

A relevance-theoretic view on issues in the history of clausal connectives

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The present study takes a perspective which Jacobs and Jucker (1995: 14) characterize as ‘pragmahistorical’, ‘concerned with pragmatic explanations of language change’. The kind of phenomena for which explanations are sought and discussed can be exemplified by the following question: How is it that the etymological ancestors of clausal connectives like *since* or *while*, which were purely temporal, have developed non-temporal senses (*i.e.* causal or contrastive respectively)? A well-known general answer to questions like this – one whose basic idea is certainly on the right track – has been given in a number of works notably by König and Traugott. They argue that such semantic diachronies are the result of the conventionalization of conversational implicatures.¹ The present study looks at some of the details involved in this answer. It examines the appropriateness of one of the pragmatic principles that has been claimed to be underlying the implicatures involved, namely the principle of informativeness. After discussing some problems of using this principle in an account of the semantic diachrony of clausal connectives, the study suggests an alternative approach in terms of relevance theory and applies it to the semantic diachrony of the connectives *where* and *whereas*. The first section, however, is concerned with providing some background for the discussion.

1 The diachrony of clausal connectives and pragmatic inferencing

Pragmatic inferential processes play an important role as a causal factor in language change (see *e.g.* Cole 1975: 273ff., Abraham 1976, Horn 1984: 31ff., Carey 1990, Sweetser 1990, Heine, Claudi and Hünemeyer 1991: 164ff., Traugott and König 1991, Hopper and Traugott 1993: ch. 4, Levinson 1995: 95, Nicolle 1998, Diewald 2002, Heine 2002, Traugott and Dasher 2002, Traugott 2003: 631ff.). The history of clausal connectives is one area where this has been convincingly argued to be the case.² One of

¹ See for example König and Traugott (1988), where this idea appears also in the title of the article: ‘Pragmatic strengthening and semantic change: The conventionalizing of conversational implicature’.

² The same can be said about the diachrony of discourse (or pragmatic) markers (see *e.g.* Schwenter and Traugott 1995: 263ff., 2000, Brinton 1996: 275f., *pass.*, 1998: 15f., 20, Jucker 1997). The difficulty of classifying items as discourse (pragmatic) marker or clausal connective, of distinguishing between these two categories and of the terminological confusion surrounding these notions is well known (see *e.g.* Jucker and Ziv 1998). As far as I can see, these problems are not essential for the points to be made in the present paper.

the classic examples is Geis and Zwicky's (1971) observation concerning the development of the connective *since*, which used to be purely temporal and has acquired a causal sense in the course of time. They argue that '[s]entences which express a temporal sequence of situations invite the inference that the first situation is a cause of or a reason for the second' and that, consequently, 'an invited inference can, historically, become part of semantic representation in the strict sense' (Geis and Zwicky 1971: 564f.). As concerns the history of English clausal connectives, similar observations have been made by König (e.g. 1985a: 15f., 1985b: 274ff., 1988: 157ff.) in connection with the development of concessives. He points out, for example, that the development of a concessive meaning of such items as *nevertheless*, *notwithstanding*, *still* and *yet* 'from expressions originally asserting remarkable co-occurrence is based on pragmatic principles of interpretative enrichment and the conventionalization of an originally pragmatic inference' (König 1988: 159). König and Traugott (1988: 114ff.) make the same point with respect to the development of connectives of preference such as *rather than* or *sooner than*, whose etymological ancestors expressed temporal precedence, and with respect to the diachrony of connectives such as *providing* or *seeing that*, which originate in free adjuncts.³

It has been observed more than once that a purely Gricean account of such developments is hardly feasible. More specifically, it does not seem possible to invoke Grice's (1967/1989) set of conversational maxims in explications of the pragmatic inferences that appear to play a role in most of the cases in question. Geis and Zwicky (1971: 565) consider the sentence in (1) in the light of the fact that it suggests a causal connection between the referent of *he* having a large meal and his sleeping soundly.

- (1) After a large meal, he sleeps soundly.

(*After* is a preposition here, not a clausal connective, but Geis and Zwicky's point is relevant anyway. We could modify the example so as to get *After he devours a large meal, he sleeps soundly*, for instance, where *after* is a clausal connective.) They hypothesize that the Gricean maxim of relation ('Be relevant') might be adduced in this connection, but counter this idea by arguing that 'the sentence *asserts* a connection between two events – a temporal connection – so why should people tend to assume a further relevance?' (Geis and Zwicky 1971: 565). In connection with his discussion of the derivation by pragmatic inference of concessive meanings from those involving simultaneity (e.g. *while*), concomitance (e.g. *and*) or unhindered continuation (e.g. *still*), König too comes to the conclusion that '[n]one of the Gricean maxims [...] seems to play any role in the calculation of these inferences' (König 1985b: 275; see also 1985a: 16, 1988: 159). Indeed, he adds in a footnote that

[t]he only maxim that could be argued to play a role is the maxim of Quantity. There are many things going on simultaneously with a given state, process or

³ See Traugott and König (1991) for a digest and update of these authors' earlier works on pragmatic inferencing and the history of clausal connectives. König's and Traugott's insights are integrated into Kortmann's (1997) comprehensive typology and history of adverbial subordinators.

event ‘p’ which are hardly worth mentioning. To point out these facts and their simultaneity can be totally uninformative and perhaps also irrelevant (König 1985b: 280, n. 3).

But this situation seems to be only a special subcase of the more general situation where the information value of denoting a simultaneous eventuality as such may be anything between zero and high and is thus irrelevant for whether a certain inference is made or not.

Rather than the classic Gricean conversational maxims, it is predominantly neo-Gricean⁴ pragmatic principles that are invoked in explanations of the diachronic effects of pragmatic inferencing in discussions of the history of clausal connectives. Notably the principle of informativeness, which says ‘read as much into an utterance as is consistent with what you know about the world’ in the (textbook) version of Levinson (1983: 146f.), and/or Horn’s R-principle, which says ‘MAKE YOUR CONTRIBUTION NECESSARY [...] SAY NO MORE THAN YOU MUST (given Q)’⁵ in the version of Horn (1984: 13), have been mentioned in this context (see König 1985a: 15f., 1985b: 275f., 1988: 159ff., König and Traugott 1988: 120f.).

Relevance theory as a potential framework for explanations of how pragmatic inferencing affects the history of clausal connectives has not yet been explored to a substantial degree. More than the occasional reference to relevance theory can hardly be found in the works that deal with diachronic aspects of clausal connectives. König and Traugott (1988: 110) mention Sperber and Wilson (1986/1995) as potentially being a framework which can be used in explanations of pragmatically induced diachronic changes concerning clausal connectives. However, they also express doubt about the manner in which relevance theory could actually be applied.⁶ In Traugott and König (1991) the neo-Gricean approach based on the principle of informativeness and the relevance-theoretic approach are mentioned side by side. While there is no discussion in the main text of potential differences that may ensue from taking either of these approaches (see Traugott and König 1991: 191f.), the authors hint in a note that the debate between neo-Griceans and relevance theoreticians over the nature of pragmatic principles may be important for discussions of language change, including that of clausal connectives (see Traugott and König 1991: 214, n. 4).

