

TEXTUAL ANALYSIS AND INTERPRETING RESEARCH

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In this paper a research model is proposed for simultaneous interpreting (SI) based on textual analysis, able to shed light on the nature of the texts for which SI is required and on interpreters' behaviour in the rendering of such texts, thereby contributing to a better understanding of simultaneous interpreting both as a text-processing task and a translation activity. The use of such a model may also help develop useful tools for the training of interpreters.

In the first part of the paper, the model is presented in general terms, while in the second part the focus is on a single text (hyper)genre, i.e. on scientific papers presented at international conferences. Although discussion will be restricted to simultaneous interpreting, I am convinced that the model proposed is, with minor adjustments, suited to research on conference interpreting in general, including consecutive interpreting.

1. Textual analysis in the literature on SI research

In its relatively short life, research on interpreting has dealt with a number of issues and problems, focussing mainly on the operations performed by the interpreter in her/his work and looking at them from different viewpoints: information processing, translational action, memorisation, note-taking (in connection with consecutive interpreting), cerebral lateralization, psychomotor and neuronal activity in the interpreting exercise, cross-cultural transference and the quality of the final 'product'. Far less attention has been devoted to texts involved in interpreting activity, and in particular to the source text (ST). This situation prevails in spite of the fact that in the 'neighbouring' field of translation studies, ST analysis and typology have attracted substantial attention in an attempt to use these texts as a basis for the development of workable tools for the translator (e.g. Trosborg 1997, Nord 1991)¹. In this context, one may wonder why in SI research so little interest has so far been shown in textual analysis despite experts' claims that "... a theory of interpreting will necessarily depend heavily on the theories and techniques of

1 Trosborg's and Nord's are the two best known works specifically devoted respectively to text typology and text analysis in translation. Of course, if one considers chapters or sections that deal with text typology and text analysis in general works on translation the bibliographical entries are more numerous (e.g. Bell 1991: 202-206; Hatim and Mason 1990: 138-164).

descriptive and comparative linguistics ... opening up whole new areas of comparative text linguistics” (Dodds 1989: 17).

The reason is probably simpler and more empirical than one might think. In simultaneous translation, text processing is a rigorously linear operation, in which discourse segments are elaborated in succession, one after the other, without the text ever becoming a ‘complete object’ to the eyes of the interpreter. When you look at a written text, its transphrastic dimension appears at once. Even the most superficial perusal will immediately show that ‘connectedness’ is created not only by syntagmatic relationships between words and phrases within the syntactic chain, but also by ‘vertical’ or ‘transverse’ links - sometimes even ‘materially visible’ across the page - between distant elements in the text that are separated by more than one sentence or even by pages of textual material. These links can be perceived thanks to the stability of the written text as an object of enquiry. An oral text, on the other hand, can exist as a tangible object only in a recorded form or in transcription (but these ‘second-hand’ formats are not relevant to interpreting), and is not therefore a ‘philological object’, given its exceeding volatility: in physical terms it exists only in the form of one single language sound being produced by the speaker at one given instant; the rest of its existence relies on the participants’ memorial synthesis.

It is no surprise then that textual analysis has not appeared to be an obvious instrument for application to SI research. The few proposals found in the literature are in most cases accounts of a linguistic theory or part of one, with the suggestion of possible usefulness in interpreting research (e.g., see Bühler 1989 on *Textlinguistik*; Gallina 1992 on systemic functional theories, Alexieva 1992 on text typology; Falbo 1997 on FSP; and Riccardi 1997 on Italian as a “conference language”). A more recent contribution has been made by Setton (1999), who nevertheless sees discourse analysis only as one element in a complex model characterised by an essentially cognitive orientation. Snelling (1992) is also essentially text-based but the approach adopted is more practical, being centred on case-studies and offering ‘a guide to target-text formulation’ addressed to interpreters translating into a non-native language; besides, analysis tends to be effected mainly at the (sentential and inter-sentential) syntax level in an essentially contrastive perspective.²

The model I set out to illustrate in this paper makes more specific reference to a set of linguistic instruments of investigation and takes as its starting point the analysis of texts above sentence level, without however ignoring the lower levels, which are examined proceeding in a top-down direction. In this

2 Snelling (1992: 6) considers ‘the formula of interpreting training with *language pairs*’ inadequate and suggests instead that one should think ‘in terms of *language families*’ (the author concentrates on interpreting from Romance languages into English).

