(Non-)Sense in note-taking for consecutive interpreting

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The paper applies cognitive theories of text and language processing, and in particular relevance theory, to the analysis of notes in consecutive interpreting. In contrast to the pre-cognitive view, in which note-taking is seen mainly as a memory-supporting *technique*, the process of note-taking is described as the reception and production of a notation *text*. Adding the relevance-theoretical constructs of explicature and implicature to the general account of cognitive text processing as coherence building and the construction of a mental representation at local and global levels, this approach allows for the comparison of source, notation and target texts with respect to the underlying propositional representation, and shows how the sense of highly fragmentary notation texts is recovered in consecutive interpreting. The paper is based on an empirical study involving consecutive interpretations (English–German) by five trainee interpreters. The analysis shows that the interpreters operate relatively closely along micropropositional lines when processing the source, notation and target texts, with the explicature regularly having the same propositional form as the corresponding proposition in the source text.

Keywords: consecutive interpreting, note-taking, sense, coherence building, mental model, propositional processing, explicature

A key feature of all forms of interpreting is that the interpreters try to understand the source text's sense by processing its conceptual content rather than the words as such. In consecutive interpreting, this raises the question as to how the information extracted in the process is transmitted via the interim phase of note-taking to target text production. In the pre-cognitive view, under which note-taking is some kind of memory-supporting *technique*, the answers remain inconclusive due to an unclear conception of the underlying relationship between sense and its linguistic representation. This is where the cognitive theory of text and language processing comes in. From this perspective, the process of understanding is described as

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coherence building and as the construction of a mental representation at local and global levels. When applied to note-taking, this means that not only the processing of the source and target texts, respectively, but also the process of note-taking can be described in terms of (notation) *text* reception and production.

If we take an even broader perspective and add relevance theory (RT) to the more general background of cognitive text processing, it becomes possible to show how the sense of highly fragmentary notation texts is recovered in consecutive interpreting. The tools provided by relevance theory (especially the constructs of the explicature and implicature) have interesting methodological implications, since they allow us to compare the source, notation and target texts with respect to the underlying proposition.

This paper is based on an empirical study that uses these tools to look at how sense is transmitted from source text comprehension via notation text production and reception into the rendering of the target text. It will show how interpreters operate relatively closely along micropropositional lines when processing the source, notation and target texts, with the explicature regularly having the same propositional form as the corresponding proposition in the source text.

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1. Sense as a central notion in the traditional view

In the traditional literature on note-taking for consecutive interpreting, "sense" is an all-pervading notion discussed and emphasised by virtually every author. The general view is that the interpretation will be more successful if the source text content is well understood and spontaneously and idiomatically rendered into the target language. For didactic as well as practical interpreting purposes, great emphasis is therefore placed on a careful analysis of the source text, a good grasp of its "sense" (some authors also speak of "ideas"), and substantial abstraction from the specific language structures of the source text. This is presented as the crux of interpreting and is also considered to be the basis for note-taking:

> "L'interprète ne répète jamais les mots de l'orateur, il reproduit ses *idées*", est le leitmotiv de ceux qui exercent le métier d'interprète de conférence. (Seleskovitch 1975: 69; emphasis added)
> ("The interpreter never repeats the words of the speaker; he reproduces the speaker's *ideas*," is the recurrent message of those who practice the profession of conference interpreting.)

> The art of consecutive interpreting is to grasp the *essence of the meaning* and to jot down a word or a symbol to represent and ultimately recall that meaning. (A.T. Pilley quoted in Seleskovitch 1975: 131; emphasis added)

> Rozan ist voll beizupflichten, wenn er — wie auch die gesamte Fachliteratur — als unabdingbare Forderung für das Dolmetschen herausstellt, daß nicht das Wort, sondern der Sinn des Gesagten zu übertragen sei, daß es also darauf ankomme, beim Speichern bzw. Fixieren auf dem Notizblock den *Sinn* des Gesagten festzuhalten, nicht jedoch das "Wort". (Matyssek 1989: 31; emphasis added)
> (Rozan is absolutely right to emphasize — as does all of the literature — that the indispensable requirement for interpreting is to transfer not the words, but the sense of what has been said, so that the important thing is for what is stored or fixed on the notepad to convey the *sense* of the utterance, not the "word".)

In a nutshell, there is "unanimité" (Seleskovitch 1975: 70) in the literature on note-taking (as well as among interpreters) that the interpreter must grasp *and* note down the content-related information in the source text, rather than its words. When it comes to implementing this practical requirement, however, the positions differ greatly with respect to (1) the degree to which interpreters should seek abstraction from the linguistic structures of the source text (see, for instance, Seleskovitch 1975: 165; Ilg 1980: 118; Matyssek 1989: 36), (2) the number of iconic symbols they should use,[1] and (3) the language in which they should take their notes.[2]

The wide range of differing views may be attributable to the varying assumptions about the relationship between sense and linguistic representation made (or implied) in the literature on note-taking. The following quotation illustrates the difficulty of conceptualising this relationship:

> The most oft repeated thing you will hear as a student interpreter is "note the ideas and not the words!". But what is an idea? […]
> This question is a little too metaphysical for this type of book […] (Gillies 2005: 35).

One way, especially in the traditional views on note-taking, is to conceptualise the ideas or the sense as something separate (or to be separated) from language. Seleskovitch, in particular, adopts a language-independent approach. In her deverbalisation theory, or *théorie du sens*, she posits the dissociation of the sense from the language form or verbal expression (see e.g. 1978a: 336) and distinguishes between transcoding, where one signifier is substituted for another without a change in meaning, and interpreting proper, that is, the analysis and re-expression of a message, where sense is grasped without any reference to the linguistic form ("en dehors de toute réference à la forme linguistique"; Seleskovitch 1975: 5).

Furthermore, she stresses that note-taking takes place during the non-verbal thought phase of the process of "parole–pensée–parole" (1975: 146), that is, at a high level of abstraction from the source text's linguistic structures (see also Seleskovitch & Lederer 1989). With the exception of certain words that can be translated

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directly, such as numbers, proper names, enumerations or technical terms ("note verbale", 1975: 32; "signes appartenant à un code", 1975: 98), the speaker's "idées" are noted down in a non-language-specific form that is supposed to be simply a kind of prompt helping the interpreter to remember the sense ("note idéique", 1975: 32; "signes aide-mémoire", 1975: 98).

Seleskovitch's ignoring of the word is rejected not only by Ilg (1980: 118), who refers to it as "l'évacuation du mot", but also by Matyssek (1989: 36). Although Matyssek proposes a language-independent view of note-taking too, his focus is exclusively on the practical aspects of note-taking, with no underlying theoretical model. His goal is to develop a highly language-free notation system by using as many iconic symbols as practicable. In this way, he tries to overcome the constraints imposed by language structures or words ("Fessel der Sprache", "Befreiung vom Wort"; 1989: 38) and to capture the "essence" (1989: 19) of what is understood. In the end, however, he concedes that the idea of language-free note-taking may not be all that realistic after all:

> Der Dolmetscher wird also, dem Ideal der vollen "Sprachlosigkeit" seiner Notation anhängend, immer wieder zur Sprache zurückkehren müssen. (Matyssek 1989: 133)
> (The interpreter, while striving for the ideal of notes that are utterly "language-free", will therefore have to fall back upon language time and again.)

A possible explanation of why language-free note-taking may not be an option is given by Kirchhoff, who is the only author to speak of notes as a "notation language":

> Ein von jeder natürlichen Sprache unabhängiges Notationssystem aufbauen zu wollen, ist unrealistisch, weil eine Abstraktionsstufe gesucht werden müßte, die den Rang einer Universalsprache hätte. Wenn wir die Funktion der Notationssprache richtig deuten und die Leistungsfähigkeit unserer Notationsbelege richtig einschätzen, ist ein sprachfreies Notationssystem auch unnötig, denn was wir in der Notationspraxis brauchen ist *ein gemeinsames* Bezugssystem für *zwei* verschiedene natürliche Sprachen (1979: 125).
> (Attempting to construct a note-taking system independent of any natural language is unrealistic, as one would need to aim for a degree of abstraction corresponding to a universal language. If we are correct in our understanding of the function of the note-taking language and in our assessment of the strength of the evidence, then a language-free notation system is unnecessary, because what we need in note-taking practice is *a common* reference system for *two* different natural languages.)

From a cognitive-linguistic point of view, it is difficult to understand why Kirchhoff's approach was not followed up more closely.[3] Only recently has note-taking

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been described in more linguistic terms. In his course book on note-taking, Gillies (2005) addresses the difficulty of noting down the sense or the ideas (see the quotation above). Taking the sentence as a starting point, he suggests that "for the purposes of note-taking" an "idea" be defined as "a SUBJECT-VERB-OBJECT group" (2005: 37).

Obviously, addressing sense requires a cognitive perspective as it concerns the (mental) relationship between (conceptual) sense and linguistic (surface) representation. The last two decades have, in fact, seen great progress in the cognitive-theoretical and empirical foundation of interpreting research in general (see for instance Gile 1988, 1991, 1995; Gran & Dodds 1989; Pöchhacker 1994; Kohn & Kalina 1996; Danks et al. 1997; Kalina 1998; Setton 1998). However, the findings from recent cognitive research have not been applied to the specific field of note-taking. Despite Seleskovitch's early introduction of cognitive components into the description of the interpreting process,[4] most descriptions of note-taking are very much guided by practical and technical considerations and with concrete interpreting tasks in mind. The one common denominator that all the descriptions of note-taking share is that what is used in consecutive interpreting is essentially a highly individualised (note-taking) *technique* (see Herbert 1952: 33; Rozan 1956: 9; Kade 1963: 15, 17; Ilg 1980: 125; Matyssek 1989; Gile 1997: 203; Kalina 1998: 246; Ahrens 2001; Gillies 2005: 10). Given the wide range of conceptual views and practical instructions (see above), however, one is left with the impression that note-taking is some kind of a technical aid or (memory) supporting entity that operates in an unspecific way somewhere between source text comprehension and target text rendition, and serves to capture the source text's sense or its ideas, without there being any agreement or clarity as to what exactly that means.