⁴ I follow Carston (*e.g.* 1998) in distinguishing between ‘post-Gricean’ and ‘neo-Gricean’: ‘Post-Gricean refers to all those approaches to pragmatics that take the Gricean inferential approach to communication as their starting point and so includes relevance theory. By neo-Gricean I mean those approaches that function with some version or other of the original Gricean maxims and the Cooperative Principle; relevance theory, of course, stands outside this category’ (Carston 1998: 227, n. 1).

⁵ Horn’s (1984: 13) Q-principle says ‘MAKE YOUR CONTRIBUTION SUFFICIENT [...] SAY AS MUCH AS YOU CAN (given R)’.

⁶ In a footnote they write: ‘Whether the Principle of Relevance proposed by Sperber/Wilson (1986), to which all Gricean maxims are reduced, provides an adequate explanation of these augmentations is not so clear. Sperber/Wilson define ‘relevance’ as informativeness in relation to context, which can be measured by the number of contextual implications, but the phenomena they discuss are very different from the ones under consideration in this paper’ (König and Traugott 1988: 120, n. 4).

It seems worthwhile to investigate in more detail if a relevance-theoretic perspective on historical developments of the kinds mentioned above has advantages over its pragmatic alternatives within the broader post-Gricean range. This is especially so in view of the fact that neo-Griceans and relevance theoreticians have been engaged in debate for some years now, not only over subtle details, but also over fundamental and distinctive aspects of the respective approach (see *e.g.* Levinson 1989 and the references given there, 2000: *pass.*, Carston 1990/1995, 1998, 2002: *pass.*). The present study aims to make a contribution to this debate by investigating a topic from historical linguistics (see also Nicolle 1998).

2 Semantic diachrony of clausal connectives and neo-Gricean principles

2.1 Three types of phenomena

A pragmatic theory which is to account for the semantic diachrony of clausal connectives has to cope with at least the following types of phenomena that arguably involve pragmatic inferencing:

Type 1 phenomena, subtype 1.1: There are pairs of connectives C_1 and C_2 which have two distinct denotations D_1 and D_2 ; C_1 and C_2 are diachronically related in that C_2 is historically derived from C_1 , this diachronic relation being due to pragmatic processes. For example, there is a temporal connective *since* (C_1) and a causal connective *since* (C_2) which are semantically independent. The historical development from temporal to causal *since* is the result of pragmatic processes.⁷

Type 1 phenomena, subtype 1.2: There are connectives C with denotation D where C is the only diachronic survivor of an earlier pair C_1 and C_2 as described under subtype 1.1. For example, there is contrastive *whereas*, which is derived from a contrastive predecessor that formed a subtype 1.1 pair with locative *whereas* in earlier stages of English.

- (2) a. **Whereas** vtilitie is, there is pietie. (1567 J. Sandford *Epictetus* 23; *OED2*, s.v. *whereas*, †1)

a.' **Whereas** the Ebrewe speache seemed hardly to agree with ours, we haue noted it in the margent. (1578 *Bible* (Geneva); *ibid.*)

b. There are layed vp for vs dwellynges of health & fredome, **where as** we haue lyued euell. (1535 Coverdale 2 *Esdras* vii. 5; *OED2*, s.v. *whereas*, 3)

⁷ I retain the common term 'causal' here although I have argued elsewhere (Breul 1997) that 'causal' *since* rather introduces a reason in a reason-consequence relation than a cause in a cause-effect relation (these two relations being conceptually different).

b.' This knave, **wheras** he is the greatest glutton..that maye bee, yet is he the moste idle lubber. (1542 Udall *Erasm. Apoph.* 7; *ibid.*)

Locative *whereas*, as in (2a, a'), does not exist any more in present-day English.

Type 2 phenomena: There are connectives *C* with denotation *D* which have the synchronic-pragmatic potential to give rise to the development of a partner so as to diachronically result in a pair as described under type 1.1. For example, the German temporal clausal connective *seit* has the potential to trigger pragmatic inferences to the effect that a causal sense is often hypothesized by the addressee to have been conveyed by the communicator.

(3) **Seit** Schmitt die Firma führt, sind die Umsätze bedeutend gestiegen.

since (temporal) Schmitt the company leads are the turnovers significantly risen

‘Since Schmitt took over as director, the turnovers have risen significantly’.

Possibly implicated: ‘The turnovers have risen significantly as a result of Schmitt’s taking over as director’.

But German *seit* is different from English *since* in that there is no causal *seit* semantically independent of temporal *seit*.

(4) a. You can rely on me **since** I am your brother. ≠

b. ?Du kannst dich auf mich verlassen, **seit** ich dein Bruder bin.

you can yourself on me rely since (temporal) I your brother am

A potential causal interpretation in connection with *seit* can only arise by pragmatic inference *on the basis of* its temporal (*terminus a quo*) denotation, which is the only denotation associated with this connective.⁸

The central explanatory concern of a pragmatic approach to the semantic diachrony of clausal connectives along the lines of König’s and Traugott’s work is an explanation of the development of a connective that shows type 2 behaviour into one which belongs to type 1. For this development to be possible the respective connective has to be used in bridging contexts, that is, in contexts that ‘trigger an inferential mechanism to the effect that, rather than the source meaning, there is another meaning, the target meaning, that offers a more plausible interpretation of the utterance’ (Heine 2002: 84). For an individual speaker this development has been completed if she uses the

⁸ *Seit* had a causal meaning in earlier German, but it got lost (see e.g. Molencki in this volume). Thus, present-day German *seit* has again the potential to go through a development which it already went through in the past.

respective connective in switch contexts, that is, in contexts that ‘are incompatible, or in conflict, with some salient property of the source meaning’ such that ‘an interpretation of the source meaning is ruled out’ (*ibid*: 85).⁹ Note, however, that the identification of bridging and switch contexts as such does not explain how it is possible that a speaker starts using a given connective in a switch context. Moreover, their identification alone does not explain why connectives generally show typical pathways of their semantic diachrony (see Kortmann 1997: *pass.*). In order to tackle these questions we have to make use of (theories of) principles of interpretation and of theories of how the operation of such principles affects the (mental) lexicon. König’s and Traugott’s answer to these questions in very general terms is that inferred senses often triggered by type 2 connectives become conventionalized. And, as we saw above, it is especially the principle of informativeness (Atlas, Levinson) or the R-principle (Horn) that König and Traugott consider to be the appropriate conceptual tools to be used in their account. Although I consider König’s and Traugott’s answer to be essentially correct, one point to be made in the present study is to cast doubt on the appropriateness of the principle of informativeness (henceforth I-principle) in this context and to suggest that a relevance-theoretic stance is more promising;¹⁰ the other point is to present a more explicit idea of what it means for a certain meaning of a connective to become conventionalized.