framework, the term ‘*textual analysis*’ is preferred to ‘*text analysis*’, which evokes specifically *Textlinguistik* as a consolidated line of thought within the general picture of theoretical approaches focussing on texts, and also to *discourse analysis*, which is only occasionally used in this paper to mean ‘analysis focussing on discourse as a set of mutually relevant texts’ (with text being defined as ‘*a natural language occurrence in a communicative setting*’; de Beaugrande 1985: 47), which is the meaning unconditionally attributed to it in the American tradition, while in Europe *discourse analysis* tends to be more specifically associated with the analysis of oral linguistic interaction and/or conversation analysis, an area of research that is of purely marginal interest for conference interpreting (although it is highly relevant to other modes of interpreting, i.e. *liaison* interpreting, community interpreting, court interpreting etc.).

In this framework, the most purposive proposal to date for the adoption of a text-analytic approach in SI research has come from Hatim and Mason (1997: 36-77)³ who highly recommend the application of text linguistic categories to interpretation research and training. Yet, from their analysis it emerges that the effectiveness of such an approach is to some extent limited by the fact that in each of the interpreting modes they consider (simultaneous, consecutive and *liaison*) there are “particular strands of textuality [that] remain inaccessible for the interpreter” (1997: 42). In particular, in their view, in SI the strand of textuality that has prominence, being actually available and therefore worth working upon with text linguistic instruments, is *texture*. More specifically, according to the two authors, as regards *context* and *text structure* the simultaneous interpreter

has to settle for a partial view of both ... and has therefore to rely more heavily on the emerging texture in order to make and maintain sense ... because in this mode of interpreting, reception and production of text take place at more or less the same time (Hatim-Mason 1997: 41-42).

Thus, the interpreter has no alternative but to work exclusively at a ‘local’ level, guided by texture signals, and is denied all opportunity for adequate top-down processing because of the constraints of immediacy of response. The focussing on a succession of short text segments, with a small portion of text in active storage at any given time, prevents her/him from ‘seeing’ the context and appreciating the structure of the text.

³ The two authors have devoted two chapters of their 1997 volume *The Translator as Communicator* to interpreting, Ch. 3: ‘Interpreting: a text linguistic approach’; and Ch. 4: ‘Texture in simultaneous interpreting’.

This hypothesis is to a certain extent viable, but applies only to situations where the interpreter is not informed in advance about the topic of the conference or the lecture s/he has to translate, or is not familiar with the linguistic habits of the speech community involved.

Fortunately this is not usually the case: in most working situations, interpreters can rely on previous knowledge, which represents a crucial advantage for reasons that are not only intuitively understandable, at least in very general terms, but can also be explained scientifically.

2. Factors involved in discourse comprehension

Modern discourse comprehension theories have highlighted that, in the understanding of a text, linguistic decoding is not the whole story. Understanding requires the activation of the correct *frames* or *scripts* (Shank - Abelson 1977), which are necessarily based on the comprehender's previous experience. This is because text comprehension is an integrative process, i.e. component ideas from individual sentences are not simply juxtaposed, but integrated by comprehenders, and a constructive process, i.e. "in creating a mental representation of the content of a text, information that is explicit in the text (almost always) has to be combined with relevant knowledge about the world" (Garnham - Oakhill 1996: 315-316). As Seleskovitch (1975: 143) stated over two decades ago with specific reference to SI: "*Assimiler un sens, c'est intégrer un message dans une connaissance et une expérience préalables*".

In this perspective, although comprehenders do also elaborate text representations at lower levels of abstraction (textbase level, *verbatim* level),⁴ by default the process is ultimately aimed at the production of mental representations that "capture the real world situations conveyed by language" (Gernsbacher 1996: 296), whether they be called *situational models* (Kintsch - van Dijk 1983: 11-12) or *mental models*, i.e. *models* going "beyond the literal meaning of the discourse because [they embody] inferences, instantiations, and references" (Johnson-Laird 1983: 245).