I therefore propose to look at the notes from the perspective of a cognitive text and language (processing) theory. The research conducted on cognitive language processing in the most recent past (see Section 2 below) gives us a better understanding of the relationship between sense and its linguistic representation in the notes taken by consecutive interpreters. From such a perspective, "sense" in note-taking is the result of a complex process of coherence building during the production and reception of a notation *text*. In other words, both source text comprehension and target text rendition, on the one hand, and (the making of sense in) note-taking, on the other, are essentially regarded as a matter of text processing.

In the pre-cognitive view, the consecutive interpreter's notes are *not* regarded as a text. In contrast with stenography (see Herbert 1952: 37; Rozan 1956: 27; van Hoof 1962: 71, 100, 114; Thiéry 1981: 104; Matyssek 1989: 117, 164), what is noted down is mostly seen to be the result of source text analysis, i.e. "nonverbal comprehension":

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> La sténographie se révèle donc effectivement trop lente pour l'interprétation, car elle ne fixerait pas une compréhension essentiellement non verbale mais un texte dont le sens resterait à saisir. (Seleskovitch 1975: 138f)
> (Shorthand then turns out to be too slow for interpreting, as it does not take down an act of essentially nonverbal comprehension but rather a text whose sense remains to be grasped.)

In the cognitive view, both stenographic notes and consecutive notes constitute a text (although of a specific kind, see Section 4.1), the sense of which has to be reconstructed during the reception process (irrespective of whether or not it was pre-analysed during source text comprehension). If we adopt a pre-cognitive stance, the noting down of some superordinate conceptual content (i.e. the sense or the ideas as opposed to the words) remains an unspecifiable technique, or at best one that is described in highly contradictory terms. If, by contrast, we approach note-taking from a cognitive-linguistic angle, it becomes possible to apply the more recent models of cognitive text processing research (Section 2) as well as the instruments provided by relevance theory (Section 3). This allows us to look at notation texts empirically (Section 4) and thus to shed light on the question of how sense is recovered in notation text processing.

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2. A cognitive text-processing perspective of "sense"

From a cognitive point of view, making sense in mono- or multilingual text processing is considered to be a constructive process. Regardless of whether the listener has to understand a source, target or notation text, he or she will not find the text's meaning in its material form, i.e. its words and language structures. This does not mean, however, that the listener is building sense without tapping into linguistic forms. Thanks to the advances made by modern (cognitive) language processing research, there is now a more differentiated way of looking at how a text's sense or meaning is understood. The linguistic means used in a text serve as a kind of indicator or signpost to direct a listener's understanding of the text. From a cognitive point of view, a text makes sense only if a listener is capable of deriving a meaningful, i.e. coherent interpretation. Coherence is an inherent property neither of texts nor of purely cognitive processes (see Rickheit & Schade 2000). It is constructed by means of strategically controlled, dynamic inferential processes, guided by the linguistic input (bottom up), and draws on a great number of non-linguistic factors, such as background knowledge and situational context (top down). Most importantly, it is constructed in the course of the interplay between the participants in a communication situation. From the cognitive angle, the decisive element is no longer the analysis of the *product*, i.e. the *text* itself as laid down

on a piece of paper, for instance, but how it is produced or received. A distinction is therefore made between the text as such, i.e. the textual record of a discourse, and "*discourse-as-process*", i.e. its function or purpose and how it is processed, both by the producer and by the receiver (see Brown & Yule 1983: 23–26). Seen from this perspective, the text is the record of a dynamic process (discourse) in which language is used as an instrument of communication in a context by a speaker/writer to express meanings and achieve intentions.

To account for the communicative nature of texts and to explain how even sketchy texts can be fully understood, one must therefore integrate language structures, mental construction processes and pragmatic communication principles with a large number of individual factors and situational processing conditions. *Individual factors* include cognitive capabilities such as intelligence, concentration, memory and, in particular, the relevant general and specialised knowledge, but also highly subjective motivational and emotional factors (see Strohner 2000: 268). *Situational conditions* refer to the specific elements of the situation in which an act of communication takes place, its participants as well as more general culture-specific conventions (see Rickheit & Strohner 1999: 295f, Rickheit et al. 2002: 27f, 111).

In modern language processing research, it is uncontroversial that the integration of this great variety of bottom-up and top-down sources and processes is best explained in terms of the *construction of a mental representation*. More precisely, (coherence building in) text comprehension involves building *multi-level* representations of the text: on a lower level the representation of the (lexical and syntactical) *surface structures* and a *propositional text base* (explicit text propositions plus local-level inferences) and on a superordinate, more global level a situation or *mental model* (see van Dijk & Kintsch 1983; Johnson-Laird 1983; Schnotz 1994). In other words, one can say that meaning is constructed on both local and global levels. On the subordinate level of surface representation, *language structures are maintained*; on the level of the propositional textbase, information is represented in a conceptual way but *closely reflecting the text*; on the superordinate level the mental representation models the situation described by the text rather than the text itself and is therefore *much less text-specific*.[5] Schnotz (1994: 201) points to the implications of reproducing (recalling) a text based on a mental model or a propositional representation. As the latter is closely related to the linguistic structure of the original text and contains central as well as peripheral information, accuracy of recall is higher than with a mental model, which is more distant from the original linguistic form and foregrounds essentials rather than details.

While text comprehension can be seen as a progressive elaboration of the mental representations, it is important to note that the lower and higher levels are not built up sequentially and that there are no strict dividing lines between

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the different levels. Rather, there is *parallel* processing and reciprocal enrichment between them. However, it is still useful to draw a distinction for analytical purposes, as this helps to illustrate the differences in kind and enablement across the various representation levels. Empirical research suggests that proposition-based and mental model-based processing serve different purposes. A highly elaborated *mental model* on a very global coherence level is assumed to be analogous and holistic by nature and thus remote from the text. Mental modelling is often found to be rather capacity consuming, as it enables the listener to (strategically) infer new information and apply what has been learned to new situations in order to solve problems. *Propositional processing*, by contrast, typically requires less energy, closely reflects and conserves the text and helps to store even vague statements with unclear reference, thus enabling the listener to retrieve and supply detailed and precise content information (see Schnotz 1994: 155, 180, 201).

In accordance with these functional potentialities, a listener's attention may be focused on any of the different levels of cognitive representation (even on a subordinate surface structure level) (see Graesser et al. 1994: 377). That is, coherence building or making "sense" is regarded as an *intentional* process, by which listeners *actively* set particular processing goals and choose specific processing strategies, focussing on certain representation levels in the process (see Graesser et al. 1994; Schnotz 1994; Rickheit & Strohner 1999, 2003). Consequently, optimal cognition may be supported either by the combined use of mental models and propositional reasoning, or by propositional reasoning or mental modelling alone (see Glenberg et al. 1994: 639; Schnotz 1994: 182). The general goal in text comprehension is that "the reader attempts to construct the most global meaning representation that can be managed on the basis of the text and the reader's background knowledge structures" (Graesser et al. 1994: 376). However, the prevailing processing conditions may not allow the reader to construct a mental model. Moreover, "task demands constrain the goals that readers adopt and therefore the inferences that they construct" (Graesser et al. 1994: 377). A case in point is proofreading, where processing is clearly directed towards a surface structure representation level. While the different levels generally interact to some degree, the emphasis is shifted from level to level depending on the processing conditions and task requirements, with listeners directing their attention accordingly.

In conference interpreting, the functional variability of text processing and the flexibility of inference building become particularly apparent, for there is a "large number of different working environments and conditions, as well as [a] variety of individual interpreters' personal parameters" (Gile 1998: 83). Coherence-building in interpreting is influenced, on the one hand, by the continuous, dense, technical or complex nature of the text, the presentation rate and rhetorical qualities of the speaker, the quality of the technical equipment, the number of listeners,

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the importance of the conference organiser, etc., and by the interpreter's thematic and terminological knowledge, fitness, motivation, memory capacity etc., on the other. Secondary factors such as the technical equipment may override primary ones like the interpreter's background knowledge. Depending on these factors, the interpreter will focus on different levels of representation in the course of *one and the same* interpreting task. This is reflected in the *alternating* interpreting modes of "word-for-word" vs. "meaning-based" interpreting (see Gran 1989: 98), which are a direct expression of processing on lower or higher representation levels.

Understanding the source text and its meaning is therefore a variable value[6] that depends on a variety of interacting elements. Over the past few years, *graded coherence* has, in fact, been recognised as a viable concept not only for monolingual but also for multilingual communication (see Hönig 1992: 163f; Pöchhacker 1994: 138; Dancette 1997: 80). This recognition raised the question of whether translation tasks presuppose a deeper, more global understanding and the construction of a mental model (see Pöchhacker 1994: 88). In-depth processing aimed at understanding not so much the text itself but the intended text world is often a prerequisite for choosing the right linguistic expressions in target text production (see Kohn 2004: 222f). A translator, for instance, to whom the author of a text normally remains invisible, will often have to expend more energy and processing resources to build up an elaborate mental representation of the contextual knowledge that explains why the author is making a particular statement. The interpreter, by contrast, having access to a very rich pragmatic context that sets the scene for communication between the source text's speaker/author and the listener/interpreter will often be able to generate such inferences more easily, if not automatically. This goes to show that the degree of elaboration depends on the task at hand, i.e. the goal pursued and the circumstances under which it takes place. The task defines the framework to which the translator/interpreter strategically adapts.

Against this background, propositional reasoning appears to be a crucial element in standard interpreting situations (as opposed to adaptation, see Gutt 1991). It is true that the construction of a mental model would allow the interpreter to control the interpreting process from a greater distance. From the perspective of cognitive language processing research as described above, however, it seems safe to assume that the interpreter's task is facilitated by working on the propositional levels of representation for two reasons, as follows:

1. Working at a more local level requires little processing effort (see above) and thus reduces the considerable cognitive strain on the interpreter (see, for instance, Gile 1997: 211f) and
2. Working at a more local level, the interpreter can closely follow the source text (see above) and translate it with greater accuracy and attention to detail,

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which is, after all, a generally recognised requirement of interpreting (see Seleskovitch 1975: 85f, 1988: 50, 66; Thiéry 1981: 102; Kalina 1998: 110).