2.2 Discussion of the I-principle

According to König (1985a: 16, 1985b: 276; similarly König 1988: 160), the I-principle ‘roughly states that the best interpretation of an utterance is the most informative proposition among competing interpretations that is consistent with the common ground’. This is a simplified but essentially accurate version of the original formulation (presented in Atlas and Levinson 1981: 40f.), whose most important first part reads as follows:

Suppose a speaker *S* addresses a sentence *A* to hearer *H* in a context *K*. If *H* has *n* COMPETING interpretations A^{u1} , A^{u2} , ..., A^{un} of *A* in the context *K* with information contents $\text{INF}(A^{u1})$, $\text{INF}(A^{u2})$, ..., $\text{INF}(A^{un})$, and G_A is the set of propositions that are noncontroversial in *K*, then the ‘best’ interpretation A^{u*} of *A* for *H* is the most informative proposition among the competing interpretations that is consistent with the common ground.

One problem that arises with this formulation of the I-principle is that it provides an account of which interpretation from a range of competing, *somehow predetermined* interpretations tends to be picked by the addressee as the result of the interpretation process. But it fails to provide an account of how the individual interpretations that are

⁹ For concepts similar but not identical to bridging and switch contexts see Diewald (2002). I am grateful to the editors of the present volume for having made me aware of Heine (2002) and Diewald (2002).

¹⁰ The restriction to the I-principle in the following is due to considerations concerning the length of the present paper, to the fact that both Levinson and Horn acknowledge the similarity of their proposals (see *e.g.* Horn 1984: 19, Levinson 1995: 111, n. 9, 2000: 41, 137) and that, to my mind, the I-principle has been formulated in more explicit terms than the R-principle.

the elements of the set of interpretations picked from come into existence in the first place. More specifically with respect to clausal connectives: The I-principle tells us which of the competing interpretations associated with an utterance that contains a given clausal connective tends to be taken to be licensed under certain contextual conditions – the purely temporal one or the temporal +> contrastive¹¹ one of *while*, for instance.¹² But it does not tell us how the temporal +> contrastive interpretation is generated in the first place.

This problem has been acknowledged by Levinson,¹³ and new versions of the I-principle have been put forward which aim to avoid it. In Levinson (2000: 114) the most important parts of it for our purposes read as follows:

I-Principle

Speaker's maxim: the maxim of Minimization. 'Say as little as necessary'; that is, produce the minimal linguistic information sufficient to achieve your communicational ends (bearing Q in mind).

Recipient's corollary: the Enrichment Rule. Amplify the informational content of the speaker's utterance, by finding the most *specific* interpretation, up to what you judge to be the speaker's m-intended point,^[14] unless the speaker has broken the maxim of Minimization by using a marked or prolix expression.

Specifically:

- a. Assume the richest temporal, causal and referential connections between described situations or events consistent with what is taken for granted.
- b. Assume that stereotypical relations obtain between referents or events, unless this is inconsistent with (a).

The idea that the addressee has to search for an interpretation which is more *specific* than what is linguistically encoded (the 'what-is-said' in Gricean terms) is crucial in the present context. In Levinson (1987/1998: 550) an explanation of this notion in simple

¹¹ The symbol '+>' in front of readings is used by Levinson (e.g. 2000) to signal that this reading is implicated.

¹² König and Traugott (1988: 114) point out that 'the fact that [...] *while* is still awkward in contexts expressing anteriority of one event to another shows that this conjunction has not lost its original meaning of temporal overlap'. They exemplify by the following sentence: *While we were extremely successful last year, this year does not look too promising*. For those speakers who consider such examples unacceptable *while* is a type 2 connective; for those who consider them acceptable it is a type 1 connective.

¹³ Levinson (2000: 115): 'We sketched there [*i.e.* in Atlas and Levinson 1981] a two-level account: first, all the competing interpretations are generated; then the most informative is selected. The principles generating the set of competing interpretations were left open in that account'.

¹⁴ 'M-intention is Grice's (1989: 105) shorthand for the complex reflexive intention involved in speaker's meaning – namely, the speaker's intention to cause an effect in the recipient just by getting the recipient to recognize that that was his/her intention' (Levinson 2000: 391, n. 43).

terms is ‘*what is communicated is a sub-case of what is said*’. The more sophisticated version in Levinson (2000: 115) reads: ‘*p is more specific than q* if (a) *p* is more informative than *q* (e.g. *p* entails *q*); and (b) *p* is isomorphic with *q* (i.e., each term or relation in *p* has a denotation that is a subset of the denotations of the corresponding expressions in *q*)’. With respect to alleged misunderstandings of earlier presentations of his I-principle Levinson emphasizes the following two points: a) that a more specific meaning inferred by applying the I-principle consists of the conjunction of the linguistically encoded meaning and of the meaning of one or more I-implicated proposition(s); b) that this conjunctive meaning (the I-*implicated meaning in his terminology) entails the meaning of the literally encoded proposition (see Levinson 2000: 115, 392, n. 51).

Let us consider what this means with respect to the following attested example, which involves the connective *while* with the meaning ‘[a]t the same time that (implying opposition or contrast)’ according to the *OED2* (s.v. *while*, adv., conj., B.2.b) (for the diachrony of *while* see also González-Cruz in this volume).

- (5) **Whill** others aime at greatnes boght with blood, Not to bee great thou stryves, bot to bee good. (1617 Sir W. Mure *Misc. Poems* xxi. 23)

The linguistically encoded meaning of the utterance of (5) can be rendered as in (6a) and the I-implicated contrastive sense as in (6b).

- (6) a. The two eventualities, (a) that others aim at greatness bought with blood and (b) that you do not strive to be great but to be good, occur simultaneously.
- b. That you do not strive to be great but to be good contrasts with the fact that others aim at greatness bought with blood.

Now, it is of course descriptively (and trivially) correct that the conjunction of (6a) and (6b), that is, the I-*implicated meaning of (5), entails (6a). And it is equally descriptively correct that the conjunction of (6a) and (6b) is more specific than (6a). But still it remains mysterious how an addressee of (5) may pragmatically infer (6b) on the basis of the I-principle, *this inference being a prerequisite of the interpretation of (5) as the conjunction of (6a) and (6b)*. Very similar to the problem pointed out in connection with the original formulation of the I-principle, there seems to be an interpretive gap here which cannot be closed by an application of the I-principle.