With regard to SI, it is true that the approach usually taken is more 'local', with reception and reproduction being effected mainly at the *verbatim* or

4 The categories and terminology used here are derived from the model presented in Kintsch-van Dijk 1983 where the comprehender is seen as allocating his/her limited resources to the construction of one or more of three different levels of representation: *verbatim representation*, based directly on the surface structure of the text, the *textbase representation*, based on concepts and meanings of the text and containing both a macrostructure (the main ideas of the text) and a microstructure, and the *situational model* which combines prior knowledge and text information in a synthetic and mainly conceptual representation of the text.

textbase level, and often the final aim of a complete mental representation of the text is not fully attained. It is also true, however, that in order to reconstruct meaning and follow the development of discourse, recourse has to be made to inferences as well as to background knowledge, as the interpreter moving forward in her/his translating task incrementally tries to construct a mental model of the text. S/he can only do this by relying on extra-textual (and, as we shall see, often intertextual) knowledge and on anticipation based on previously acquired contextual and discursual knowledge. As Setton (1999: 191) shows on the basis of corpus study,

[simultaneous interpreters] use deduction and inference from combined text and non-text information, including the logical structure of long segments of the discourse. The additional extratextual sources provide them with a basis for making temporary approximations and generalisations about these entities, properties and relations while the sentences in which they occur are still incomplete.

This also explains the fact that sometimes interpreters also produce 'informed' paraphrases or provide more details or more information than the Speaker her/himself.

It can therefore be stated that, in spite of the constitutive properties of SI (and in particular its 'simultaneity'), in the long term a strategy relying merely on texture (i.e. on coherence and cohesion mainly at a local level) may not be the best option in terms of efficiency. Obligated as s/he is to exploit any and all possible clues to reconstruct overall meaning and produce a congruous translated text, the interpreter will rely partially on memorial synthesis "incorporating incrementally information that is explicit in the current clause into the model of the text constructed to that point" (Garnham - Oakhill 1996: 320) and partially on anticipation and prediction. Her/his efficiency in this endeavour will depend to a large extent on her/his textual and discursual competence of the type of communicative events s/he is called upon to interpret. Chernov speaks of "probability prediction model" and regards "the probability prediction of the verbal and semantic structure of the oral message in progress as the most essential psycholinguistic factor explaining the phenomenon of simultaneity in simultaneous interpretation" (Chernov 1994: 140).

A close look at the role of anticipation in interpreting shows that it acts at different levels:

- 1) in the basic process of decoding, which means at the level of the phonemic recognition of words as well as the lexico-grammar and syntax level: words are identified even before they have been pronounced completely, syntactic patterns are anticipated and recognised holistically, with clear expectations about lexis on the basis of collocations;

- 2) at the level of the discourse plan; even when operating essentially at a 'local' level, it is inevitable that the interpreter should nevertheless maintain a certain 'macro' or long-range representation of the developing discursive structure (Setton 1999: 189); at this level anticipation can be based on a 'logical' process or rely purely on discursual expectations;
- 3) at the extra-linguistic level, counting on encyclopaedic knowledge and other resources.

Anticipation at level 1 is constantly operational in language processing in ordinary life, so it will be constantly active in SI even when the interpreter is producing his/her oral translation on a *verbatim* basis (as happens for certain stretches of a text even in the best possible conditions). It is the interpreter's ability to resort to anticipation at levels 2 and 3, however, that will improve his/her performance, enabling him/her to work at the textbase or discourse plan level (rather than locally on a *verbatim* basis), thereby helping him/her achieve an adequate detachment from the syntactic structuring of the original and enhancing his/her ability to cope with various kinds of interpreting problems.

3. A textual-analysis based model for SI research

It is now possible to return to Hatim and Mason's argument and state that there are reasons to believe that textual analysis can be useful for the simultaneous interpreter not only at the level of texture, as they argue, but also as regards context and, above all, discourse structure. No doubt, work on texts, and in particular "on [the] semantic relations between individual messages" contained in a text (i.e. on the different parts of the message) and on "the lexicogrammatical patterns that realise them" (Halliday-Hasan 1989: 71-72) can be highly beneficial for the simultaneous interpreter, helping her/him develop an awareness of text texture and equipping him/her with the tools necessary to detect the various elements of cohesion, theme-rheme progression, information structure etc., which are essential for a coherent reconstruction of discourse meaning and its reproduction in the TL.

This assertion relies partly on the assumption that the texts interpreters are called upon to translate, though not systematically homogeneous on account of the great variety of situations and topics included under the *conference* label (from scientific conferences to political meetings, from debates in international institutions to celebratory and ceremonial events), nevertheless do present certain similarities and invariants at different levels so that working on them with instruments developed within the domains of text linguistics, genre analysis, discourse analysis etc. may help create a valuable textual and discursual competence.