Propositional processing, being an integral part of graded coherence, seems to be more fully recognised in simultaneous interpreting,[7] where it is perhaps more obvious. When it comes to note-taking for consecutive interpreting, however, the descriptions seem to be based on the early ideal of deverbalisation, which proceeds from the assumption that there is, on a small scale, transcoding of individual words, and as a major part "l'interprétation à proprement parler", i.e. "l'assimilation du sens" or "l'exégèse" (Seleskovitch 1975: 10) (see also 1975: 5, 7 and 69). From a cognitive language and discourse theory perspective, "exégèse" and deverbalisation, and thus an essential part of the interpreting process, are unmistakably linked to global (mental-model based) processing, i.e. a level distant from the text. This becomes clear from the following quotations:

> *sense is non-verbal*, not only because the cognitive addition remains unvoiced, but also because sense as a whole is dissociated from any language form in cognitive memory as soon as it has been found. (Seleskovitch 1978a: 336)

> The process of interpretation involves the perception of the ideas, or *sense*, expressed in discourse. As the sense is perceived, the verbal forms used to convey it fall away, leaving only a bare consciousness from which the interpreter can then spontaneously express that sense, unrestrained by the form of the source language. (Seleskovitch & Lederer 1995: 24)

> J'ai donc cherché à vérifier le thème central de mes réflexions et de mon enseignement, à savoir que l'interprétation ne procède pas par transcodage mais impose au passage d'une langue à une autre une étape intermédiaire pendant laquelle le signifiant disparaît alors qu'interviennent des mécanismes cérébraux non linguistiques. (Seleskovitch 1975: 7)
> (I have therefore sought to substantiate the central theme of my reflections and my teaching, i.e. that interpretation does not take place through transcoding, but that the shift from one language to another necessarily requires an intermediary stage, during which the signifier disappears, while non-linguistic brain mechanisms take place.)

> [l'interprète] analyse le discours hors de toute formulation linguistique. (Seleskovitch 1975: 10)
> ([the interpreter] analyses the speech irrespective of any linguistic formulation.)

Perhaps it is because of Seleskovitch's bilingual experience and her mastery of different languages that this view rejects the idea of a mental representation of surface structures and does not consider processing on the level of propositions which are closely tied to the linguistic structures of the text:

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> […] le sens passe sans que ses structures sonores, syntaxiques ou grammaticales, subsistent […]. (Seleskovitch 1975: 164)
> ([…] the meaning gets across without the retention of sound patterns, syntax or grammar […].

> […] l'assimilation du sens se fait alors en dehors de toute référence à la forme linguistique […]. (Seleskovitch 1975: 5)
> ([…] the assimilation of sense occurs irrespective of any reference to linguistic form.)

> What sticks in our minds is the meaning […]. Most of the words that were uttered […] are blotted out […], and only the meaning which they conveyed lingers on. […] Whether one likes it or not, the wording only makes a fleeting impression and, because of this, meaning and wording are automatically separated. (Seleskovitch 1978b: 16)

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The idea that propositional reasoning plays only a minor role in note-taking and that the sense to be noted down is located at a more global level is promoted not only by Seleskovitch's deverbalisation theory. It can also be found in the demands made in the literature, in general (see Section 1) and in note-taking training courses, in particular (see Gillies' quotation above); namely, that the interpreter should concentrate on the superordinate sense or ideas and seek detachment from all surface structures. In addition, it is reflected in the distinction between stenographic notes fixing words and consecutive notes capturing some conceptual sense (see Section 1). Moreover, it follows from the attempts at establishing a link between note-taking and van Dijk & Kintsch's (1983) macropropositions (see Mackintosh 1985 and Gran 1990):

> It is generally agreed […] that in consecutive interpretation, the interpreter notes down the essential features of the message […]. It is my contention that this schematic notation of the semantic features of the discourse results from the application of the macrorules to the micropropositions of the original message, and that the interpreter's notes reproduce the resultant macropropositions. (Mackintosh 1985: 40)

The various calls for dissociating sense from language, for concentrating on the conceptual content or essence and for taking notes on the macropropositional level seem to be influenced by the ideal of meaning-based interpreting. In their somewhat prescriptive attempts to provide instructive guidelines, many authors on note-taking, such as those referred to by Mackintosh, tend to adapt their instructions to that ideal. As a result, the aim of note-taking has often been described as the process of capturing some abstract, global-level conceptual sense on the notepad. Only more recently has proposition-based processing begun to play a

more explicit role in note-taking (e.g. Gillies (2005: 37) in his definition of an "idea" as "a SUBJECT-VERB-OBJECT group"). Bearing in mind that an interpreter (like any person using language) is always capable of actively shifting her attention to different processing levels (see above), I should like to show in what follows that there is evidence to suggest that (micro-)propositional processing can play a pivotal role in note-taking.

3. Sense from a relevance theory perspective

Although the share of proposition-based processing in the overall construction process varies, depending on conditions and task specifications, it plays an integral part in building up a mental representation as described above. Relevance theory (by Sperber & Wilson 1986/1995) should therefore be part of the theoretical framework for meaning or coherence building. Explaining the relevance-driven processes of explicating and implicating, relevance theory is a cognitive inferential theory with a clear and rather narrow focus on propositional processing. Taking the listener's perspective, it describes how individual utterances are understood or recovered. With its micro-pragmatic dimension it is a perfect complement to the more general text comprehension theory described above, which, in turn, is an adequate framework for the integration of relevance theory: the broader cognitive text processing perspective provides a schema-theoretical account of how knowledge is stored and organised and later used in inferential processes. Moreover, this makes it possible to distinguish between the different representation formats, which is necessary for linking up linguistic surface structures and the propositional text base formed by these structures with more global construction processes. More generally, this is the basis for relating the cognitive dimension of text processing to its communicative dimension. The integration of relevance theory into this broader cognitive text-linguistic theory provides the comprehensive background against which interpreting (and translation in general) can be more fully and adequately described (see Setton 1998; Kohn 2004: 218; Albl-Mikasa 2007: 100f).

What, then, is "sense" from a relevance-theory perspective? Relevance theory starts from the generally recognised assumption that in most cases meaning is linguistically underdetermined and that utterances are elliptical in nature. In order to bridge the enormous gap between the words of an utterance and what is meant or understood, listeners draw inferences, and they do so not only on the basis of non-linguistic information such as background knowledge or the situational context, but under the guidance of the speaker and constrained by the principle of relevance:

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> […] inferential processes […] complete the interpretation of semantically incomplete expressions, narrow the interpretation of vague expressions and, more generally, enrich the linguistically encoded meaning to a point where the resulting overall interpretation would be relevant enough. (Sperber & Wilson 1986/1995: 256)

Relevance is assessed in terms of cognitive effects and processing effort, i.e. information is attended to when the resulting cognitive effects in terms of alterations (additions, cancellations or changes) to an individual's beliefs are achieved with minimal processing effort (see Wilson & Sperber 1988: 140, 2004: 609).

More concretely, in order to recover the conceptual meaning or underlying proposition of single utterances, the explicit linguistic contribution of the utterance is developed into a full (micro-)propositional form as intended by the speaker. This is done by means of various (pragmatic) enrichment and completion processes. For instance, underlying an utterance such as *He is going to Paris tomorrow* one will find the *semantic representation* < Human/male go to Paris day after day of utterance >. From this incomplete conceptual representation, which functions as a kind of "template" (see Carston 2004: 633), a fully developed propositional form is constructed through the process of "explicating" (i.e. *John is taking a train to Paris on 23 February 2002* or *Peter is flying to Paris on 5 August 2004*). This is then the basis for the process of "implicating", i.e. for deriving an implicature such as *John wants to avoid the pilot strike* or *Peter wants to avoid the railway strike*.

The important point here is that, in a given communicative situation, the principle of relevance ensures that there is always only one proposition fully reconstructed as intended by the speaker, which is the *explicature*. Another important point is the difference drawn between the explicature and the implicature. The explicature is recovered on the basis of a combination of decoded linguistic and pragmatically inferred meaning, and has the same propositional form as its explicit utterance. The *implicature*, by contrast, is derived solely pragmatically and deviates from that propositional form:

> The obvious but important point here is that the explicature is distinct from the implicatures of the utterance; they do not overlap in content […]. Implicatures have distinct propositional forms […]. (Carston 1988: 157f)

> […] the conceptual content of an implicature is supplied wholly by pragmatic inference, while the conceptual content of an explicature is an amalgam of decoded linguistic meaning and pragmatically inferred meaning. (Carston 2004: 636)

> [The] "semantic" representation (or logical form) is typically not fully propositional […], but consists of an incomplete conceptual representation which functions as a schema or template for the pragmatic construction of propositional forms. The pragmatic system is in the business of inferring the intended interpretation (or

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> "what is meant"); this is a set of propositional conceptual representations, some of which are developments of the linguistically provided template and others of which are not. The former are called EXPLICATURES, the latter IMPLICATURES; this is the explicit/implicit distinction made within relevance theory and it plainly does not coincide with the distinction between linguistically decoded meaning ("semantics") and pragmatically inferred meaning. (Carston 2004: 633f)

In this distinction, enrichment, being a pragmatic inferential process, is as much part of the explicating process as is disambiguation and reference assignment. Moreover, it is a standard procedure, for in most cases linguistically encoded meaning is highly underdetermined, and with good reason:

> Taking account of the addressee's immediately accessible assumptions and the inferences he can readily draw, the speaker […] encode[s] just what is necessary to ensure that the pragmatic processor arrives as effortlessly as possible at the intended meaning. (Carston 2004: 636)

However minimal the linguistic contribution may be, "utterances […] are standardly instantly understood as conveying complete propositions" (Carston 1988: 164). Accordingly, the construct of explicature also applies to highly reduced or even subsentential utterances (e.g. in the form of a single word like *telephone!*). It may take more enrichment and completion (processes) in such cases to recover all the constituents of the explicit content, which do not occur in any form in the linguistic representation. And yet, such (pragmatic) enrichment is still explicature-based. The recovery of (the explicature) *The telephone is ringing!*, for instance, is a development of the utterance's linguistic contribution (*telephone!*), which makes available its explicit content. The recovery of (the implicature) *Go and get it!*, by contrast, clearly deviates from the underlying proposition. Making "sense" as understood by relevance theory is a matter of developing the explicit linguistic contribution into a full proposition as intended by the speaker, and of taking it as an input into deriving what is communicated (i.e. explicatures and implicatures).