We may try to close this gap by taking the ways into account by which Levinson attempts to make his notion of a ‘more specific interpretation’ more specific (‘Assume the richest temporal, causal and referential connections [...]’, ‘Assume that stereotypical relations obtain [...]’; see above). This does not conform to Levinson’s intention, for these specifications refer to the relation between the linguistically encoded meaning and I-*implicated meaning, not between linguistically encoded meaning and I-implicated meaning. Nevertheless, for the sake of the argument we may consider whether these specifications would help in inferring (6b) on the basis of (6a). However, they do not

appear to do so: A causal enrichment ('That you do not strive to be great but to be good is caused by the fact that others aim at greatness bought with blood') obviously leads to a wrong result; and there is nothing at all stereotypical about thinking of two simultaneous events as standing in a contrastive relation to one another. In fact, there is also nothing at all stereotypical about thinking of two succeeding or simultaneous events as being causally related (*cf. since*, German *weil*), given that we are constantly confronted with perceptions of events which are succeeding or simultaneous but which we do not conceive of as causally related. Finally, there is no sense in which (6b) can be understood as a sub-case of (6a). What seems to be crucial is not (our conception of) the nature and relation of the eventualities involved as such, but the fact that the communicator mentions them at the respective point in the discourse.

The preceding discussion casts doubt on the appropriateness of the I-principle in accounts of type 2 phenomena. Being rather synchronic than diachronic, these phenomena are the subject of the general debate over which pragmatic principles and which of the more general theoretical frameworks are best suited to explain them. Within the mosaic of this debate the preceding discussion is just an additional piece. I turn now to what I consider a shortcoming of the I-principle in accounting for type 1 phenomena.

2.3 The detachment problem

What does the I-principle have to offer in explanations of those diachronic developments of clausal connectives where the formerly I-implicated meaning becomes an independent denotation? This question refers to what I would like to call the detachment problem. That is, how does a causal meaning get detached from a temporal one so that, for instance, *since* can be used without any implication of a temporal relation, or how does a contrastive meaning get detached from a locative one so that *whereas* is used without a locative implication?¹⁵ Detachment in this sense is a prerequisite for the formerly implicated meaning to become conventionalized and lexicalized. But the I-principle does not seem to have anything to offer in the way of explaining the leap from a connective's triggering an implicature to this implicature becoming a semantically independent denotation. The I-principle is concerned with the relation between linguistically encoded (implicating) meaning and I*-implicated meaning. The diachronic detachment of a formerly implicated meaning does not fall into its purview. Of course, this principle being developed with a synchronic perspective on pragmatic issues it is not designed so as to provide a solution for the detachment problem. However, it ought to provide an angle from which such a solution might be sought, if it is invoked in the context of discussing the semantic diachrony of clausal connectives and if certain examples from the semantic diachrony of clausal connectives are vice versa invoked as supporting its viability (see Levinson 2000: 263). As we will see, a relevance-theoretic approach, whose

¹⁵ Recall that 'becoming an independent denotation' may be followed by the loss of the formerly implicating denotation (subtype 1.2 phenomena, *e.g. whereas*), or it may be retained (subtype 1.1 phenomena, *e.g. causal since* alongside temporal *since*).

starting point is equally not designed with diachronic issues in focus, nevertheless does seem to be able to provide a solution for the detachment problem.

3 A relevance-theoretic approach: The examples of *where* and *whereas*

3.1 Relevance theory in a nutshell

A recapitulation of some essentials of relevance theory is in order. In relevance theory the linguistic meaning of a sentence or phrase used in an utterance, which is decoded on the basis of the hearer's knowledge of the language, 'is just one of the inputs to a non-demonstrative inference process which yields an interpretation of the speaker's meaning' (Wilson and Sperber 2004: 607). Being 'non-demonstrative' means that the inference process does not guarantee the recovery of the speaker's meaning. The other inputs to such an inference process are drawn from the context, that is, the set of assumptions held by the hearer at the time when the utterance is to be interpreted. The set of assumptions drawn from comprises those which the hearer holds about the world in general, about the specific situation of the communicative exchange and about assumptions held by the addressee.

One basic supposition of relevance theory is that the part of the human cognitive system which is concerned with utterance interpretation strives for the generation of so-called positive cognitive effects. The most important type of positive cognitive effect is the generation of a new assumption, that is, one which could not have been derived from the input alone, nor from the context alone, but only from both together. Other types of positive cognitive effect 'include the strengthening, revision, or abandonment of available assumptions' (Wilson and Sperber 2004: 608). Another basic supposition is that the generation of positive cognitive effects is constrained by the amount of cognitive effort invested in the interpretation process. The relevance of an utterance results from weighing processing effort and positive cognitive effects against one another along the following lines:

- a. Other things being equal, the greater the positive cognitive effects achieved by processing an input, the greater the relevance of the input to the individual at that time.
- b. Other things being equal, the greater the processing effort expended, the lower the relevance of the input to the individual at that time (Wilson and Sperber 2004: 609).

Now, the essential claim made by relevance theory is that the specific inferences that are made in the interpretation of an utterance in addition to the decoding of its linguistic meaning are guided by two principles. The 'Cognitive Principle of Relevance' states that '[h]uman cognition tends to be geared to the maximization of relevance' (Wilson and

Sperber 2004: 610). The ‘Communicative Principle of Relevance’ states that ‘[e]very ostensive stimulus [*i.e.* an utterance in verbal communication] conveys a presumption of its own optimal relevance’ (Wilson and Sperber 2004: 612). These two principles together imply a certain strategy for the process of utterance interpretation on the part of the addressee: It is most rational for the addressee to apply a least effort strategy and to take the first interpretation which satisfies his expectations of relevance as the most plausible hypothesis about the intended meaning on the part of the communicator. However, as pointed out by Wilson and Sperber (2004: 614), ‘[s]ince comprehension is a non-demonstrative inference process, this hypothesis may well be false; but it is the best a rational hearer can do’.

3.2 Relevance theory as the key to a solution of the detachment problem

I would argue that it is precisely the possibility of false hypotheses generated during pragmatic inferencing by interlocutors who have not yet completed language acquisition which provides the key for a solution of the detachment problem. More specifically, it is language users who have not yet completely fixed the denotation(s) for the respective clausal connective in their mental lexicons, that is, typically children, who are responsible for the diachronic detachment of a formerly implicated meaning from the linguistically encoded meaning. The steps of my argumentation are these:

1. For a child who has not yet fixed the denotation(s) for a connective there does not yet exist a clear separation between denotational meaning and implicated meaning of the connective.¹⁶ That is, the distinction between denotational and implicated meanings presupposes fixed denotations.
2. What is an implicated meaning of the connective for an adult may be taken as a denotational meaning of the connective by the child.
3. If an implicated meaning M_i is more relevant in a given communicative situation than what is a/the denotational meaning M_d of the connective for the adult, then M_i may be (falsely) hypothesized by the child to be a/the denotational meaning of the connective and may correspondingly become lexically fixed. Note especially that M_i is *not* generated as a specification or enrichment of M_d by the child, in contradistinction to the approach based on the recent version of the I-principle. Note also that by ‘false hypothesis’ I mean that the child assumes a denotational meaning for the connective where it is actually or potentially only an implicated meaning, the denotational meaning associated with the connective on the part of the speaker being different from the one assigned to it by the child.

