chisha achimzola.

then they-chased-him

The owner of the field sent a third person. This one too they beat and wounded, then they chased him away.

2.2. Contrastive focus on two or more participants

When two participants in a discourse are performing actions or are in states which contrast in some way, the contrast between participants may be expressed though the use of *naye* coreferential with the second mentioned participant. However, the actions or states are invariably of similar kinds; what is in contrast is the motivation or purpose underlying them. Therefore, rather than thinking of contrastive focus involving multiple participants as an alternative to parallel focus, it is better to treat this as a sub-category of parallel focus.

The following example illustrates this. A hunting party has killed an elephant and the protagonist (the stranger introduced in (1) above) has told his companions to take as much meat as they can carry. The stubborn man (the antagonist) refuses to do as the stranger asks and insists on doing things differently from his companions. In (5b) he repeats the instruction of the stranger, but applies it only to his companions (including the stranger) and not to himself, and in (5c) his companions cut meat and he also cuts meat, but after them. The use of naye referring to the stubborn man therefore indicates contrastive focus between the stubborn man and the stranger in (5b), and between the stubborn man and his companions (minor participants) in (5c). Neither occurrence of *naye* is strictly necessary to establish reference (walagiza is unambiguously 3rd person singular and the second akate can pragmatically only refer to the stubborn man since his companions would already have cut their meat).

(5a) Lakini kahi ya hara atu kala phana mmwenga ambaye kala ana kani mana

But among those people there was one who was stubborn because

- (5b) <u>naye</u> walagiza ayae akate nyama and-he he-ordered companions-his they-cut meat he told his companions to cut meat
- (5c) **ndipho <u>nave</u> akate badaye.** then and-he he-cut after. and then he would cut afterwards.

2.2.1. Contrastive focus involving first person participants

In addition to contrastive and parallel focus relating two or more third person participants, contrast and parallelism can occur between other persons. In the following first person factual narrative, the narrator recounts a time when he worked as a hospital orderly and had to take a blind patient from Mombasa to Nairobi. The use of *nami* in (6b) is not required for grammatical reasons nor does it assign reference (the prefix *n*- in

nchiphiya is unambiguously first person singular), but by using *nami* to refer to himself, the narrator highlights the contrast between the patient's situation and his own.

(6a) Phahi yuya mkongo wahalwa achendalazwa kura kpwa akongo ayae a matso.

So the patient was taken away to be admitted along with his fellow eye patients.

- (6b) Ndipho nami nchiphiya nyumbani Then and-I I-went to-home Then as for me, I went to the home
- (6c) **kpwa Dr. Maneno ambaye ni aphu.** of Dr. Maneno who is my uncle.

3. Hortatory texts

Parallel focus involving two participants is rare in hortatory texts, but it does occur as the following example illustrates. In (7b) *naye* indicates that the younger son <u>as well as the elder son</u> is in a bad state. (Note that in this example the referent of *naye* is the object of the following VP.)

(7a) Haya lola sambi, mwanao mvyere wa chilume vi sambi, wafungbwa mana waiya matumbingbwa ga atu. Na yuno wanjina achiyesala

Now look what has become of your elder son recently, he was jailed because he stole someone's eggs. And the other one who is still at home

(7b) <u>nave</u> <u>kumphirika</u> <u>skuli.</u> and-him you-do-not-send-him school even him you don't send him to school.

Parallel or contrastive focus between two or more participants is more common in hortatory texts if at least one of the participants is the speaker and/or the hearer(s):

(8a) Mwanangu nakuamba, uwe unaphiya ujenini, kumanya mutu

My child, I tell you, you are going to a strange place, you do not know anyone there

(8b) <u>nao</u> hiko taakumanya. and-they there they-do-not-know-you. and no-one there knows you.

Usually, however, *naye* in hortatory texts indicates either parallel or contrastive focus between *actions or states involving the same participant*.