3.1. Conference papers as a (hyper)genre

I shall now examine these similarities and invariants, first looking at the problem in socio-linguistic terms. From this point of view, it can hardly be denied that, although diverse in many respects, events at which simultaneous interpreters work, whether they be one-shot lectures or papers embedded in larger occasions (e.g. in sessions of international conferences) and thus part of a *hypertext* (to quote Pöchhacker 1995), are to some extent homogeneous in communicative terms. This is confirmed even by a very general look at the semiotic configuration of the 'conference paper' as a speech event. The element most obviously shared by the vast majority of conference events is the participation framework (Dressler 1994). With few exceptions, these events are platform monologues, where the speaker holding the floor addresses a relatively large set of listeners who can be described as audience members rather than co-conversationalists (Goffman 1981: 138). Consequently, there are similarities also in the tenor of discourse. From the moment the speaker takes the floor and starts delivering her/his lecture s/he is accorded a certain degree of authoritativeness by the audience: "By virtue of reputation or office, s/he is assumed to have knowledge and experience in textual matters, and of this considerably more than that possessed by the audience" (Goffman 1981: 167). In this situation, the interpreter is in a somewhat 'displaced' position, being an invisible and purely 'tangential' ratified participant, who however is, in actual fact, the real addressee of the lecture as delivered by the delegate (although, as Alexieva suggests, "the Speaker cannot be expected to take into account the simultaneous interpreter's knowledge of the conference paper, that is usually less than that of the ... conference participants"; 1999: 45) and the ultimate sender of the message received by the audience.

As for the mode of discourse, while oral delivery is a constitutive property of lectures, their production format is by no means constant. Some conference papers are spoken-spontaneous, thereby qualifying as *fresh talk* although, most of the time, the oral text is formulated by the speaker on the basis of notes; others are memorised and recited. But in most cases, they are written to be read aloud, sometimes with additions and digressions (Crystal-Davy 1969; Nencioni 1983). Of course, *fresh talk* is the prototype that every consummate speaker tries to approximate, at least in terms of the illusion of extemporaneousness, which is obtained by means of a number of stratagems, above all suitable prosodic shaping and other paralinguistic devices (e.g. gesture, emphasis etc.) as well as text-parenthetical remarks aimed not only at underlining relevance to the actual situation in which the lecture is being delivered, but - more often than not - also at giving the impression of "convey(ing) qualifying thoughts that the speaker appears to have arrived at just at the very moment" (Goffman 1981: 177; 181),

thus bridging the gap between the ‘prepared’ (written) text and the actual situation in which the text ‘comes to life’ in its oral mode .

3.2. The conference paper as ‘spoken prose’

In spite of these (minor) variations in the mode of discourse, someone writing a text for oral delivery will use a style that Mounin (1975: 192) calls ‘scriptural oral’ and Goffman describes as ‘spoken prose’ (1981: 190), which is different from natural conversation as it is from written prose. In actual fact, the process of drawing up a written-to-be-published text has been described by the Italian scholar Nencioni as “making linguistic expression autonomous from paralinguistic and situational values and from the limits of memorial synthesis, thus releasing it from time and space and conferring upon it cultural and social transcendence, an objective and lasting solidity” (Nencioni 1983: 134; my translation). In contrast, preparing a draft or notes for a lecture requires radically different criteria, in that the text, although jotted out or planned beforehand, will only come into existence at the time of delivery in a well-defined socio-communicative context in which the text itself is deeply embedded.

More specifically, comparison of spoken prose with written-to-be-published papers shows that its most characteristic features are the frequent use of ‘procedural’ vocabulary and meta-discoursal commentary aimed at signalling to the audience what the Speaker is doing in every section of the speech, the occasional recourse to short and ‘summative’ sections that schematically recapitulate information and argumentation put forth to that point, with the purpose of helping the audience follow the development of the Speaker’s reasoning by making up for moments of inattention or distraction on their part; recourse to rhetorical procedures aimed at keeping the listeners’ attention alive and enabling them to follow the course of reasoning with ease, by resorting, for example, to various ‘fronting’ procedures aimed at highlighting specific elements in the sentence, obviously in addition to prosodic and gestural emphasis which can be used to give prominence to a whole statement (often, the topic sentence in a longer ‘text unit’, which in a written text would correspond to a paragraph). Incidentally, it is to be hoped that the rhetorical characteristics of conference papers will soon become the object of serious and systematic research.