¹⁶ The expression ‘implicated meaning of the connective’ is an abbreviation for ‘those aspects of the meaning of the connective which contribute to certain implicatures associated with utterances in which it occurs’.

4. That a diachronically later denotation of a clausal connective often contributes to an informationally more specific meaning of a sentence than an earlier denotation is one consequence among others of pragmatic inferencing guided by relevance. This is because a more specific interpretation (*e.g.* temporal + causal) is, other things being equal, generally more relevant than a less specific interpretation (*e.g.* temporal). However, other things are not always equal. A more specific interpretation may be less relevant in a given case because it costs too much processing effort. Or it may be less relevant because the maximal relevance of the utterance for the interpreting individual derives from positive cognitive effects on a higher level than the propositional content.

Note that when I talk of children as being those who are typically involved in this process I do not implicate a specific age up to which the process may operate. The important point is that those speakers are the agents in this process whose lexical entry or entries for the respective connective has not yet been fixed, and I assume that this is typically the case for children. With respect to the specific processes to be discussed below, concerned with the connectives *where* and *whereas* and the notion of contrastiveness, I assume that children rather advanced in language acquisition are involved, *i.e.* roughly from age 7 onwards (see Kortmann 1997: 156f. and the literature mentioned there). Traugott and Dasher (2002: 41f.) argue that adults rather than children are the initiators of changes that involve pragmatic inferencing. This does not contradict the argument presented here. Adults are initiators and innovators of change in that their use of language invites pragmatic inferencing, but it is in the children's minds that implicatures are transformed into lexical denotations.

What I mean by a lexical entry for a connective being fixed or not can best be explained with the example of German *seit*: Although the temporal connective *seit* has been shown often to implicate a causal relation (see above), adult speakers of present-day standard German have, perhaps due to normative pressure, fixed its temporal denotation (*terminus a quo*) as the only denotation for it in their mental lexicons. Such speakers will not accept utterances in which *seit* would have to be interpreted as a connective with a causal denotation (*cf.* (3)-(4) above).

To illustrate the line of argumentation drawn by steps 1-4 above consider (7) addressed to a child whose lexical entry for the connective *where* has converged on the locative denotation but who is still prepared for the possibility of other denotations for it.

- (7) They are rude **where** they should be reverent. (1850 Newman *Diff. Anglicans* ix 221; *OED2*, *s.v.* *where*, 10.b.(a))

There are communicative situations in which a reading of (7) as (8a) (denotationally contrastive) is more relevant – in the relevance-theoretic sense – than the reading (8b) (denotationally locative, either with or without implicated contrastiveness).

- (8) a. They are rude whereas they should be reverent.

- b. They are rude in situations in which they should be reverent.

Some differences between (8a) and (8b) are these: In (8b) the propositional content ‘They should be reverent’ is an integral part of the representation of a larger propositional content, namely that of (8b) as a whole. The connective *where* in this reading serves a representational function, that is, it effects this integration of the subordinate proposition into the representation of the superordinate proposition, indicating that the conceptual anchor for the integration is a certain locative one. The larger propositional content is taken to be asserted in an utterance of (7) under interpretation (8b). In (8a) on the other hand ‘They should be reverent’ is the propositional content of an assertion which is separate from that of the assertion of *They are rude*. The function of the connective *where* in this reading is procedural. The representational function is associated with clause embedding and the procedural function with the structurally ‘tactic’ (para- or hypotactic) clause relations.¹⁷

Expressions with a ‘procedural meaning’ ‘encode procedural constraints on the inferential phase of comprehension’ (Wilson and Sperber 1993: 11); in other words, they are ‘expressions whose function is not so much to encode a concept as to indicate how to ‘take’ the sentence or phrase in which they occur’ (*ibid.*).¹⁸ Taking *where* in (7) to be procedural means to take it as signalling that the assertion of *They should be reverent* generates contextual implications (*i.e.* implicatures) that stand in a contrastive relation to contextual implications generated by the assertion of *They are rude*.¹⁹ For example, the utterance of the *should*-clause can be said to implicate a positive attitude of the speaker to its propositional content, with the connective guiding the hearer to an interpretation according to which the speaker has a negative attitude to the propositional content of the preceding clause. That is, even if the child does not yet have a lexical entry for contrastive *where* it would make sense for her to interpret (7) as if it were procedurally contrastive, since this interpretation generates positive cognitive effects on the level of

¹⁷ On this structural distinction see Halliday (1985/1994: 242), Breul (1997: 25ff., 1999); see the last two works also for investigations into the relation between the syntactic characteristics of clause embedding and clause combining on the one hand and what may be called the speech-act theoretical, Gricean, and/or text or discourse linguistic correlates of the relevance-theoretic concepts of procedural and representational functions on the other hand, mainly in the semantic domain CAUSE-REASON. As suggested by the anonymous reviewer and the editors of this volume, it would be interesting to supplement the pragmahistorical approach of the present paper by a diachronic study of the syntactic characteristics of *where*- and *whereas*-clauses.

¹⁸ I prefer the terminological dichotomy ‘representational’ versus ‘procedural’ for the two functions just mentioned. While ‘representational’ is used in Blakemore (1992: 149ff.), for instance, the alternative term ‘conceptual’ (as opposed to ‘procedural’) is used in Blakemore (1987, 2002) among others.

¹⁹ This claim is supposed to match what Blakemore (2002: 103) says about *whereas*, ‘which would seem to have properties which suggest procedural encoding’; see also Rouchota (1998: 44ff.). More specifically, with respect to the utterance *It was really wet before Christmas, whereas after Christmas it was quite dry* Blakemore (2002: 103) explains: ‘The use of *whereas* [...] seems to indicate that the relevance of the utterance lies in the derivation of a set of parallel and contrasting contextual implications, for example the ones in [(i)]’:

- (i) (a) We were unhappy with the weather before Christmas.
- (a') We were happy with the weather after Christmas.
- (b) We couldn't go outside much before Christmas.
- (b') We could go outside often after Christmas.

attitudes towards propositions. Such positive cognitive effects related to what are called higher-level explicatures in relevance theory are absent on the level where representational denotations of connectives are involved.²⁰

A communicative situation in which a reading of (7) as (8a) is more relevant than the reading (8b) will result in a lexical entry for contrastive *where* alongside locative *where* (perhaps only after having repeatedly occurred in analogical fashion). Locative *where* plays no role in the pragmatic inference process, except that it is rejected because it is considered to contribute to a less relevant interpretation than (8a). Note that this consideration is similar to the idea that underlies the original I-principle as suggested by Atlas and Levinson, according to which the ‘best’ interpretation is picked from a range of potential interpretations. However, as already pointed out, within that theory there was no account of how the non-literal interpretations might come about. In the present account these interpretations are the result of processes of pragmatic inferencing guided by relevance. In contrast to the recent version of the I-principle the contrastive reading of (7) is in no way an enrichment or specification of the locative reading in the present account.