3.1. Parallel focus involving one participant

In the following example, *naye* indicates parallel focus, emphasising various states experienced by the father of a girl following the initial action of fathering her. In the previous clauses the speaker had been referring to himself and his expectations as the father of a girl, so the first occurrence sets up a parallel focus between the speaker and fathers in general. In the passage cited below, each action or state follows from the previous and leads towards a culmination or fulfillment: fathering > desiring > knowing > being satisfied. Focus is reinforced through the repetition of the key verbs *achivyala* ('if he fathers') and *anamanya* ('he knows'), and the change to first

person reference *nindazola* ('I will marry (her) off') in (9d).

- (9a) **Kpwa sababu amba mvyazi <u>naye</u> achivyala**For reason really parent and-he if-he-bears
 Because really if a parent bears a child
- (9b) dza viratu <u>naye</u> ana tamaa, anamanya, as same-way and-he he-has desire, he-knows, in the same way he hopes (to get dowry), he knows
- (9c) **achivyala mwana mchetu <u>naye</u> anamanya,** if-he-bears child female and-he he-knows if he produces a girl he also knows,
- (9d) "Nindaloza, na aphahe chakpwe,"

 I-will-cause-marry and she-get her-thing
 "I will marry her off, and she should get her due,"
- (9e) <u>nave</u> asitiri moyowe. and-he he-covers his-heart. and he is satisfied.

3.2. Contrastive focus involving one participant

In the final example, *naye* indicates contrastive focus between two states of affairs concerning the same participant. The contrast here is between the apparent state of the participant and her actual state, betrayed by her actions. The participant in question is a wife whose dowry has not been fully paid off and the speaker is her father. He is telling his son-in-law what will happen if the wife has to return to her parents' home: she will give the appearance of being happy, but in reality she will want to return to her husband.

(10a) Andasagala, andarya, andaoga, na hali yoyosi ndiyomfika

She will stay, eat, wash, and no matter how things are for her

- (10b) <u>nave</u> achibisha mara anayala and-she when-she-speaks time she-forgets when she speaks sometimes she will forget
- (10c) anaamba, "Nataka kpwangu." and say, "I want my own home."

4. Discussion

When *naye* functions as a discourse marker, it is always coreferential with a previously mentioned participant, so in a trivial sense it is anaphoric, but it is rarely used to <u>establish</u> reference. Clauses with *naye* are therefore marked in comparison with clauses without *naye*. In this section, I will use relevance theory (Sperber & Wilson 1995) to suggest how the use of this marked anaphoric expression achieves the focus effects illustrated above. In particular, I will argue that parallel and contrastive focus are by-products of the way discourses containing *naye* are processed according to relevance theory.

According to relevance theory, human cognition, and by extension communication, is governed by the principle of relevance. Briefly, this is a cost-benefit principle which is assumed to be inherent in the human cognitive system. A stimulus is worth processing to the extent that it achieves cognitive effects (that is, it results in a positive modification to the processor's cognitive environment). However, at any given time, a processor is exposed to a number of competing stimuli, and so preference is given to those which require the least effort to process, unless there is an expectation that additional processing effort will be offset by sufficient additional cognitive effects.

An utterance or written text is a stimulus which is created with the intention to communicate, and so it comes with a 'guarantee' that the effort required to process it will be offset by adequate cognitive effects. When a speaker or writer uses an expression which requires more effort to process than an equivalent alternative, the addressee is thereby licensed to expect additional cognitive effects by way of compensation. Therefore, according to relevance theory, the additional processing effort required to process a clause containing naye as opposed to an unmarked clause should be expected to be offset by some additional cognitive effects.

I have shown through various examples that these additional effects come in the form of parallel and contrastive focus on certain elements of the clause (participants, actions or states), but I have not yet attempted to explain how these kinds of focus come about. The following sections will attempt to do this.

The examples and commentary provided above have provided a descriptive account of *naye*, but an adequate explanatory account must answer the following questions:

1) Why does *naye* function as a marker of parallel and contrastive focus?

2) How do addressees determine which elements are in focus and whether parallel or contrastive focus is intended?