By developing the relevance-driven processes of explicating and implicating and its proposition-based constructs of the explicature and the implicature, relevance theory provides very useful tools for analysing propositional processing in note-taking. The idea is that if notes are really taken at an abstract and global level of sense or coherence, and if they actually subsume structures under higher-order macropropositions, as is often claimed (see Section 2 above), they should deviate from the propositional form of the source text. If, on the other hand, the notes echo the given propositional form and follow the line of the explicature, they would, according to RT definitions, operate along more local micropropositional lines.

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4. A cognitive linguistic model of sense in note-taking

Combining relevance theory with the broader framework of a (cognitive) text and language processing theory makes it possible to put the analysis of sense in note-taking on a sound theoretical foundation. From this perspective, it can be shown that the notation product is, in fact, a text, that notation texts can be analysed using the instruments provided by relevance theory, and that the "sense" of notation text utterances is recovered on the propositional level of the explicature. (For a more detailed account of the (cognitive) theoretical foundation and some empirical aspects of note-taking, see Albl-Mikasa 2007.)

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4.1 Notation as text

On the basis of a cognitive model of language and discourse processing, it has become clear that "sense" is worked out by means of natural (mental) language processes as described in Section 2. Against this background, "sense" in interpreting tasks is more adequately described as what the interpreter understands (in the course of source text comprehension in the first consecutive phase) and what is built up in the form of a mental representation. The interpreter aims at processing what she understands in such a way that the result of this analysis remains accessible and available for the act of interpreting. Trying to memorise as much as she can, she makes additional use of notation-specific means of expression to *produce a notation text* which conserves part of what she has understood.[8] In the second consecutive phase, she can then draw on the memorised mental representation built up during source text reception *and* fall back on the notation text as a complementary memory support. This helps her to produce a complete rendering of the source text in the target language. Source text reception and notation text production as well as notation text reception and target text production are quasi-simultaneous processes in the two consecutive processing phases.

The notation text produced in the process differs from a natural language text in terms of its use and specialized function as a memory support in the specific communicative environment of consecutive interpreting. The main differences are as follows: Firstly, the notation text is characterised by its highly reduced or even *fragmentary* and incomplete nature and typically contains *pictographic* and iconic signs and *non-linear* structuring principles. Secondly, it is *solipsistic* in that its purpose is immediate communication between the interpreter and herself. Thirdly, it is an *extreme case of intertextuality*, as it can be understood by the interpreter almost only in conjunction with the previously memorised mental representation of the source text.

Yet, from the perspective of a cognitive text processing theory as described above it is easy to see how such an atypical entity, which often looks like an arbitrary and unrelated, at times even hieroglyphic accumulation of surface signals, can be conceptualised as a text, and how it is essentially a text like any other. This is because the fragmentary and elliptical features of colloquial speech, traditionally criticised by grammarians, have turned out to be typical of natural language use — in fact the very basis of its flexibility and creativity (see Rickheit & Strohner 1993: 21, 141). From this functional viewpoint, natural inferential coherence-building processes (as described above) apply to the processing of both natural language and notation texts. What is more, when compared with multimedia texts in electronic environments (see Storrer 2003), which make use not only of graphic means and non-sequential links but also of films and acoustic information, the notation text appears rather conventional as a type of text. It features, for instance, classical text-linguistic properties such as delimitation and sequentiality, meaning that notation texts have a clear beginning and ending point; and even in mind-map oriented versions (see Albl-Mikasa 2007: 274–278), the ordering of propositions will at least to some degree be influenced by the source text structures.

In fact, a typical feature of notation texts is that the source text's underlying thematic relations, its continuity, conventionalised patterns or superstructures and the local or global markers supporting coherence building are not only preserved but deliberately visualised and highlighted (see Albl-Mikasa 2007: 278–290). The aim of such notation-specific means of expression is to optimise the relation between the intended effect of the means used in coherence planning and the effect actually achieved in coherence building, and to do so under the specific solipsistic condition of note-taking, i.e. with the producer and the recipient of the (notation) text being one and the same person.

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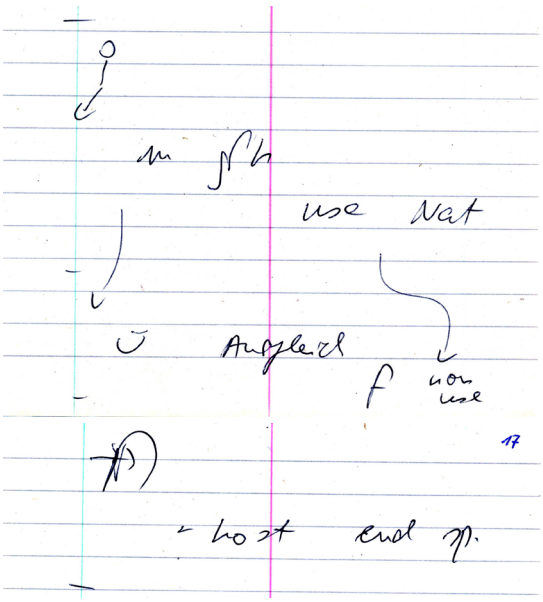
4.2 Making sense by recovering the explicature

The overriding question is to what extent the interpreter will be able to produce just those notation cues that will help her to recover, in the second consecutive phase, the one intended proposition (i.e. the explicature, on the basis of which any intended implicatures can be inferred). The analytical instruments provided by relevance theory (see Section 3) make it possible not only to explain in abstract terms how a few seemingly unrelated surface signals are inferentially connected but to make transparent how the notation text is actually recovered by the interpreter.

By way of illustration I should like to take an example from my case study (see Albl-Mikasa 2007: Chapter 4). The study is based on five consecutive interpretations, four of which were presented by students with different levels of proficiency as

part of a survey conducted by Sylvia Kalina at the Institute of Translating and Interpreting of Heidelberg University in 1992.[9] The fifth interpretation was presented at said institute during the final examinations in late 1992.[10] In each case the students worked from English into German. All students had taken a course in Matyssek's (iconic) symbol-based note-taking system (see Matyssek 1989). A written version of the source texts, the students' notepad notations (notation texts) and the recorded interpretations (target texts) were available for all five interpretations at the beginning of my study. On the basis of these data, using relevance theory instruments, I looked into the reduction and expansion processes in note-taking. (The step from source text to notation text (in source text reception/notation text production) typically involves a considerable amount of reduction; the reduced information is expanded again as the interpreter moves from the notation text to the target text (in notation text reception/target text production), see Albl-Mikasa 2006.)

In the following notation example, it is quite obvious that due to the specific and reduced nature of the text, no-one but its producer will be able to understand it (The contextual background is a meeting of the United Nations' Environment Programme debating the role of host countries of endangered species):

Notation text original	Natural language transcript
	**Mensch dieser**
	muss Recht h[aben]
	use Nat[ure]
	↙[Mensch dieser]
	will Ausgleich
	f[ür] ↙ non use
	Beitrag
	= host end[angered] sp[ecies]

How, then, could the interpreter arrive at the following target text (TT) using nothing but the minimalistic linguistic contribution illustrated by the natural language transcription of the notation text above?

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> *TT*: Diese Menschen müssen das Recht haben, ihre natürlichen Ressourcen zu nutzen, und dafür fordern sie zu Recht einen Ausgleich — und wenn sie diese Ressourcen nicht nutzen, fordern sie zu Recht einen Ausgleich von den Industriestaaten.
> Ihr Beitrag zur Erhaltung bedrohter Tierarten ist, dass sie diese Tierarten in ihren Ländern fördern und quasi aufnehmen.

To begin with, the interpreter has access to the mental representation built up and stored in the process of understanding the underlying source text (ST):

> *ST*: Those people cannot be denied the right to use their natural patrimony. What they are asking for is a fair compensation by the world community for the non-use of this natural patrimony. Their contribution to the endangered species is to host them.

The findings of my empirical study suggest that the "sense" of notation text utterances is further recovered by developing the linguistic template (see above Section 3) or input (i.e. notation signs and symbols) into the fully propositional explicature. To this end, the interpreter assigns reference and disambiguates vague and ambiguous expressions. In addition, she completes and enriches the available information by drawing on non-linguistic sources and the principle of relevance. Interestingly I found that *linguistic sources* such as the notation co-text (NC) and knowledge of the target language (TK) were more frequently resorted to in recovering the notation text's explicatures than *non-linguistic sources* such as background knowledge (BK) and the understanding of the source text (US) (see Albl-Mikasa 2007: 398).

In the following table the focus is on the underlying proposition or explicature, but it is via the linguistic forms (as documented in the target text) that the developments of what is made explicit in the notation text can be described. (In all of the following passages and examples boldfaced letters indicate those units that have been noted down):

Notation	**Developments (as documented in the target text)**	**Source**
Mensch dieser muss Recht h[aben]	"Diese Menschen müssen das Recht haben"	Plurals from US Definite articles from TK
use Nat[ure]	"ihre natürlichen Ressourcen zu nutzen"	Possessive pronouns from US or previous NC Technical terms from BK, US and TK
↙[Mensch dieser] will Ausgleich	"und dafür fordern sie zu Recht einen Ausgleich"	Personal pronouns from NC Idiomatic expressions from US and TK Indefinite articles from TK

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f[ür] ↙non use	"und wenn sie diese Ressourcen nicht nutzen"	Coordinating and semantically classifiable conjunctives from NC and US Subject and object from NC (arrow) Demonstrative from US or NC
Ausgleich	"Ausgleich von den Industriestaaten"	Prepositional phrase from US (source text: "by the world community")
Beitrag	"Ihr Beitrag zur Erhaltung bedrohter Tierarten"	Possessive pronoun from US or previous NC Prepositional phrase from BK or US
= host end[angered] sp[ecies]	"… ist, dass sie diese Tierarten in ihren Ländern fördern und quasi aufnehmen"	Subordinating construction from TK Personal and demonstrative pronoun from notation and target text co-text Prepositional phrase from US "fördern und quasi" — unnecessary addition, possibly for strategic reasons, e.g. to gain time

This analysis shows that the *recovery of a notation text's "sense" starts from the level of the explicature* as defined by relevance theory. That is, confronted with a source text utterance such as *What they are asking for is a fair compensation by the world community for the non-use of this natural patrimony*, the interpreter is likely to note down something along the lines of **↙ will Ausgleich f[ür] non-use** and to expand this into a target text utterance such as: *und wenn sie diese Ressourcen nicht nutzen, fordern sie zu Recht einen Ausgleich von den Industriestaaten*. In doing so, she sticks to the propositional form underlying the source text in the notation and target text, and thus operates at a micropropositional level.