3.3 An account of the semantic diachrony of *where* and *whereas*

The relevance-driven reading of (7) as conveying (8a) may very well be a false interpretive hypothesis. In fact, the gloss given in the *OED2* for the meaning to be exemplified by (7) is ‘[i]n a or the case in which [...]; in the circumstances, position, or condition in which; in that respect or particular in which. (Sometimes with implication of contrast or opposition [...])’. That is, if the producer of (7) actually intended to convey the meaning given in the *OED2* in a communicative situation that involved our hypothetical child-addressee, then we are confronted with a case of false interpretive hypothesis driven by relevance. The effect for the mental lexicon of the addressee will be that she fixes a purely contrastive lexical denotation for *where* independent of its locative meaning, whereas the surrounding speech community may involve mental lexicons in which there is only locative *where*. In other words, the detachment of contrastive *where* is a kind of pragmatic reanalysis driven by relevance.

In view of this consideration it is not surprising that denotationally contrastive *where* has been attested since the fourteenth century (see *OED2*, s.v. *where*, 12.b). That is, there probably have been speakers of English at all times since *where* began to be used as a connective introducing clauses of (specific) place who have gone through the process just described.²¹ The first and the last examples given in the *OED2* (s.v. *where*, 12.b) for contrastive *where* are (9a, b).

²⁰ On the explicature/implicature distinction see Carston (1988). On representational (or conceptual) versus procedural meanings and their relation to the explicature/implicature distinction see for example Blakemore (1992: ch. 4, 6, 2002), Wilson and Sperber (1993), Rouchota (1998).

²¹ On the beginnings of this use, developing out of the interrogative and/or nonspecific (indefinite; *i.e.* ‘wherever’) use of OE *hwær*, see Yamakawa (1971), Mitchell (1985: 273ff.).

- (9) a. It fordoip Cristis privylege, þat **where** Cristene men shulden be free, now þei ben nedid to hire a preest. (c1380 Wyclif *Sel. Wks.* III. 358)

‘It spoils Christ's special significance that, **whereas** Christians should be free, they are now compelled to hire a priest’.

- b. **Where** the pagan architecture had been an *exterior* art ... and **where** Roman and Byzantine art had striven to achieve space in its simplest form, the North worked for interior space. (1929 R.A. Cram *Catholic Church & Art* iv. 57)

I would suggest that scenarios analogical to the one just described with the example of *where*, in which the fixing of lexical entries for clausal connectives is preceded by relevance-driven reanalysis, can be extended to the explication of other phenomena of diachronic semantic change of clausal connectives for which a pragmatic approach has been proposed. The semantic/pragmatic history of *whereas*, for instance, seems to show a development exactly parallel to the potential history of *where* implied by the scenario.

It is reasonable to assume, with the *OED2*, that the earliest occurrences of *whereas* in the fourteenth century were denotationally only locative; see (10).

- (10) a. þei ... tok forþ here wey ... to sum wilderness **where as** þei bredde. (c1350 *Will. Palerne* 1782; *OED2*, s.v. *whereas*, †1)

‘They [...] proceeded [...] to some wilderness **where** they dwelt’.

- b. The colveres retournen a en **where as** thei ben norissht. (1366 *Mandeville*; *OED2*, s.v. *as*, adv., conj., B.27)

‘The pigeons go back **where** they were nourished’.

- c. Nat fer fro Pedmark ther his dwellyng was **Where as** he lyueth. (c1386 Chaucer *Frankl. T.* 74, *OED2*, s.v. *whereas*, †1)

‘Not far from Penmarch, **where** his house was, where he lives’.

The origin of specifically the combinative form of locative *whereas* (*where* + *as*) seems to be due to the development OE *swa hwær swa* (‘wherever’) > ME *whær(e) swa* (cf. *OED2*, s.v. *also*, s.v. *as*, adv., conj., s.v. *so*, s.v. *whereso*) in combination with the use of *as* as a complementizer analogous to *that* in combinations such as *after that*, *when that*, *where that*, which were lost after the Early Modern period of standard English (see *OED2*, s.v. *as*, adv., conj., 27, Franz 1898f./1986: 430f., Barber 1976/1997: 206f., Fischer 1992: 305, Kortmann 1997: 312, 321, 332). Locative *whereas* became obsolete by the end of the seventeenth century with occasional archaic occurrences later.

The first attested examples in the *OED2* of denotationally contrastive *whereas* are those given in (2b, b') above, which are from the first half of the sixteenth century.²² However, the following examples (11a-f) from Chaucer and Gower, in which *whereas* does not have a locative meaning, show that denotationally contrastive *whereas* appeared much earlier: in the course of the fifteenth century, or even as early as the end of the fourteenth century (*i.e.* at the time of Chaucer's and Gower's own writing the respective lines).²³ Note that the presence of *where* for *whereas* in the Hengwrt manuscript versions of (11d, e) cannot be taken to indicate a locative relation. For *where* had a clearly established denotationally contrastive meaning alongside the locative one in the respective period (see above).²⁴

- (11) a. Ensample that it falleth thus, // Thou miht wel take of Piramus, // Whan he in haste his swerd outdrowh // And on the point himselve slowh // For love of Tisbee pitously, // For he hire wympele fond bloddy // And wende a beste hire hadde slain; // **Wher as** him oghte have be riht fain, // For sche was there al sauf beside. (Gower, *Confessio Amantis*, Book 3, l. 1659)

'As an example that things happen this way you may well take Pyramus, when he drew his sword in haste and, sadly, killed himself on the point because of his love for Thisbe. For he found her bloodstained wimple and thought that she had been killed by a wild animal; **whereas** he should have been very glad, since she was there, altogether safe nearby'.

- b. For as much as the almykanteras in thin Astrelabie ben compowned by two and two, **where as** somme almykanteras in sondry astrelabies be compowned by 1 and 1, or elles by 2 and 2, it is necessarie to thy lernyng to teche the first to knowe and worke with thin oune instrument. (Chaucer, *A Treatise on the Astrolabe*, 671, c. 2; part II. 5; l. 1ff.)

