Different Approaches to Interpreting Studies

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Different Approaches to Interpreting Studies

Diplomski rad

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SUMARY:

The present thesis contains an extensive overview of different methodological and theoretical approaches to the field of interpreting studies. At the beginning, a distinction between interpreting and translation is made, followed by a brief history of interpreting practice. The basic concepts, models and assumptions concerning the study of interpreting are presented in the middle section, showing how the role of the interpreter and the attitude towards interpreting has changed over the course of years. In the final part, studies made by scholars from different disciplinary fields are briefly presented, proving that simultaneous interpreting is a complex process which requires careful and detailed study from various angles.

Key words: simultaneous interpreting, psycholinguistiscs, methodological and theoretical aspects

SAŽETAK:

Diplomski rad sadrži pregled različitih teorijskih i metodoloških pristupa u istraživanju usmenog prevođenja. U početnom dijelu definira se razlika između usmenog i pismenog prevođenja, a slijedi kratak povijesni razvoj profesije usmenog prevođenja. U središnjem dijelu opisani su osnovni koncepti, modeli i pretpostavke o istraživanju usmenog prevođenja, pokazujući kako se uloga prevoditelja i stav prema usmenom prevođenju mijenjao kroz godine. U završnom su poglavlju opisana istraživanja usmenog prevođenja provedena u suradnji sa istraživačima iz drugih disciplina, što dokazuje da je simultano prevođenje složen proces koji je potrebno pažljivo i detaljno proučavati sa različitih stajališta.

Ključne riječi: simultano prevođenje, psiholingvistika, metodološki i teorijski aspekti

Abbreviations:

EVS – ear-voice span

CI – consecutive interpreting

SI – simultaneous interpreting

SL – source language

TL – target language

RT – relevance theory

IT – interpretive theory of translation

NP – noun phrase

VP – verb phrase

TT (paradigm) – translation theoretical

CP (paradigm) – cognitive processing

NL (paradigm) – neurolinguistic

1. INTRODUCTION

The present thesis proposes a deeper insight into a relatively new phenomenon in interpreting practice, simultaneous interpreting. Over the course of years various approaches to the study of interpreting have developed. This is why this thesis endeavours to summarize and critically review different methodological and theoretical aspects of the broad field of research and studies concerning this young discipline.

1.1 Defining the object of the study

Ever since different nations started communicating with each other, interpreters were the ones enabling communication across cultures and languages, bridging the gap between different languages, and helping speakers to be understood and listeners to understand what is being said. (Nolan, 2005)

Since interpreting and translation share the same main features, such as function, transfer of meaning, and transfer of ideas, the simplest definition of the term 'interpreting' would be 'oral translation of a discourse'. But as Pöchhacker emphasizes, interpreting differs from other forms of translation due to its immediacy, it "is performed 'here and now', for the benefit of people who want to engage in communication across barriers of language and culture". In accordance with the feature of immediacy, he also proposes the following definition: "Interpreting is a form of translation in which a first and final rendition in another language is produced on the basis of a one-time presentation of an utterance in a source language." (Pöchhacker, 2004: 11)

It is important to understand that there is more to interpreting than just simple transmission of an utterance from one language to another. The interpreter must pay attention to the way the message is socially constructed and be attentive to the social factors which affect communication. Since interpreters are supposed to facilitate understanding in different social settings, e.g. hospital, school, conference, meeting, etc., they must be aware of the possible differences that exist among social backgrounds of speakers and listeners, and adapt the message to their social and cultural realities if necessary. Regarding the social context of interaction, there are two different settings: the intra-social setting which mediates within heterolingual societies and inter-social setting, which mediates between different linguistic and cultural entities. (Angelelli 2004; Pöchhacker 2004)

Interpretation can be defined as mediated bilingual activity (Chernov 2004: 2), since this kind of human interaction involves different languages and verbal communication is mediated through an interpreter. When treating an act of translation as an act of communication, one must be aware of the fact that a translational act splits into two interrelated communicative acts: communication between the sender of the message and the interpreter, and communication between the interpreter and the addressee. The interpreter as a partner in communication takes turns assuming the role of the receiver and the sender concurrently.

1.2 Interpreting vs. Translation

Regardless of the fact that translation and interpreting fulfil the same function, these two professions have different conceptual and theoretical frameworks and different approaches to research of both phenomena. What they both demand is a thorough mastery of the TL and very good passive understanding of the SL. One must also be aware of the fact that no translation is ever perfect due to numerous differences among cultures and languages.

Translation holds to a higher standard of accuracy and completeness, since translators have enough time to polish their work, do the background research, and use different strategies to compensate for contextual gaps. These gaps occur because the process of translation is stretched out in time and space, sometimes separated by centuries and continents, so the delivery of message to the audience occurs at different time and in different places. This poses a great challenge for translators, since they have to convey the same message across various historic and societal contexts.

Interpretation happens at the same place and at the same time as the speaker's rendition, and message is delivered immediately. Interpreters are present at the event, they have access to various cues, such as intonation, and sometimes even immediate feedback from addressees, but unlike translators, they have limited memory span and any additional knowledge on the subject matter has to be acquired before the interpreting session. Simultaneous interpreters rely on the short-term retention of propositional representations and mental models constructed for general understanding and contextualization, and in addition to that, their receiver and sender roles overlap in time. Interpreters have to make decisions faster than the translators, since they work under severe time constraints, but as they are expected to convey the essence of the message, they must immediately come up with a satisfactory paraphrase or a rough equivalent. The translators must be familiar with

the rules of written language, and have to be competent writers in target language, whereas interpreters need to master the features of oral language and be good speakers, using their voice effectively to help to get the message across. (Setton: 1999; Nolan: 2005; Baker: 1998)

1.3 Various forms of professional interpreting

Over the course of history, several types of interpreting emerged in various settings, from tribal encounters to institutionalized events, e.g. conference interpreting, business interpreting, liaison interpreting, diplomatic interpreting, military interpreting, court interpreting, community interpreting, signed language interpreting and media interpreting.