The overwhelming majority of conference speeches tend to begin and end with parenthetical ‘ritual’ phases that are rarely omitted in any situation in which someone speaks in public in a formal context (with the exception of a few cases in which the speaker chooses to proceed differently in order to create a situation of ‘markedness’). Lectures start and finish with ‘bracketing phases’ each of which has the function of ‘linking’ the speech to the immediate situation, of

connecting the speech as a microtext with the conference as a 'hypertext'. In particular, the introduction represents a transitional stage when for the speaker a shift in footing takes place from ordinary member of the audience to lecturer before s/he starts projecting his/her textual self (as opposed to her/his 'ordinary' self); in some cases the presentation is opened with greetings and thanks and some general statements about the event, venue, organisation, etc., in all of which there is an obvious prevalence of a phatic function, the 'polite' remarks being aimed at creating what Malinowski called 'phatic communion' with the audience. From the viewpoint of discourse development, the introduction is usually aimed at putting the content of the paper into perspective. Closing statements have an exactly symmetrical function: they help bring the speaker back to her/his ordinary status as audience member, while winding up the discussion.

4. Genre analysis in interpreting research: the 'scientific' paper

If, on the basis of what has been said so far, one looks at the problem in the light of the definition of *genre* given by Swales (1990) as "a recognisable communicative event characterised by a set of communicative purpose(s) identified and mutually understood by the members of the professional or academic community in which it regularly occurs", one can conclude that in very broad terms conference papers can be deemed to belong to a single textual genre or, better still, 'hyper-genre', which stands as a superordinate to genres and sub-genres. This awareness can be of great help if used as a basis for reflection and research. By the same token, the usefulness of this approach will be enhanced if research is conducted on a more articulate basis, i.e. looking at one single genre or, rather, sub-genre or genrelet at a time, thereby restricting analysis to a more homogenous group of events and to a limited range of disciplines and topics.

Attention will therefore now be turned specifically to scientific papers presented at international conferences because, however broad this category may be, in the field of science genres have been shown to be more heavily codified and subject to consolidated textual conventions and practices than in other sectors of activity.

It is now generally accepted that in texts produced within the framework of scientific research there is considerable uniformity in the use of generic resources, each genre offering a 'template' with ready-made solutions that are highly functional to the communicative purposes of the discourse community involved and that cater for the rhetorical needs determined by the epistemological approach adopted: there is a close relationship between scientific communication and the state of the art of each discipline at the time of

text production. Scientific communication and the text genres on which it relies are intimately connected with the prevailing scientific paradigm (Kuhn 1970) and rest on a commonality of values and perspectives within the scientific community that generates and uses them: in scientific research the performance of co-operative activities is made possible by linguistic communication which, in turn, in order to be successful, requires that the persons involved “share much, not just the meaning of words and the syntactical operations but how those generalised words apply in this situation and how they are to be realised in action”, as C. Bazerman has pointed out (1988: 302-303) drawing on the model of the role of language in human activity put forward by Russian psychologist Lev Vygotsky and his school of cognitive psychology. Berkenkotter and Huckin call this ‘*Community ownership*’: within its framework genre conventions “signal a discourse community’s norms, epistemology, ideology, and social ontology” (Berkenkotter - Huckin 1995: 4).

It can therefore be argued that at any given time in history, the texts produced within the prevailing scientific paradigm, do present a high degree of uniformity in the general articulation of discourse, being part of the same ‘semiotic-behavioural-perceptive’ system (Bazerman 1988: 307), intimately connected with the modalities of linguistic communication. This applies both to lexico-grammatical choices and to the semiotic and rhetorical configuration and therefore to the organization of the semantic and pragmatic components of the text.

Thus, if one restricts the object of analysis from conference papers in general to those produced within the framework of the observational and experimental sciences, and even more specifically if attention is confined to a single disciplinary sector (e.g. medicine, or molecular biology, or microelectronics, etc.), texts will exhibit an ever more substantial number of invariant elements and features in their rhetoric organization as well as in their use of language.

As early as two decades ago Teun van Dijk (1980: 108 ff.), dealing with ‘fixed conventional schemata’ for global discourse content in ‘experimental research scholarly papers’, identified two invariant steps,

an *Introduction* specifying a certain problem and its background (e.g., treatment by others, followed by theoretical development of a new idea or the refutation of other proposals, a theory that may be backed up by concrete analyses, descriptions, or experiments). After that the *Conclusion* follows” (van Dijk 1980: 119-120).