²² I ignore in the present paper what the *OED2* calls the illative meaning of *whereas*, *i.e.* 'In view or consideration of the fact that; seeing that, considering that, forasmuch as, inasmuch as. (Chiefly, now only, introducing a preamble or recital in a legal or other formal document)' (*OED2*, s.v. *whereas*, 2). It may be noted that *where* was also used with this meaning (see *OED2*, s.v. *where*, 12.†a).

²³ The manuscripts on which the editions are based from which the following quotations are taken came into existence before 1420 as far as *Confessio Amantis* and the *Canterbury Tales* are concerned (see Owen 1991: 7ff. in connection with Macaulay, ed., 1900f.: cxxviiff. for the former and in connection with Benson, ed., 1933/1988: 1118ff. for the latter), and sometime within the fifteenth century in the case of the *Treatise on the Astrolabe* (see Benson, ed., 1933/1988: 1193f.). Thus it is unclear to which extent the manuscripts reflect Chaucer's and Gower's own usage where details are concerned.

²⁴ a. The examples in (11) and (12) below were retrieved by searching for *whereas* and its various orthographic variants in the *Corpus of Middle English Prose and Verse* followed by 'manual' checking for relevant sentences. This procedure attests once more to the usefulness in historical linguistic research of having corpora at one's disposal.

b. A double slash (//) in some of the examples in (11) and (12) below indicates the end of a verse line. The quotations from Gower in (11a) and (12a, b) below are cited after Macaulay, ed. (1900f.); the quotations from Chaucer in (11b-f) and (12c-i) are cited after Benson, ed. (1933/1988) and have been checked as far as *whereas* is concerned against the respective volume of the *Variorum* editions of Chaucer's works where available, that is, Ruggiers, ed. (1979), Pearsall, ed. (1984), Eisner, ed. (2002).

‘Since the almucantars in your astrolabe are constructed in distances of two degrees, **whereas** some almucantars in various astrolabes are constructed in distances of one or two degrees, it is necessary for your learning process to teach you first to understand and work with your own instrument’.

c. Thy zodiak of thin Astrelabie is shapen as a compas which that contenith a large brede as after the quantite of thyn Astrelabie, in ensample that the zodiak in hevene is ymagyned to ben a superfice contenyng a latitude of 12 degrees, **whereas** alle the remenaunt of cercles in the hevene ben ymagyned verrey lynes withoute eny latitude. (*ibid.*: 668, c. 2; part I. 21; l. 32ff.)

‘The zodiac of your astrolabe has the shape of a circular band whose breadth matches the size of your astrolabe, in imitation of the fact that the celestial zodiac is conceived to have a surface of 12 degrees in width, **whereas** all the remaining celestial circles are conceived to be actual lines without any width’.

d. The sclandre of Walter ofte and wyde spradde, // That of a crueel herte he wikkedly, // For he a povre womman wedded hadde, // Hath mordred bothe his children prively. // Swich murmur was among hem comunly. // No wonder is, for to the peples ere // Ther cam no word, but that they mordred were. // For which, **where as** [ms. Hengwrt *wher*] his peple therbifore // Hadde loved hym wel, the sclandre of his diffame // Made hem that they hym hatede therefore. (Chaucer, *The Clerk’s Tale*, 146, c. 2; l. 722ff.)

‘The scandalous rumour about Walter was often and widely being circulated: that, having a cruel character, he had viciously and secretly murdered both his children because he had married a poor woman. Whispers of this kind were very common among them. And it is no wonder, for no word other than that they were murdered reached the people’s ears. And because of this, **whereas** his subjects had before loved him very much, the rumour of his disgrace caused it that they therefore hated him’.

e. And certainly, as sooth as God is kyng, // To take a wyf it is a glorious thyng, // And namely whan a man is oold and hoor; // Thanne is a wyf the fruyt of his tresor. // Thanne sholde he take a yong wyf and a feir, // On which he myghte engendren hym an heir, // And lede his lyf in joye and in solas, // **Where as** [ms. Hengwrt *wher*] thise bacheloris synge ‘allas,’ // Whan that they fynden any adversitee // In love, which nys but chilydyssh vanytee. (Chaucer, *The Merchant’s Tale*, 154, c. 1-2; l. 1267ff.)

‘And certainly, as sure as God is king, taking a wife, that is a glorious thing, and especially when a man is old and grey. Then a wife is the best part of his wealth; then he should take a young and good-looking wife with whom he might have an heir and lead his life in joy and comfort. **Whereas** these bachelors whine ‘alas’ when they meet with any adversity in love, which is nothing but childish vanity’.

f. Ye han erred also, for it semeth that yow suffiseth to han been conseilled by thise conseillours oonly, and with litel avys,/ **whereas** in so greet and so heigh a nede it hadde been necessarie mo conseillours and moore deliberacion to parfourne youre emprise. (Chaucer, *Tale of Melibee*: 225, c. 2; 1252f.)

‘You have made a further mistake, for it seems that you were content to have been counselled by these counsellors only, and with little weighing of opinions, **whereas** in such a great and important matter more counsellors and more deliberation would have been necessary to accomplish your enterprise’.

That denotationally contrastive *whereas* is attested almost as early as denotationally locative *whereas* (and not much later in any case), in contrast to what the *OED2* suggests, is fully in accordance with the explanatory approach taken in the present study: Right from the beginning of its existence in the middle of the fourteenth century (recall (10a) above), locative *whereas* can be expected to have occurred in many utterances which also allow for an implicated contrastive reading and in which the implicated contrastive reading is more relevant than the denotationally locative one; this resulted in an entry for contrastive *whereas* in the mental lexicons of speakers of the ‘next generation’. If this scenario is correct, then we should find occurrences of *whereas* during this period which are ambiguous between locative and contrastive readings. Actually, we do find them, as shown in (12):

- (12) a. What helpeth it a man have mete, // Wher drinke lacketh on the bord? // What helpeth eny mannes word // To seie hou I travaile faste, // Wher as me faileth ate laste // That thing which I travaile fore? (Gower, *Confessio Amantis*, Book 4, l. 1718ff.)

‘What is the use of food to a man where there is nothing to drink on the table? What is the use of anybody’s talk, saying how zealously I am working, {where (i.e.: in situations in which) / whereas} at last I find myself lacking that which I am working for?’.

- b. Riht as myn yhe with his lok // Is to myn herte a lusti coc // Of loves fode delicat, // Riht so myn Ere in his astat, // Wher as myn yhe mai noght serve, // Can wel myn hertes thonk deserve // And fieden him fro day to day // With suche deyntes as he may. (ibid.: Book 6, l. 827ff.)

‘Just as my watching eye is to my heart a cheerful cook of love’s delicate food, just so, {where (i.e.: in situations in which) my eye cannot render service / whereas my eye may not be able to render service}, my ear in its place can well deserve my heart’s gratitude and can daily feed it with such dainties as best it can’.