3) Why does *naye* function differently in narrative and hortatory texts? I will sketch an answer each question in turn.

4.1. Why *naye* indicates parallel and contrastive focus

The answer to the first question comes from looking at the functions of the constituent parts of *naye*. These are the conjunction *na* (and/with) and *ye*, the reduced form of the independent 3rd person singular pronoun *iye*.

4.1.1. The contribution of *na*

When naye functions simply as a purely grammatical connective, as in example (2a), na establishes a semantic and syntactic link between the cliticised pronoun, ve, and a previous referent, such as 'they' encoded by the 3rd person plural subject prefix a- in 'achiphiya naye' (they went with him). This is not the case when naye functions as a discourse marker. Although na is still cliticised to a pronoun, it does not connect the referring expressions which occur immediately to either side of it. Either these are coreferential, as in example (3a) 'mzee Mwazewe naye' (elder Mwazewe and-he) where ye is coreferential with mzee Mwazewe, or there is no overt preceding referring expression, as in (5c) 'walagiza ayae akate nyama ndipho naye akate badaye' (he ordered his companions to cut meat and then and-he he would cut afterwards). The syntax and semantics of na in this construction therefore differs from that in example (2a). However, I will suggest that na does nonetheless contribute something of its original semantic content to the discourse marker naye in the form of procedurally encoded information.

In Carston's (1988, 1993) relevance theory account of *and*, the temporal and causal interpretations often (but not always) associated with *and*-conjoined clauses ('She took out her key and opened the door') are shown to be pragmatically derived aspects of 'what is said', that is, inferentially determined contributions to truth-conditional meaning. Such effects arise because *and* encodes an instruction to the addressee to process the conjoined elements in parallel with each other. More precisely, in addition to encoding the concept '&', *and* also encodes what is termed 'procedural information' to the effect that the addressee should seek to derive cognitive effects by processing the elements related by & together, rather than separately.

Although Digo na is not exactly equivalent to English and (it can often be translated as with, as in example 2a), it is similar enough that I believe that the arguments which Carston adduces for her procedural account of and also hold for na. When na occurs as a conjunction, it makes sense to talk of it encoding procedural information to seek cognitive effects by processing the elements it conjoins in parallel rather than separately. However, in the discourse marker naye, na is no longer functioning as a conjunction. If it nonetheless continues to encode procedural information to process the elements it relates in parallel, the question arises as to what these elements are. At a general and intuitive level, the answer to this question is that *naye* relates the clause in which it occurs and the previous clause. This characterisation arises from noting the somewhat parenthetical position of naye, near the beginning of each clause in which it occurs, and the interpretation of these clauses as ones which contain some element which is in a relation of contrast or similarity with an element of the same type in the preceding clause. The relevance of a discourse containing naye is therefore to be found in part by processing the clause in which it occurs in parallel with the preceding clause.

One further feature of *naye* betrays the origins of *na* as a conjunction. Conjunctions always conjoin elements of the same syntactic type. Similarly, whenever two participants are in a relation of parallel or contrastive focus and *naye* is used, these participants are invariably referred to by expressions having the same theta roles: for example either both agents, as in most of the examples above, or both patients, as in examples (4) and (7).

4.1.2. The contribution of ye

According to relevance theory (Reboul 1994; Wilson & Sperber 1993) pronouns and agreement markers also encode procedural information, that is, processing instructions that assist the addressee to identify the intended referent¹. According to the principle of

¹ The idea that pronouns and other types of referring expression might encode procedures predates Wilson & Sperber (1993). For example, Hawkins (1978:17, cited in Matsui 2000:4) suggested that the use of the definite article acts as "an instruction to the hearer to locate the referent of the definite NP" by searching for it in "the appropriate, pragmatically identifiable, set" (ibid.), and Ariel (1988:68) proposed that, "instead of claiming that an expression of type *x* is processed in a certain way... we view the processing procedure associated with each form

relevance, addressees aim to interpret a given utterance as efficiently as possible; for this reason, addressees will, in the first instance, process new information within the currently most accessible utterance interpretation context, and will only extend or revise this if adequate cognitive effects can not be computed, or if there is some indication that the current context will prove insufficient. Pronouns reflect and exploit this procedure by constraining the addressee's search for intended referents to the set of highly mentally accessible discourse entities.