Building on this basic suggestion, different authors (Hutchins 1977; Trimble 1985; Swales 1990; Bhatia 1993) have concentrated on different sub-genres of the scientific paper, pertaining to restricted disciplinary sectors, and have produced descriptions of the macro-propositions included in its conventional

schemata. For instance, Swales (1990: 30) has identified the following structure in research article introductions (which he denominates *Research Space Model for Article Introductions - RSMIAI*): 1. *Establishing field*; 2. *Summarising previous research*; 3. *Preparing for present research*; 4. *Introducing present research*. With *ad hoc* adjustments this model can be extended to the entire research article, in all of its parts, as has been done by among others Evangelisti Allori (1996) for the psychology paper and Garzone (1999) for the research paper in the field of economics, the latter yielding the following schema: 1. Introduction: a) *definition of the object for research*; b) *Summarising previous research*; c) *Presenting present research*; 2. Developing the central argument: a) *presenting arguments or the model adopted*; b) *demonstration, by using mathematical or statistical procedures*; c) *their application to the problem under discussion*; 3. Conclusion: a) *conclusive statements with a summary of the arguments put forward*; b) *indications for further work and new lines of research*.

Although these results derive from research focussing on published papers, it can be assumed that in terms of macrostructures researchers will also continue to apply the same 'organisation of points of view' when drafting conference papers; of course, in this case there will be awareness that the text being sketched will have to be delivered orally. The result will, therefore, normally be a text qualifying for the denomination of 'spoken prose' (see 3.2. above), i.e. exhibiting at least in part the rhetorical strategies that are typical of lectures and/or public speaking in general. As for the 'ritual phases', sometimes they will not figure in the written draft drawn up before the conference and so at the time of the 'reading' of the paper the author will improvise 'bracketing' and 'bridging' statements aimed at setting his speech more appropriately in the contingent communicative situation, while in other cases these statements will be already present in the outline and therefore will be read as they are, or integrated with 'situational references' to make the speech more 'topical'.

If, then, one considers SI, although this may not be immediately evident in consideration of the 'local' dimension typical of this activity, the contribution that textual analysis can make to an interpreter's competence with regard to the discursal and rhetorical organization of papers (Hatim and Mason's 'structure') is really meaningful and should not be overlooked. In particular, also in the light of what has already been said concerning the cognitive mechanisms involved in text comprehension, the awareness of the *generic (macro)structure potential* (Halliday and Hasan 1989: 63ff.) of specific genres within the hypergenre of conference papers can be especially useful, increasing what Chernov (1994) calls 'subjective redundancy'; in other words, generic and textual competence at the macrostructure level can improve an interpreter's ability to anticipate, enabling her/him more clearly to 'see' the discourse plan as the Speaker

proceeds in text delivery and enhance her/his skill in coping with textual features that are typical of a given text genre and typology. In this way, the interpreter finds her/himself in a position that enables her/him to adopt, at least in part of his/her performance, a *top-down* approach rather than working exclusively at the level of local structures. As de Beaugrande (1985: 53-54) makes clear talking about language processing in general: “For best efficiency, a processor might strive to work on the deepest feasible level. Having understood the conceptual content, for instance, might enable a *bypassing of thorough analysis of phrasing*” (my italics). Chernov (1994: 140) applies a similar concept to SI as follows: “The interpreter forms a general outline of a probability prognosis of the meaning and sense structure of the forthcoming message, supported by some knowledge of other factors of the situational context. Such a prognosis may be called top-to-bottom prognosis”. Technically, s/he will be able to work on the basis of longer processing units, avoiding a fragmentary approach based on ‘atomistic’ lexical segmentation and remaining suitably detached from source-text syntax. Furthermore, whenever the interpreter manages to adopt a top-down approach, s/he frees precious resources in terms of processing capacity which can thus be redirected to tackling other problematic aspects of SI, enabling him/her to enact suitable strategies or ‘coping tactics’ in the translation process (Gile 1995: 169ff; 191ff.).

It can therefore be stated that the application of discourse analysis at the macrostructural level, i.e. at the level of discourse plan, in SI research can lead to an improved understanding of the different kinds of events at which interpreters work and the types of texts involved, thus shedding light on their behaviour as a function of the specific characteristics of the different text typologies. An enhanced discursual competence can offer interpreters elements correctly to evaluate the context and the semiotic configuration of the communicative events in which they are called upon to participate. This is absolutely essential if they are to be able to anticipate text content, its rhetorical organisation and structure, and thereby adopt a top-down strategy, avoiding sticking to a purely ‘local’ approach to translation.