As a result, the three text representations are closely interlinked: The notation text (NT) clearly reflects the source text (ST) surface structure (although in an elliptical manner):

NT: **↙ will**	ST: *they are asking for*
NT: **Ausgleich**	ST: *fair compensation by the world community*
NT: **f non use**	ST: *for the non-use of this natural patrimony*

The target text (TT) is a development of the reduced linguistic contribution of the notation text:

NT: **will Ausgleich**	TT: *fordern sie [zu Recht] einen Ausgleich [von den Industriestaaten]*
NT: **f non use**	TT: *und wenn sie [diese Ressourcen] nicht nutzen*

From an RT perspective, the enrichments in square brackets are *not* an indication of structural changes but a reflection of the (memorised) source text and its explicatures:

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TT: *zu Recht*	ST: *cannot be denied the right*
TT: *von den Industriestaaten*	ST: *by the world community*
TT: *diese Ressourcen*	ST: *natural patrimony*

Leaving the inference of possible implications and conclusions to the hearer, the interpreter appears much less likely to note down and then render into the target language an implicature like *It is high time host countries were paid compensation for preserving the world's living genetic resources/Es ist höchste Zeit, dass Gastgeberländer für die Erhaltung der Artenvielfalt auf der Welt entschädigt werden.* That the explicature (and thus micropropositions rather than macropropositions) is a central level of processing in note-taking can be concluded on the basis of the following findings of my study (see Albl-Mikasa 2006 und 2007: Chapter 4):

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- The linguistic contribution in the notation text has the *same propositional form* as the target text utterances, although the latter are more explicit (see the example above). This is in line with Sperber and Wilson's (1986/1995) definition of an explicature, which holds on to the propositional form and is recovered on the basis of both decoded linguistic meaning and pragmatically inferred meaning (see above). Throughout my study, source text implicatures, which differ from the propositional form, were not made explicit to any significant degree.[11]
- Similarly, the expansion process in target text production was found to mirror the reduction process in notation text production. That is, enrichment and completion processes were largely confined to the *re-expression* of those source text units that were left out in the notation text.
- The data of my study also suggest that the choice of target language means of expression is clearly influenced by the structures put down in the notation text. This is in line with other findings that suggest that in translation tasks source text structures (as laid down in the notation text, which is then the source text for target text production in the second consecutive phase) tend to hamper or at least *influence the search for target language* means of expression (see the difficulties caused by the omnipresence of source text structures in translation tasks, described by Kohn 2004: 221f).
- In addition, I found that reduction in notation text production is brought about mainly by two reduction strategies, namely an ellipsis strategy and a restructuring strategy. The *ellipsis strategy* involves omitting source text units and transferring selected, often central content words from the source text to the notation text. The result is not so much a detachment of the source text's surface structures, but rather some kind of loosening of it. The *restructuring strategy*, by contrast, substitutes non-source text structures for source text structures, thus bringing about some degree of detachment. Such restructuring

mostly takes place within phrase or clause boundaries and is often found in connection with routine communicative formulas, since the target language has a typical way of expressing such standardised phrases. Since the restructuring strategy is used much less frequently than the ellipsis strategy, no substantial detachment from the source text structures was found to occur.

– In accordance with the phenomena described above, notes or notation cues were rather detailed and resulted in noticeable structural parallels with the source text.

Overall, consecutive notes turn out to be *not some unspecific kind of technical aid or support entity, but one of three highly interdependent text representations* (the source, notation and target texts), differing in language (source, notation and target language) and explicitness (explicit source text, reduced notation text, expanded target text) but representing the same explicit content or explicatures.

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4.3 Propositional processing

In the course of my analysis, I became aware of an apparent contradiction between my findings (based on trainee interpreters working in the consecutive mode) and those of Setton (in a study with professional simultaneous interpreters), who points to a "formal 'distance' between SL and TL structure" (1998: 172) and posits "extensive SL-TL changes" (1998: 181). Although the two studies place their emphasis on different aspects, both are based on a cognitive linguistic framework integrating Sperber and Wilson's relevance theory. Among the proponents of this cognitive perspective, there is widespread agreement that translation as a type of language processing proceeds via the construction of a mental representation (see for instance Kohn & Kalina 1996), or as Setton puts it via "intermediate representations" (1998: 165) "integrating knowledge, contextualisation and the apprehension of Speaker intentionality into meaning assembly" (1998: 166). But why do interpreting studies yield different findings ranging from Setton's "formal 'distance' between SL and TL structure" (see above) on the one hand to structural parallels in my study or "formal similarity" between source and target text and "interpreters pay[ing] considerable attention to formal source text features when working in the consecutive mode" in a study by Dam (1998: 52, 64) on the other.

Two pivotal aspects seem to emerge. Firstly, given the functional variability in text processing as described in Section 2 and the prescriptive tendencies in interpreting studies, a *descriptive perspective* needs to be adopted. The research objective should be to look at what is actually going on under certain processing conditions (for validity aspects of my study see Albl-Mikasa 2007: 391–398). Setton's "model is designed to account for SI tasks involving maximal inference

and/or pragmatic reformulation" (1998: 194). Apart from the different *modes of interpreting* (his model addresses simultaneous interpreting, mine consecutive interpreting), Setton's study also differs with respect to *learning progression* (professional interpreters vs. trainees — closer structural parallels are to be expected due to the greater degree of attachment of inexperienced interpreters to source text structures) and *typological differences* (Chinese/German–English in Setton's, English–German in my case). Dam's study involves *professional consecutive* interpreters and the language pair *Spanish–Danish*. There is no one naturally given way of interpreting, but rather different forms and expressions that need to be investigated and described in connection with the different combinations of variables and conditions.

The second aspect concerns *methodology*. What exactly are we referring to when we speak of detachment vs. non-detachment from the source text surface or of structural differences vs. structural parallels resulting from the process of making sense or assembling meaning? How do we conceptualise 'surface structure'? Is the focus on linguistic means of expression or on propositional structure?

Putting the emphasis on the purely linguistic forms when comparing source and target texts is more likely to yield structural differences since source and target languages differ for typological reasons (e.g. SVO vs. SOV languages), and have their own specific idiomaticities and their own ways of casting conceptual input into forms and expressions. If, on the other hand, we turn to the level of the (micro-)propositions, we find correspondences where one would have expected differences in structure.

In my study, I proceeded from a propositional angle based on relevance theory and found that — in non-adaptation tasks — note-taking processes operate on the level of the explicature. That is, when analysing notation text utterances it would seem that the underlying proposition remains the same in the respective source, notation and target text despite differences in explicitness and language (see Section 4.2). Seen from this perspective, structural parallels become apparent (which is not surprising given the psychological reality and relevance of phrases for cognitive processing and the *close strategic relation* (in language processing) *between such surface structures and conceptual or mental propositions*, see Clark & Clark 1977: 13, 39, 50; van Dijk & Kintsch 1983: 14, 28, 36, 41; Schnotz 1994: 155).

The advantage of looking at the underlying propositions becomes even more apparent, when one goes back to Seleskovitch, who concentrates on the linguistic forms in the analysis of her examples. According to her, a change in syntactic structures and the use of words other than dictionary equivalents is an indication of formal distance. From an RT-based propositional angle, however, the picture looks different: Her examples are given to support the deverbalisation assumption, which implies a more global approach by placing "sense" at a level above

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or beyond language (see Section 2 above). And yet, these very examples can be shown to closely reflect the text and to be indicative of propositional processing and of close interrelations with the linguistic structures of the text to be processed. Seleskovitch and Lederer (1989: 38) point out, for instance, that a sentence such as *70% of the people die without seeing a doctor* is not to be transcoded by *70% des gens meurent sans voir un médecin* but should be translated into a) *70% des gens meurent sans jamais avoir vu de médecin* or b) *70% des gens n'ont jamais vu de médecin de leur vie* or else c) *70% des gens n'ont jamais pu se faire soigner*. What we see, at least in suggestions a) and b), is an idiomatic rendering of the explicit content, i.e. a case of sticking to the explicature given in the source text.

This point becomes even clearer when looking at the note-taking examples given by Seleskovitch (1975: 90):

(In all of the following examples, boldfaced letters indicate the units noted down in the notation text.)