- c. And soothly, as to youre fifthe resoun, where as ye seyn that In wikked conseil wommen venquisshe men, God woot, thilke resoun stant heere in no stede. (Chaucer, *Tale of Melibee*.,: 221, c. 1, 1089)

‘And for sure, as far as your fifth argument is concerned, {where (i.e.: where in the argumentation) / whereas} you say that women excel men in giving bad advice, God knows that same argument has no value here’.

d. Trusteth nat in hire, for she nys nat stidefast ne stable,/ for whan thou trowest to be moost seur or siker of hire help, she wol faille thee and deceyve thee./ And where as ye seyn that Fortune hath norissed yow fro youre childhede,/ I seye that in so muchel shul ye the lasse truste in hire and in hir wit. (ibid.: 230, c. 1f., 1450ff.)

‘Do not trust her, for she is neither reliable nor firm. For when you believe to be most certain of her help, she will fail and deceive you. And {where (i.e.: where in the argumentation) / whereas} you say that Fortune has nourished you since your childhood, I say that precisely therefore you should trust her and her good judgement even less’.

e. For right as he that taketh a straunge hound by the eris is outhewhile biten with the hound,/ right in the same wise is it resoun that he have harm that by his inpacience medleth hym of the noyse of another man, wheras it aperteneth nat unto hym. (ibid.: 232, c. 2, 1542)

‘For just as someone who takes an unfamiliar dog by the ears is sometimes bitten by the dog, right in the same way it is natural that he gets hurt who, out of impatience, concerns himself with the noise of another person {where (i.e.: in situations in which) / whereas} it is not proper for him to do so’.

f. And, deere sire, al be it so that for youre richesces ye mowe have muchel folk,/ yet bihoveth it nat, ne it is nat good, to bigynne werre, whereas ye mowe in oother manere have pees unto youre worshipe and profit. (ibid.: 235, c. 1, 1653f.)

‘And, dear sir, although it may be the case that because of your wealth you may have many followers, yet it is not proper nor good to begin war {where (i.e.: in matters where) / whereas} you may have peace for your honour and well-being in a different manner’.

g. I seye for me, it is a greet disese, // Whereas men han been in greet welthe and ese, // To heeren of hire sodeyn fal, alas! (Chaucer, The Prologue of the Nun’s Priest’s Tale, 252, c. 1; l. 2771ff.)

‘As far as I am concerned, it causes me great pain to hear of people’s sudden downfall in view of the fact that they have been living in great wealth and ease before, alas’. (It seems impossible to give present-day English translations of whereas here that clearly reveal the ambiguity. The translation provided retains the ambiguity (note the locative basis of in view of!); actually it is one of the expressions given in the OED2 for the ‘illative’ meaning of whereas (see n. xxii).

Thus, examples of this kind may be responsible for the development of ‘illative’ whereas.))]

h. And Seint Jerome, whan he longe tyme hadde woned in desert, where as he hadde no compaignye but of wilde beestes, where as he ne hadde no mete but herbes, and water to his drynke, ne no bed but the naked erthe, for which his flessch was blak as an Ethiopeen for heete, and ny destroyed for coold,/ yet seyde he that ‘the brennyng of lecherie boyled in al his body’. (Chaucer, The Parson’s Tale, 297, c. 2; l. 344f.)

‘And St. Jerome, after he had lived in the desert for a long time, {where (i.e.: in the desert) / whereas} he had no company except for wild animals, {where (i.e.: in the desert / whereas} he had nothing but herbs for food and water for drink, nor a bed except for the naked earth, his body being black like an Ethiopian because of the heat and almost destroyed by the cold, yet he said that ‘the fire of lechery was burning in his whole body’’. (In the contrastive reading with whereas, the ‘contrasting proposition’ is that associated with the following yet-clause.)

i. Amonges othere Daniel was oon, // That was the wiseste child of everychon, // For he the dremes of the kyng expowned, // Whereas [ms. Hengwrt Ther as] in Chaldeye clerk ne was ther noon // That wiste to what fyn his dremes sowned. (Chaucer, The Monk’s Tale, 243, c. 2; l. 2154ff.)

‘One among others was Daniel, who was the wisest child of them all, for he interpreted the king’s dreams {where (i.e.: in the situation in which) / whereas} there was no scholar in Chaldea who knew what significance his dreams had’.²⁵

A Late Middle English language user whose lexical entry for *whereas* has not yet converged on being only locative may hypothesize an independent contrastive denotation alongside the locative one for cases like these. Detachment takes place if such as speaker then fixes an independent contrastive lexical entry for *whereas* alongside the locative one.²⁶

Blakemore (2002) assumes a procedural function for *whereas* (recall note 19). If this is correct, which I believe it is, then there is an additional indication why the I-principle cannot be the appropriate conceptual tool in explanations of the diachrony of clausal connectives. For a procedural connective such as present-day English *whereas* does not contribute to the encoding of a representation of a conceptual relation at all, in

²⁵ I am grateful to the editors of this volume for a comment to the effect that *whereas* in this example may be locative. I had thought of the contrastive reading as the only possible one and had placed the example under (11).

²⁶ The loss of the locative meaning in later generations of speakers is a development unrelated to the detachment problem and can be ignored in the present context. It seems that *where* and *whereas* developed interchangeably during the period from the fourteenth until the end of the seventeenth century, after which they have become complementary (locative *where*, contrastive *whereas*), with *where* still having the potential of developing an independent contrastive meaning, as we have seen above.

contrast to the locative *whereas* of earlier stages. Consequently, the development from denotationally locative to contrastive *whereas* cannot have been the result of the conventionalization of a more specific (sub-case) interpretation. Rather, we would have to say that the representational connective locative *whereas* was reanalysed as a procedural connective by language users whose mental lexicon still allowed for independent denotations as lexical entries for this form. The reanalysis was enabled by the fact that in a sufficient number of cases this interpretation was possible and more relevant to the addressee than an interpretation which involves the representational denotation.

4 Conclusion

All other things being equal, it would appear that a more specific, ergo more informative, propositional content is also more relevant. This is the reason why the semantic diachrony of clausal connectives has often been described in terms of increased specificity or informativeness along the lines suggested by the I-principle (e.g. the conceptualization of a typical causal relation where one eventuality is conceived to be the cause of another eventuality as effect contains more information than the conceptualization of a purely temporal succession of eventualities (cf. *since*)). However, there may be other aspects involved than informativeness which may make an interpretation more relevant, so that *relevance in a sense comprises informativeness but does not reduce to it*. Within the relevance-theoretic framework the procedural aspect of meaning encoded by certain clausal connectives constitutes an essential and important difference between what can be accounted for in terms of relevance as opposed to informativeness. The present study has made this point by considering the semantic diachrony of the connectives *where* and *whereas*. And it has provided sufficient reason to believe that it is worthwhile to pursue relevance theoretic approaches also to topics within historical linguistics.

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