4.1. Lower-levels of textual analysis

However, this is not tantamount to suggesting that the more traditional instruments of linguistic analysis that take the sentence as their basic unit are superfluous and therefore have to be cast aside. Indeed, for the best results, a macrostructural approach should be combined with a comparable competence at the lower linguistic levels, which means not only the ability to use language correctly (an ability which has been traditionally considered a pre-requisite in SI), but also, and above all, an awareness of the linguistic preferences of a given

speech community in terms of lexico-grammatical and stylistic choices. This is one of the reasons why, in this paper, preference has been given to the expression *textual analysis* rather than *text analysis*, *discourse analysis* or *text linguistics*.

It is a recognised fact that, also at the interphrastic and intraphrastic level, conference papers do exhibit certain invariants distinguishing them from other types of text. This again is true for all forms of lectures and speeches delivered in public, where a number of linguistic forms will recur: at the word level, with the so-called '*Terminologie de conférence*', and at sentence level, with what Ilg (1994) describes as "*un stock common de tours et de figures*". Also 'ritual formulas' will be recurrent, especially in 'bracketing' sections. Thorough acquaintance with this verbal apparatus and a good knowledge of the corresponding forms across her/his working languages represent for an interpreter, in Ilg's words, the basic '*outillage linguistique*' with which s/he should be equipped.

As regards scientific papers in particular, in relatively recent times substantial attention has been devoted to the syntactic aspects of scientific language, highlighting the fact that, although no special rules are applied in LSP texts, preference tends nevertheless to be given to certain constructions which recur with an abnormal frequency if compared to 'ordinary' language, a tendency that Halliday (1990: 58) describes as "a typical syndrome of grammatical features". The most notable example is certainly nominalization, in which "the processes are reconstrued as nouns, as if they were entities, and at the same time the logical-semantic relations are reconstrued as verbs" (Halliday 1997: 30ff), a phenomenon interpreted by Halliday as a form of 'grammatical metaphor'. This obviously results in a dramatic increase in lexical density, a characteristic which has been shown to be problematic in SI. It goes without saying that these textual features, if unforeseen, can pose insurmountable problems for simultaneous translation since, although nominalization is a phenomenon that occurs in many languages (certainly in Italian, French, German, Spanish and Russian), its frequency and the actual forms it takes differ from language to language. One critical element in translation from English is that, as Halliday points out (1997: 36), with the shift to a nominal mode "one tends to gain in discursive power; but by the same token one tends to lose most of the ideational-semantic information, because all that the nominal group provides is a long string of modifying words". It is absolutely essential, therefore, that the interpreter pay attention to this problem and work on texts so that s/he can prepare adequate language-specific strategies to cope with it. See the following example from a paper given at a Conference on Joint Replacement, where the noun phrase is made up of a sequence of as many as ten

elements:⁵ “A review of 91 *proximal one-third circumferentially porous-coated cobalt-chrome femoral components* at a mean follow-up of 8.6 years showed a HHS of 93.4” (my italics).

The frequent recourse to nominalization is functional to discourse development in that the packaging of processes into nominal groups seconds discourse development and “makes it possible for large chunks of information to take on critical values in the flow of discourse either as Theme or as culminative New-Rheme” (Halliday 1997: 32). Recent research suggests that the attention to thematic elements is fundamental in relation to the performance of interpreters in that it is essential for them to be able to “follow the path indicated by thematic material in the source text” (Taylor-Torsello 1996: 137-138). At the same time other authors, such as Chernov (1994: 147), have emphasised the importance of attention to the Rheme-Comment part of the sentence, in which the Speaker tends to place the information that s/he considers to be a New contribution that will lead to progress being made in the development of her/his argument: missing the rhematic portion of a sentence is equivalent to missing the main point made in that sentence. However contradictory these two positions may seem, they contribute to highlighting just how essential it is that an interpreter should be acquainted with the mechanisms governing the thematic structure and the information structure of a text. Something similar can be said as regards cohesive devices and the language specific problems of sentence organisation.