Original notation text	**Transcribed notation text**
– Educ : vue unif pr supply personnel	– Education : vue uniforme pour supply personnel
bq clercs	banque clercs
mecq	mécaniciens
operate skilled	skilled operatives
pr offset + nbre Lib profes	pour offset + number liberal professions
(1e occas Afrcs high Educt)	(première occasion Africains high education)

ST: In education, an overall view is also required
NT: Education vue uniforme
TT: Dans le domaine de l'éducation, une telle vue d'ensemble est indispensable

ST: to restore proper balance and ensure
NT: pour
TT: afin de

ST: that there is an adequate supply of middlegrade personnel:
NT: supply personnel
TT : fournir [aux différents pays d'Afrique] le personnel [nécessaire à sa vie de tous les jours]

ST: bank clerks, mechanics, skilled operatives of all kinds,
NT: banque clercs, mécaniciens, skilled operatives
TT : depuis les employés de banque jusqu'aux mécaniciens, jusqu'à la main d'oeuvre qualifiée

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ST: in order to offset	the larger number of members of the liberal professions
NT: pour offset	**+ number liberal professions**
TT :afin de compenser	*le nombre excessif par rapport à ceux-ci des membres de professions libérales*

ST: which was the outcome of the	first early opportunities
NT:	**(première occasion**
TT: qui, eux, avaient profité de la	*première occasion*

ST: that	Africans had for	higher education
NT:	**Africains**	**high education)**
TT : qu'avaient eue les	*Africains de prétendre à*	*l'éducation supérieure*

According to Seleskovitch, this is an example of an in-depth analysis of the sense and of the absence of direct translation. She explicitly states that *afin de fournir aux différents pays d'Afrique le personnel nécessaire à sa vie de tous les jours* is not a direct translation of *ensure that there is an adequate supply of middle grade personnel* (1975: 91). Furthermore, she takes the phrase *aux différents pays d'Afrique*, which is added to the target text, but was not in the source text, to be evidence that the interpreter does not translate phrase by phrase, but is aware of the overall input and the line of arguments running through the whole of the (source) speech. From a cognitive viewpoint the following explanation seems more appropriate: It is quite obvious from the example that the interpreter takes down her notes elliptically and by switching codes, i.e. she leaves out some elements while noting down others in whatever (source or target) language seems most convenient to her. The added phrases *aux différents pays d'Afrique* and *necessaire à sa vie de tous les jours* are simple enrichments to the explicit content within the meaning of relevance theory. Furthermore, there are obvious structural parallels (especially when the source, notation and target texts are juxtaposed, as above), whereas there is no indication that the linguistic forms have been eliminated, or that processing at a distance from the (source) text has occurred (as is implied by deverbalisation theory: "[La] langue […] a presque entièrement disparu au profit du sens", Seleskovitch 1975: 162). What can be said is that the propositional form of the explicature — as given by the linguistic input in the source text — is echoed or maintained in all three (source, notation, target) texts.

The same can be said of a large number of examples by other authors who favour the principle that one should note the idea and not the words. Examples are:

Herbert (1952: 51):

> AT: Le délégué de la **France** a **regretté** que la Commission n'ait **pas renvoyé** la question au **Comité de rédaction**.

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NT: France say not O.K. not send back to C[omité] r[édaction]

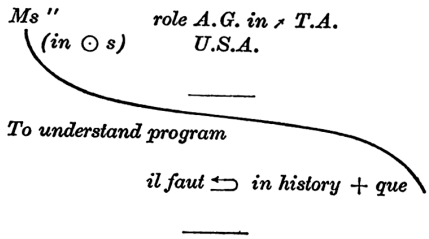
Rozan (1956: 48):

Source text

1. On a mentionné, dans nos discussions, le rôle joué par l'Assemblée générale et les Etats-Unis dans l'instauration de l'assistance technique.

2. Pour comprendre le programme, il est nécessaire de se reporter un peu plus en arrière dans l'histoire que ne l'ont fait les représentants qui sont intervenus au cours des débats du Comité.

Notation text



ST: On a mentionné, dans nos discussions
NT: members say (in discussions)

ST: le rôle joué par l'Assemblée générale et les Etats-Unis
NT: role A[ssemblée Générale] and U[nited] S[tates of] A[merica]

ST: dans l'instauration de l'assistance technique.
NT: in establish T[echnical] A[ssistance]

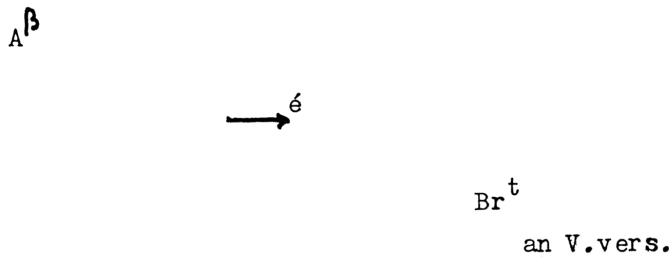
ST: Pour comprendre le programme,
NT: To understand program

ST: il est nécessaire de se reporter un peu plus en arrière dans l'histoire
NT: il faut revert back more in history

ST: que ne l'ont fait les représentants qui sont intervenus au cours des débats du Comité.
NT: que members

Ilg (1982: 19):

ST : Der Ausschuß hat den Bericht an die Vollversammlung überwiesen.
NT : Ausschuß renvoyé Bericht an V[oll]vers[ammlung]



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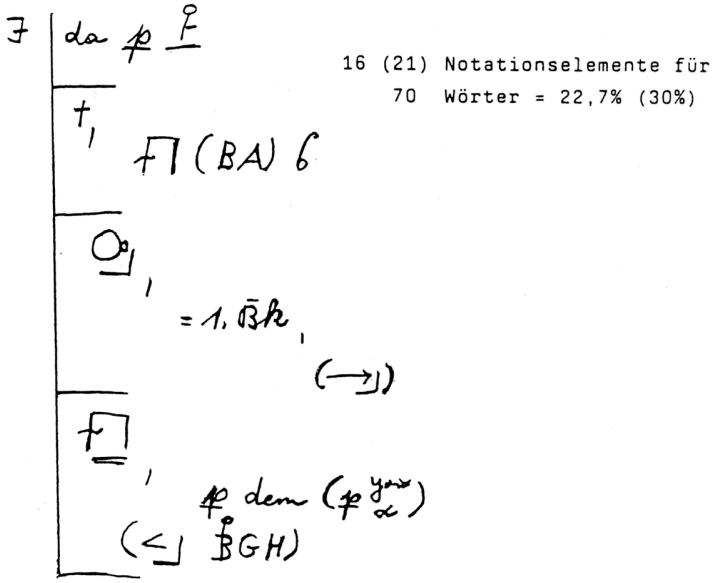
Matyssek (1989: 73):

> ST: **Ich** darf mich zunächst bei Ihnen **für** dieses **freundliche Willkommen bedanken**. **Ich halte** es für selbstverständlich, **auch** einmal die **Bundesanwaltschaft** zu **besuchen**. Erst hier **habe ich erfahren**, daß ich offenbar der **erste Bundeskanzler bin**, **der** den **Weg hierher gefunden hat**. Ich mache **ganz bewußt** diesen **Besuch**, und zwar — ich **sagte** das eben schon in einem anderen Zusammenhang dem Herrn **Präsidenten des Bundesgerichtshofs** —, **um für Sie und** ihre **Arbeit** zu **demonstrieren**. (Bulletin Nr. 3 v. 9.1.1987, S. 15).



A particularly interesting example is the one given by Gran (1990: 360):

> ST: M. **President**, **I** will **refrain** from entering the **dispute** concerning the arrangement of Parliament's business. **Though I** hasten to add that I would **not find it unwelcome** if these procedural debates were to take place at a **different time** from this usual **Thursday night**.

P,
I
no
in proc. deb.

---

tho,
I (!)
: better
no Thur. night

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With reference to Mackintosh (1985) and van Dijk & Kintsch (1983), Gran comments on her example with the following:

> When a discourse is being followed, the phonic continuum is mentally subdivided into phrases and sentences (microstructure) which are subsequently reduced by the listener to the essential elements pointing to the overall meaning of the message (macrostructure) […].
> It clearly emerges that the superficial microstructure, with the rhetorical emphasis expressed in rather long phrases, has been reduced to its essential gist (macrostructure) (Gran 1990: 360f).

Looking at van Dijk and Kintsch's (1983) definition of macropropositions and macrostructures, a slightly different picture emerges:

> When we understand a text, we *no longer have access to all previous sentences* we have read, and the same holds for the everyday understanding of events and actions, of which the multiple details can only be partially retrieved. If, however, *large sequences of semantic structures* of this kind can be *subsumed by macrorules under a few hierarchically structured macropropositions*, and if such macrostructures are a sufficient basis for the further understanding of the discourse, the events, or the actions, then the extremely complex task of keeping some order in the vast amounts of semantic details can be managed. (1983: 195; emphasis added)

Under van Dijk & Kintsch's definition, macropropositions are not just elliptically reduced secondary propositions, but a synthesis of different micropropositions that deviates from the propositional form of the individual ones. Gran's example includes restructurings (*not find it unwelcome* becomes *better*) and specifications (*dispute* is noted down as *procedural debate*) that unravel the surface structure without deviating from the underlying proposition in the process. It should be noted in this context that the purpose of the macropropositions as defined by van Dijk & Kintsch is to help people cope with the overwhelming mass of details they are constantly confronted with in communicative situations. In interpreting, by contrast, the task is to preserve rather than to subsume details. As Seleskovitch puts it:

> […] pour la plupart des interprètes, écouter de façon continue et analyser chaque détail, chaque incidente du discours, chaque accentuation ou atténuation voulue par l'orateur, exige papier et crayon. (1975: 86)
> ([…] for most interpreters, listening and analysing every detail, every discourse event, every accentuation or attenuation suggested by the speaker will require paper and pencil.)

As a result, even those notation examples that contain restructurings and highly reduced and condensed elements follow the micropropositional lines of the explicature. It seems that a great many examples given in the literature to illustrate the

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ideal of concentrating on the sense, the ideas or the underlying meaning are explicature-based and sometimes closely reflect the surface structures. This does not mean, of course, that there are no examples of deviations from the propositional form whatsoever (depending on processing conditions and perhaps language typology). Generally speaking, however, many cases of alleged meaning-based, i.e. non-form-based interpretation are simply a matter of idiomatically rendering the *same* underlying proposition into the source, notation and target texts. This is true even for cases where there are additions, omissions, simplifications or compensatory and repair elements. It seems that to 'note the idea rather than the words' does not mean that one has to give up the propositional form and move to a (deverbalised) level distant from the text.