In addition to information concerning person, case, etc., all members of the set of pronouns in a given language encode procedural information relating to the relative accessibility of mental representations of intended discourse referents (for accessibility rankings, see Ariel 1988, 1990, 1994). So in English an unstressed pronoun is used when the intended referent² is highly accessible, but a stressed pronoun is used when the intended referent is less accessible. Similarly, in Digo an agreement prefix used alone indicates that the intended referent is highly accessible, but the addition of an independent pronoun (such as *iye*) is appropriate when the intended referent is less accessible.

However, in the examples with *naye* presented above, the intended referent in each case was highly accessible and reference assignment could be unambiguously determined by independent means; either the referent was named in the same clause, as in example (3), or there was no change of subject (or object) from the previous clause. The use of *ye* in addition to an agreement prefix where the intended referent is already highly salient is therefore a marked usage, and the potential increase in processing effort should be offset by additional cognitive effects. The use of the pronominal form focuses the addressee's attention on its referent which indicates that the addressee should seek additional cognitive effects related to the participant to which it refers.

As already mentioned, *na* prompts parallel processing of the conjoined clauses. Taking the proposed procedural information encoded by *na* and *ye* together, I suggest that the composite function of *naye* is to 'instruct' the addressee to process the clause containing *naye* in parallel with the preceding clause, and to seek additional cognitive effects in respect of the participant referred to by *ye* and the participant with the same theta role in the previous clause. How addressees determine which elements of the clauses are in focus (participants *per se*, or actions or events in which they take part) and whether parallel or contrastive focus is intended is addressed in the following sub-section.

4.2. How addressees identify the intended focus

To recap, *naye* indicates that the associated clause is intended to be processed in parallel with the preceding clause (the function of *na*) and that the most salient elements are the participant which is coreferential with the cliticised pronoun, *ye* and its counterpart (that is, the participant with the same theta role) in the preceding

clause. This semantic characterisation is too vague to give rise to the specific interpretations illustrated in the previous sections; however such interpretations can be derived through the interaction of this procedural information with general pragmatic principles.

Below I will discuss how addressees determine which elements are in focus (participants or the actions or states in which they take part), and how they determine whether parallel or contrastive focus is intended. I will do this first in relation to clauses containing different participants and then in relation to clauses containing the same participant.

4.2.1. Clauses containing different participants

Since *naye* indicates that relevance is to be sought in respect of the participant referred to by *ye* and its counterpart in the previous clause, it is these elements which are processed in parallel in the first instance. When these participants are different, *naye* is only ever used when the participants are involved in similar actions or states. I have found no case of *naye* being used when different participants are involved in actions or states of different kinds. Additional cognitive effects in such cases come through processing the similarities between the actions or states affecting the two participants. This results in the effect of parallel focus.

The principle of relevance states that as soon as an utterance or text has yielded adequate cognitive effects, processing should stop so as to avoid an inferential explosion. In most cases, when similar actions or states involve more than one participant, processing stops with the recognition of parallel focus. If, however, there is some contradiction between actions or states involving the participants, processing will continue until the contradiction is resolved. In example (5), for example, the stranger orders his companions to cut meat first and the stubborn man does likewise. There is a contradiction here in that protagonist and antagonist have both instructed the other to cut meat first. Rather than simply yielding parallel focus between these two participants, the use of naye here highlights the contradiction between their actions and leads to the recognition of contrastive focus.

4.2.2. Clauses containing the same participant

If the participant which is coreferential with ye is the same as that in the previous clause, it makes little sense to think in terms of parallel or contrastive focus between a referent and itself; this could have no cognitive effects. Rather, relevance must be sought in relation to the actions or states in which that participant is involved. When these actions or states are such that together they lead to a common result or otherwise reinforce each other, adequate cognitive effects will be achieved by processing the clauses that express them in parallel. The use of naye encodes procedural information instructing an addressee to do just this, thereby increasing the salience of the results of parallel processing and reducing the addressee's processing effort (providing a short-cut to a procedure that the addressee would have to perform anyway). Parallel focus results as a by-product of the search for adequate cognitive effects.