Undoubtedly, the most characteristic linguistic feature of specialised papers is lexicon, which has been the object of considerable interest in the literature. Familiarisation with relevant vocabulary has always been the main object of the routine documentation effort that all interpreters perform before a conference: their job would be impossible without a knowledge of the most important terms occurring in a given field and the availability of relevant terminological documentation to be consulted in the booth. The typical aspiration to precision of LSPs, which means using terms rigorously and univocally within each single domain, leaves little scope for recourse to synonyms and even less scope for the use of paraphrases. This is why terminological competence has always been considered an essential part of the interpreter's armoury of skills, as has an awareness of the main mechanisms of word formation which can enable her/him to cope with any new terms s/he might come across for the first time in SI.

5 B.E. Bierbaum, ‘Hydroxyapatite: *Hype or Help*’, Conference: *Current Concepts in Joint Replacement*, Session II ‘Primary Femoreal Fixation Options in the 1990’s’, Orlando Fla. Thurs. 12 December 1996.

4.2. A research project based on the textual-analysis model

On the basis of this theoretical framework, a project has been initiated at SSLiMIT, University of Bologna at Forlì, entitled “Il testo nel processo di interpretazione simultanea e consecutiva: strumenti di analisi e applicazioni didattiche” (“Text in the Simultaneous and Consecutive Interpretation Process: Tools of Analysis and Applications to Interpreting Training”)⁶, which is organised along different research lines:

- collection of a corpus of conference papers (currently, with special regard to scientific papers);
- analysis of such texts from the point of view of their macrostructure, followed by a more detailed linguistic analysis carried out using the instruments of text linguistics, genre analysis and functional-systemic grammar;
- description of features that are typical of spoken prose in relation to the different text genres, sub-genres and disciplinary fields;
- analysis of ‘background papers’ and, more in general, drafts drawn up in advance by speakers as a basis for lecture delivery and comparison with the actual oral text produced in the course of the lecture in order to highlight the addition of ‘bracketing’ sections, digressions, metatextual or procedural commentary etc.
- analysis of interpreters’ performances focussing in particular on their behaviour in connection with textual features that have been recognised as being recurrent and worthy of attention in a given text sub-genre or typology.

5. Final observations

In its basic theoretical orientation the model for SI research put forth in this paper proposes the application of essentially linguistic tools. This might seem to be somehow in contrast with the diffidence towards linguistic approaches that has dominated the field of translation and interpreting studies following the conclusion of, and the subsequent reaction to, the ‘linguistic wave’ of the 1970s. In the meantime, however, a radical development has taken place in the meaning assigned to the expression ‘linguistic tools’: in linguistic research, the last three decades have witnessed a shift in theory and method from a logical to an operational outlook and from an interest in *langue* to one in *parole*, i.e. in language as an actualised system. The established descriptive-structural

⁶ In the project, which I am coordinating, three other colleagues are involved – Maurizio Viezzi, Gabriele Mack and Peter Mead.

methods, which, after Saussure, had been at the core of analysis, have been extended beyond the boundaries of the sentence: thus, as de Beaugrande makes clear (1985: 47), “empirically at least, the sentence ... [has now] the status of a subevent: a format for placing words and expressions inside a sequence belonging to a larger linear action”.

All too often in interpreting studies it has been taken for granted that the acquisition of textual competence could be simply an intuitional process, relying on mere exposure to texts which was thought to be the only way of enhancing awareness of their inherent peculiarities: when applied to interpreters’ training this meant relying exclusively on habit-forming practice. In this context, research has tended to concentrate on other aspects, such as comprehension and language processing, error analysis, quality of output, neurolinguistic aspects, cerebral lateralization, memory etc.

But from the point of view of investigation into and comprehension of SI as a linguistic and communicative activity, it is illusory to think that the process of text construction can be ignored or simply taken for granted. Neither can it be denied that linguistic/textual considerations are also paramount when one deals with the problem of quality of performance. As Pearl observes (1999), today from the translational point of view expectations concerning SI are no smaller than those about written translation. There is no reason therefore, either in reasearch or training, to avoid working on textual aspects for the sole reason that the SI process is so fast that on the one hand a complex discorsal approach may seem somehow aiming too high and on the other hand minute observations on linguistic and translational aspects appear to border on perfectionism: both efforts are realistic and recommendable.

If all this is related to interpreter training, the logical consequence of these considerations is that mere reliance on exposure to texts and on practice in the booth, however intensive, aimed at habit formation, need to be integrated by work on texts and theoretical reflection which will help (trainee) interpreters build the necessary discorsal competence on a cognitive basis. This will also provide them with a ‘blueprint’ for the work of preparation/documentation they will have to perform routinely in their professional life, which cannot be based merely on terminology.

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