My point is this: In interpreting research it seems as important as in cognitive science "to separate the [propositional] text representation from the situation [or mental] model" or "the text itself" from "the situation the text refers to", i.e.:

> […] we need to be clear about what we attribute to the text and derived structures which are text specific, such as the propositional textbase, and what we attribute to the world. (van Dijk & Kintsch 1983: 343f)

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5. Conclusion

From my case study and the analysis of the examples in the literature, it becomes clear that the translation-specific "general principle of message over form" (Setton 2003: 150) does not necessarily imply that note-taking operates on a macro-level distant from the text. Since "the output should resemble the original pragmatically, logically and semantically, but not syntactically, morphologically or phonologically" (Setton 2003: 150) and since, at the same time, the output "should be both idiomatic and terminologically accurate" (Setton 2003: 150), the relevance theory construct of the explicature is particularly appropriate, as it captures the pragmatic, logical and semantic dimension of the message (see its definition in Section 3). Idiomatic and terminological accuracy may cause structural dissimilarities; these are not, however, of a profound nature when looked at from the angle of the underlying proposition. From an explicature-based perspective (which uses maintenance of the propositional form vs deviation from it as a yardstick), it can be shown that interpreters, even when trying to abstract from the source text's syntactic, morphological and phonological surface, work at a highly text-specific, propositional level, which may result in a closer reflection of the related surface structures.

There are good reasons why it is likely that the lower propositional levels are attended to:

- While the share of proposition-based operations in overall processing varies according to the specific processing conditions, such propositional processing is always part of the interpreting process. That is, deep understanding and mental model building notwithstanding, the interpreter will still have to revert to a *propositional representation for re-textualisation*, as it is in the nature of (notation or target) text production to propositionalise and then express conceptual input (see the research on thinking-for-speaking, Slobin 1996). What is more, it is in the interest of multilingual translation tasks to keep track of certain linguistic structures and expressions (see Ilg 1980: 118, 124).
- The interpretation-specific *general task requirement of a complete rendering* is better served by a less elaborated mental representation. This is because a thorough understanding and the construction of a mental model are beneficial for learning and memorising more global facts on a long-term basis. However, when it comes to recalling detailed textual information in the short term and minimising the risk of losing source text input, a propositional text base can be more appropriate (see Schnotz 1994: 180 and Gile's *Modèle d'Effort*, 1988, 1991, 1995, 1997).
- In interpreting we often find not so much a cultural transfer from one culture into another, but experts discussing matters against a *shared social and technical background* (see Pöchhacker 1994: 242). As a result, the target text is not an independent product but generally closely related to the source text.
- In note-taking, in particular, it is useful to rely on the close interaction between propositional and surface structures: Retrieval was found to be better when there was a propositional and surface structure match between retrieval cues and memorised chunks or units (see van Dijk & Kintsch's study on *cued text recall*, 1983: 362f). Processing on a lower structure-related level is therefore especially conducive to the particular function of note-taking as a memory aid.

(Micro-)propositional processing and hence a somewhat form-based attitude to note-taking may therefore be advantageous, even if it means that the linguistic means of expression will be followed rather closely (as opposed to detachment from the surface structure) and that the notes will be dense rather than reduced. This has been reflected in the practice of consecutive interpreters all along. While it has not been recognised in many of the (often prescriptive, coursebook-type) descriptions of note-taking in interpreting studies, it becomes apparent thanks to the methodological tools afforded by cognitive language processing research. Further investigations are needed to determine the implications of keeping the

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cognitive load to a minimum in the highly capacity-consuming interpreting task and the effect of this strategic principle on the level of processing. An interpreter is likely to seek as much deviation from the source text as necessary for a successful and culturally adequate rendering, and as little deviation as possible as long as she does not risk a linguistically and culturally corrupted rendering. In other words, she will not deviate any further, if this takes only more attention and effort without improving the interpreting result. In follow-up studies it will be very interesting to look at the circumstances in which the interpreter moves away from source text propositions and to examine the capacity-related conditions that make the interpreter operate at a more micropropositional or at a more macropropositional level.

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Notes

1. The positions on the number of iconic symbols to be used are, for instance: a total of 20 (Rozan 1956: 28); a very restricted number, preferably abbreviations (Seleskovich 1975: 149, 155); not too many (Herbert 1952: 39; van Hoof 1962: 82); open choice (Kirchhoff 1979: 130; Ilg 1982: 27); as many as possible (Matyssek 1989).

2. The recommendations as to the language of the notes include source language (Ilg 1988: 11; Gile 1991: 22); target language (e.g. Herbert 1952: 36; Rozan 1956: 15; Déjean Le Féal 1981: 83; Laplace 1990: 374); and a mix of the two (e.g. Seleskovitch 1975: 158, 161; van Hoof 1962: 71; Kirchhoff 1979: 123; Thiéry 1981: 110); or one's mother tongue (e.g. Matyssek 1989: 138).

3. Apart from Allioni's (1989) "grammar of consecutive interpretation" that is based on Kirchhoff there have been only cautious hints that notes could be some kind of a metalanguage (see Gran 1990: 362; Kalina 1998: 245).

4. A number of statements in her 1975 book — e.g. regarding comprehension and the construction of sense on the basis of prior knowledge and experience in a given context (Seleskovitch 1975: 83, 85, 79, 137, 174, 176) — are revealing with respect to her early understanding of the cognitive dimension. However, this cognitive view is not updated to integrate the findings of cognitive language and text-processing research of the late 1980s (see, for instance, Seleskovitch & Lederer 1989), and does not include an analysis of note-taking in terms of language processing.

5. This, the specification of the various levels of mental representation, is where the main differences with regard to Seleskovitch's *théorie du sens* come in. Seleskovitch limits her description to the following two levels of processing: (1) "transcoding", i.e. the direct reexpression of isolated words in another language on the level of their dictionary meaning, and (2) "translation proper", i.e. the transmitting of the deverbalised, purely conceptual sense or message as understood after careful analysis or "exégèse" (1975: 12).

6. This means that deep understanding cannot be insisted upon, either for didactic or for professional interpreting purposes, as Seleskovitch tends to do as part of her deverbalisation theory:

> […] interpretation involves the immediate forgetting of words. By ignoring the wording of the message, the interpreter can turn all his attention to analyzing the content of what he has heard in order to understand it in its entirety. […]. One could say *interpreting is first and foremost comprehension*. (Seleskovitch 1978b: 58).

> […] the interpreter immediately separates meaning from wording. (Seleskovitch 1978b: 36)

> The remedy is to deverbalize. The only way to combat interference is to insist upon complete dissociation […]. In the early stages of training one of the commandments should be that nothing may be said in the same way as the original, leaving a little margin to ease off later on. (Seleskovitch & Lederer 1995: 26)

7. Lederer's (1978) "units of meaning", for instance, are a reflection of the micropropositional level in simultaneous interpreting; in Seleskovitch & Lederer (1989: 246f, 264), however, they are brought in line with deverbalisation.

8. A text is necessarily linked to a language that affords the means of expression needed to produce the text. It can be shown that the signs, symbols and structures used in note-taking can be described by means of linguistic categories and that *notation language* includes the different (lexical, syntactic or pragmatic) subsystems typical of language (see Kohn & Albl-Mikasa 2002; Albl-Mikasa 2007: Chapter 3).

9. I am greatly indebted to Sylvia Kalina for making these data available to me for further analysis.

10. These data were supplied by courtesy of the Institute of Translating and Interpreting of Heidelberg University.

11. There are, in fact, good reasons why interpreters would choose to stick to the propositional form as given in the source text explicatures. On the pros and cons of making explicit implicatures, see Albl-Mikasa (2007: 362ff).

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References

Ahrens, B. (2001). Einige Überlegungen zur Didaktik der Notizentechnik. In A. F. Kelletat (Ed.), *Dolmetschen. Beiträge aus Forschung, Lehre und Praxis*. Frankfurt/M.: Lang, 227–241.

Albl-Mikasa, M. (2006). Reduction and expansion in notation texts. In C. Heine, K. Schubert & H. Gerzymisch-Arbogast (Eds.), *Text and translation: Theory and methodology of translation*. Tübingen: Narr, 195–214.

Albl-Mikasa, M. (2007). *Notationssprache und Notizentext. Ein kognitiv-linguistisches Modell für das Konsekutivdolmetschen*. Tübingen: Narr.

Allioni, S. (1989). Towards a grammar of consecutive interpretation. In L. Gran & J. Dodds (Eds.), *The theoretical and practical aspects of teaching conference interpreting*. Udine: Campanotto, 191–197.

Brown, G. & Yule, G. (1983). *Discourse analysis*. Cambridge: Cambridge University Press.

Carston, R. (1988). Implicature, explicature, and truth-theoretic semantics. In R. M. Kempson (Ed.), *Mental representations: The interface between language and reality*. Cambridge: Cambridge University Press, 155–181.

Carston, R. (2004). Relevance theory and the saying/implicating distinction. In L. Horn & G. Ward (Eds.), *Handbook of pragmatics*. Oxford: Blackwell, 633–656.

Clark, H. H. & Clark, E. V. (1977). *Psychology and language: An introduction to psycholinguistics*. New York: Harcourt Brace Jovanovich.

Dam, H. V. (1998). Lexical similarity vs lexical dissimilarity in consecutive interpreting. *The Translator* 4 (1), 49–68.

Dancette, J. (1997). Mapping meaning and comprehension in translation. In J. H. Danks, G. M. Shreve, S. B. Fountain & M. K. McBeath (Eds.), *Cognitive processes in translation and interpreting*. London: Sage Publications, 77–103.

Danks, J. H., Shreve, G. M., Fountain, S. B. & McBeath, M. K. (Eds.). *Cognitive processes in translation and interpreting*. London: Sage Publications.

Déjean Le Féal, K. (1981). L'enseignement des méthodes d'interprétation. In J. Delisle (Ed.), *L'enseignement de l'interprétation et de la traduction. De la théorie à la pédagogie*. Ottawa: University of Ottawa Press, 75–98.

Gile, D. (1988). Le partage de l'attention et le 'modèle d'effort' en interprétation simultanée. *The Interpreters' Newsletter* 1, 4–22.

Gile, D. (1990). Scientific research vs. personal theories in the investigation of interpretation. In L. Gran & C. Taylor (Eds.), *Aspects of applied and experimental research on conference interpretation*. Udine: Campanotto, 28–41.