When a participant is involved in actions or states that are in some way contradictory, adequate cognitive effects will be achieved by processing the associated clauses in parallel and recognising the relevant contrast. Again *naye* encodes procedural information instructing an addressee

as its inherent definition. In other words, referring expressions are no more than guidelines for retrievals."

² Or more accurately, the mental representation of the intended referent in the addressee's mind, as estimated by the speaker.

to process the associated clauses in parallel, but the task of recognising that the associated events or states are in contrast, and identifying the nature of this contrast, is a purely inferential one in which *naye* plays no further role. Contrastive focus is the result of the addressee's search for adequate cognitive effects guided, but not determined, by the use of *naye*.

4.3. Differences between narrative and hortatory texts

The discourses included in this study have been of three types: folk-tale narratives, factual first person narratives and hortatory discourse. All of the occurrences of naye and related forms (nami, nao, etc.) in narrative texts involved more than one participant; most of those in hortatory texts involved just one participant. There is no reason in principle why a narrative text should not contain instances of *naye* involving a single participant, but it is simply the nature of most narrative texts that nave is typically found with multiple participants. The reason is, I believe, simply that most narrative discourses relate stories containing more than one participant, and that two or more participants are usually interacting throughout a typical narrative (for example as protagonist and antagonist). A single participant usually only acts alone off the main story-line and during interludes between significant events on the main story-line. These parts of a narrative are typically backgrounded and therefore do not often contain focusing devices, such as naye. Thus, when naye does occur, it results in parallel or contrastive focus between two or more participants in narrative texts.

Hortatory discourse, on the other hand, is typically addressed to a single individual or to an undifferentiated group. Typical topics of hortatory discourse include the way in which one event can lead to another, or the way in which one action, good or bad, can reinforce another. Hortatory discourse typically includes exhortations to lead a good life in order to avoid bad consequences, or illustrations of the way that one bad action can lead to a worse situation. Such functions readily lend themselves to parallel and contrastive focus between events and states involving a single individual, and so this is the dominant function of nave in hortatory texts. At other times different participants are compared, either to illustrate examples to be followed or avoided, or contrasts between positive and negative behaviours or outcomes. When naye is used in such cases, the result is parallel or contrastive focus involving different participants.

5. References

- Ariel, Mira, 1988. Referring and accessibility. *Journal of Linguistics* 24:65-87.
- Ariel, Mira, 1990. Accessing NP Antecedents. London: Routledge.
- Ariel, Mira, 1994. Interpreting anaphoric expressions: a cognitive versus a pragmatic approach. *Journal of Linguistics* 30:3-42.
- Carston, Robyn, 1988. Implicature, explicature and truththeoretic semantics. In R. Kempson (ed.), *Mental* representations: the interface between language and reality. Cambridge: Cambridge University Press, 155-182.

- Carston, Robyn, 1993. Conjunction, explanation and relevance. *Lingua* 90:27-48.
- Hawkins, John A., 1978. *Definiteness and indefiniteness:* a study in reference and grammaticality prediction. London: Croom Helm.
- Matsui, Tomoko, 2000. *Bridging and relevance*. Amsterdam: John Benjamins.
- Reboul, Anne, 1994. L'anaphore pronominale: le problème de l'attribution des référents. In J. Moeschler, A. Reboul, J-M. Luscher and J. Jayez, *Langage et* pertinence. Nancy: Presses Universitaires de Nancy, 105-173.
- Sperber, Dan, and Deirdre Wilson, 1995. Relevance: communication and cognition. Oxford: Blackwell, 2nd edition.
- Wilson, Deirdre, and Dan Sperber, 1993. Linguistic form and relevance. *Lingua* 90:1-25.