Gile, D. (1991). The processing capacity issue in conference interpretation. *Babel* 37 (1), 15–27.

Gile, D. (1995). *Basic concepts and models for interpreter and translator training*. Amsterdam/Philadelphia: John Benjamins.

Gile, D. (1997). Conference interpreting as a cognitive management problem. In J. H. Danks, G. M. Shreve, S. B. Fountain & M. K. McBeath (Eds.), *Cognitive processes in translation and interpreting*. London: Sage Publications, 196–214.

Gile, D. (1998). Observational studies and experimental studies in the investigation of conference interpreting. *Target* 10 (1), 69–93.

Gillies, A. (2005). *Note-taking for consecutive interpreting — a short course*. Manchester: St. Jerome Publishing.

Glenberg, A. M., Kruley, P. & Langston, W. M. (1994). Analogical processes in comprehension: Simulation of a mental model. In: M. A. Gernsbacher (Ed.), *Handbook of psycholinguistics*. San Diego: Academic Press, 609–640.

Graesser, A. C., Singer, M. & Trabasso, T. (1994). Constructing inferences during narrative text comprehension. *Psychological Review* 101, 371–395.

Gran, L. (1989). Interdisciplinary research on cerebral asymmetries: Significance and prospects for the teaching of interpretation. In L. Gran & J. Dodds (Eds.), *The theoretical and practical aspects of teaching conference interpretation*. Udine: Campanotto, 93–100.

Gran, L. (1990). Interaction between memory and note-taking in consecutive interpretation. In H. Salevsky (Ed.), *Übersetzungswissenschaft und Sprachmittlerausbildung. Akten der 1. Internationalen Konferenz 'Übersetzungswissenschaft und Sprachmittlerausbildung', 17.-19.5.1988*. Berlin: Humboldt Universität, 357–364.

Gran, L. & Dodds, J. (Eds.) (1989). *The theoretical and practical aspects of teaching conference interpretation*. Udine: Campanotto.

Gutt, E.-A. (1991). *Translation and relevance: Cognition and context*. Oxford: Blackwell.

Herbert, J. (1952). *Handbuch für den Dolmetscher*. Geneva: Georg.

jbid113959 IP: 160.85.104.70 On: Thu, 25 Jan 2018 10:06:47

Hönig, H. G. (1992). Verstehensoperationen beim Konsekutivdolmetschen — gehirnphysiologische Grundlagen, psycholinguistische Modellbildungen und didaktische Konsequenzen. *TexTconTexT* 7, 145–167.

Ilg, G. (1980). L'interprétation consécutive. Les fondements. *Parallèles* 3, 109–136.

Ilg, G. (1982). L'interprétation consécutive. La pratique. *Parallèles* 5, 91–109.

Ilg, G. (1988). La prise de notes en interprétation consécutive. Une orientation générale. *Parallèles* 9, 9–13.

Johnson-Laird, P. N. (1983). *Mental models: Towards a cognitive science of language, inference, and consciousness*. Cambridge: Cambridge University Press.

Kade, O. (1963). Der Dolmetschvorgang und die Notation. Bedeutung und Aufgaben der Notiertechnik und des Notiersystems beim konsekutiven Dolmetschen. *Fremdsprachen* 7 (1), 12–20.

Kalina, S. (1998). *Strategische Prozesse beim Dolmetschen. Theoretische Grundlagen, empirische Fallstudien, didaktische Konsequenzen*. Tübingen: Narr.

Kirchhoff, H. (1979). Die Notationssprache als Hilfsmittel des Konferenzdolmetschers im Konsekutivvorgang. In: W. Mair & E. Sallager (Eds.), *Sprachtheorie und Sprachenpraxis*. Tübingen: Narr, 121–133.

Kohn, K. (2004). Zur Rolle des Übersetzens beim Sprachenlernen. In J. House, W. Koller & K. Schubert (Eds.), *Neue Perspektiven in der Übersetzungs- und Dolmetschwissenschaft. Festschrift für Heidrun Gerzymisch-Arbogast zum 60. Geburtstag*. Bochum: AKS-Verlag, 217–233.

Kohn, K. & Albl-Mikasa, M. (2002). Note-taking in consecutive interpreting: On the reconstruction of an individualised language. *Linguistica Antverpiensia* N.s. 1, 257–272.

Kohn, K. & Kalina, S. (1996). The strategic dimension of interpreting. *Meta* 41 (1), 118–138.

Laplace, C. (1990). Die Didaktik des Konsekutivdolmetschens an der ESIT. In H. Salevsky (Ed.), *Übersetzungswissenschaft und Sprachmittlerausbildung. Akten der 1. Internationalen Konferenz 'Übersetzungswissenschaft und Sprachmittlerausbildung', 17.-19.5.1988*. Berlin: Humboldt Universität, 370–375.

Lederer, M. (1978). Simultaneous interpretation — units of meaning and other features. In D. Gerver & H. W. Sinaiko (Eds.), *Language interpretation and communication*. New York: Plenum Press, 323–332.

Mackintosh, J. (1985). The Kintsch and van Dijk model of discourse comprehension and production applied to the interpretation process. *Meta* 30 (1), 37–43.

Matyssek, H. (1989). *Handbuch der Notizentechnik für Dolmetscher: Ein Weg zur sprachunabhängigen Notation*. Heidelberg: Julius Groos.

Pöchhacker, F. (1994). *Simultandolmetschen als komplexes Handeln*. Tübingen: Narr.

Rickheit, G. & Schade, U. (2000). Kohärenz und Kohäsion. In K. Brinker, G. Antos, W. Heinemann & S. F. Sager (Eds.), *Text- und Gesprächslinguistik: Ein internationales Handbuch zeitgenössischer Forschung. 1. Halbband: Textlinguistik*. Berlin: de Gruyter, 275–282.

Rickheit, G. & Strohner, H. (1993). *Grundlagen der kognitiven Sprachverarbeitung. Modelle, Methoden, Ergebnisse*. Tübingen: Francke.

Rickheit, G. & Strohner, H. (1999). Textverarbeitung: Von der Proposition zur Situation. In A. D. Friederici (Ed.), *Sprachrezeption*. (Enzyklopädie der Psychologie C III/2). Göttingen: Hogrefe, 271–306.

Rickheit, G. & Strohner, H. (2003). Inferenzen. In G. Rickheit, T. Herrmann & W. Deutsch (Eds.), *Psycholinguistik. Ein internationales Handbuch*. Berlin: de Gruyter, 566–577.

Rickheit, G., Sichelschmidt, L. & Strohner, H. (2002). *Psycholinguistik*. Tübingen: Stauffenburg.

jbid113959 IP: 160.85.104.70 On: Thu, 25 Jan 2018 10:06:47

Rozan, J.-F. (1956). *La prise de notes en interprétation consécutive*. Geneva: Georg.
Schnotz, W. (1994). *Aufbau von Wissensstrukturen: Untersuchungen zur Kohärenzbildung beim Wissenserwerb mit Texten*. Weinheim: Beltz.
Seleskovitch, D. (1975). *Langage, langues et mémoire. Etude de la prise de notes en interprétation consécutive*. Paris: Minard.
Seleskovitch, D. (1978a). Language and cognition. In D. Gerver & H. W. Sinaiko (Eds.), *Language interpretation and communication*. New York: Plenum Press, 333–341.
Seleskovitch, D. (1978b). *Interpreting for international conferences* (trans. S. Dailey and E. N. McMillan). Washington, DC: Pen and Booth.
Seleskovitch, D. (1984). Zur Theorie des Dolmetschens. In V. Kapp (Ed.), *Übersetzer und Dolmetscher*. Munich: Francke, 32–50.
Seleskovitch, D. (1988). *Der Konferenzdolmetscher. Sprache und Kommunikation* (trans. I. Haas). Heidelberg: Julius Groos.
Seleskovitch, D. & Lederer, M. (1989). *Pédagogie raisonnée de l'interprétation*. Paris: Didier Érudition.
Seleskovitch, D. & Lederer, M. (1995). *A systematic approach to teaching interpretation* (trans. J. Harmer). Silver Spring, MD: Registry of Interpreters for the Deaf.
Setton, R. (1998). Meaning assembly in simultaneous interpretation. *Interpreting* 3 (2), 163–199.
Setton, R. (2003). Words and sense: Revisiting lexical processes in interpreting. *Forum* 1 (1), 139–168.
Slobin, D. I. (1996). From "thought and language" to "thinking for speaking". In J. Gumperz & S. C. Levinson (Eds.), *Rethinking linguistic relativity*. Cambridge: Cambridge University Press, 70–96.
Sperber, D. & Wilson, D. (1986/1995). *Relevance: Communication and cognition*. Oxford: Blackwell.
Storrer, A. (2003). Kohärenz in Hypertexten. *Zeitschrift für Germanistische Linguistik* 31, 174–292.
Strohner, H. (2000). Kognitive Voraussetzungen: Wissenssysteme — Wissensstrukturen — Gedächtnis. In K. Brinker, G. Antos, W. Heinemann & S. F. Sager (Eds.), *Text- und Gesprächslinguistik: Ein internationales Handbuch zeitgenössischer Forschung. 1. Halbband: Textlinguistik*. Berlin: de Gruyter, 261–274.
Thiéry, C. (1981). L'enseignement de la prise de notes en interprétation consécutive : un faux problème ?. In J. Delisle (Ed.), *L'enseignement de l'interprétation et de la traduction. De la théorie à la pédagogie*. Ottawa: University of Ottawa Press, 99–112.
van Dijk, T. A. & Kintsch, W. (1983). *Strategies of discourse comprehension*. New York: Academic Press.
van Hoof, H. (1962). *Théorie et pratique de l'interprétation*. Munich: Max Hueber.
Wilson, D. & Sperber, D. (1988). Representation and relevance. In R. M. Kempson (Ed.), *Mental representations: The interface between language and reality*. Cambridge: Cambridge University Press, 133–153.
Wilson, D. & Sperber, D. (2004). Relevance theory. In L. Horn & G. Ward (Eds.), *Handbook of pragmatics*. Oxford: Blackwell, 607–632.

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