After the development of transmission equipment in 1920s, one could distinguish between two modes of conference interpreting: consecutive and simultaneous. The main difference between these two modes is that consecutive interpreting happens after the presentation of the SL text, and simultaneous interpreting happens during the SL presentation.

Although there are several types of interpreting, this paper will focus on the simultaneous mode of conference interpreting. SI in this sense is performed in professional conditions, that is, in a sound-proof booth with headsets, control consoles and microphones, and a direct view of the meeting room, delivering versions of the discourse in different languages with a lag of a few seconds, alternating between two or three interpreters on site every 20-30 minutes.

SI has become a standard medium of multilingual communication in international organizations. At the United Nations, delegates communicate through SI in six languages, whereas the European Parliament uses eleven languages. Conference interpreting is a distinct profession, where interpreters are first trained in consecutive interpreting, in which discourse is rendered in segments of five to ten minutes with the help of notes. Consecutive interpretation was the standard medium of debate at the League of Nations, the UN's ancestor, and continues to be widely used at small, bilingual meetings and ceremonial occasions. (Angelelli, 2004; Setton, 1999)

A specificity that distinguishes SI from all other kinds of interlingual communication is that the main and sole objective is to ensure communication between the participants of the act within the time span of the act.

1.4 Interpreter's role

In the last two decades, there has been a shift in the perception of the interpreter's role from an invisible language transmitter to an essential partner in a cross-cultural conversation, or a co-constructor to the interaction. The sociolinguistic perspective illustrated crucial differences in the participatory role of interpreters. These differences depended upon the nature of the interpreted communicative event. The fact that the interpreter constructs, co-constructs, and facilitates the talk during an interpreted encounter proves the role of a co-participant.

According to Wadensjö (1998), speakers and interpreters co-construct conversations. Various studies on academic and medical settings prove that the interpreter is in fact visible and challenge the notion of neutrality. These kinds of studies focused on the participation of interpreters during interactions and they took an approach to interpreting as to a special case of interaction or discourse process in which interpreters are co-participants who share responsibility in the talk. R. Bruce W. Anderson (1976) considers interpreting as a 'three-party interaction', since a (bilingual) interpreter assumes the role of a mediator between two (monolingual) clients. This is usually referred to as bilateral or dialogue interpreting, which is in contrast with conference interpreting, the most common type of interpreting in our time. The conceptualization of an interpreter as a conduit is still prevailing, especially in research on conference and court interpreters. (Pöchhacker 2004, Angelelli 2004)

2. HISTORICAL BACKGROUND

The need for interpreters has always been present, especially in multilingual and highly advanced civilizations. The interpreters were the ones enabling communication and overcoming social and cultural differences. According to Angelelli (2004: 8), in Ancient Greece there was a constant demand for interpreters, who were responsible for linguistic mediation when communicating with Roman Senate representatives, Egyptians or Celts. The interpreters in Roman Empire also enjoyed a prominent position. During the colonization of Americas, the interpreters gained on importance, and in 1563 the Spanish Crown established laws to regulate interpreting practices in its colonies. Even at that time it was obvious that interpreting happens between two parties of unequal social status, but

this was not taken into account, since the interpreters had to take an oath that they would interpret without bias, neither omitting nor adding anything.

The real breakthrough of international interpreting happened in 1919 at The Paris Peace Conference, when a team of professional interpreters led by Paul Mantoux interpreted at the international level for the first time. Before this event, French was prevailing in diplomatic circles and there was no need for interpreting. Paul Mantoux, in collaboration with interpreters of the League of Nations, gave the first norms for professional interpreters.

Consecutive interpreting thrived during the time between the two World Wars, since English and French were constantly used in the League of Nations, and later on in the UN, too. Although there were five official languages in the UN, English and French were still the only two working languages. This however changed over time, and other languages were introduced as working languages, Spanish, Russian, Chinese and Arabic, respectively. All of these changes made consecutive interpreting inefficient and raised the need for another form of interpreting, which eventually led to the emergence of simultaneous interpreting. The system of simultaneous interpreting was developed by Edward Filene and Gordon Finlay. It enabled rendering a message with no time loss, but it still had to gain confidence of the masses. The real birth of simultaneous interpreting happened at the Nuremberg Trial (1945 – 1946), where interpretations into English, German, French and Russian were necessary, since according to the Charter of the International Military Tribunal, war criminals have the right to a fair trial held in a language they understand. (Göstl 2010)

After World War II, as the communication needs in international politics and trade expanded, a demand for interpreters suddenly increased, and new institutions for training in linguistic and translation skills opened in Europe (the first one in 1930 in Mannheim, then during 1940s in Geneva and Vienna), Asia (Taiwan, Korea, Japan), both of the Americas (Argentina, Canada, Chile, Mexico, Uruguay, the USA, Venezuela), Africa (Tunisia and Egypt), and Oceania (Australia and New Zealand).

During the 20th and 21st century the need for professional interpreters increased at the time of crisis e.g. in Kosovo, Macedonia, Croatia, Bosnia, Iraq, 9/11 attack, when people who did not share a common language were put in contact. It became obvious that nations and people could not communicate effectively without interpreters, and that it is important to encourage learning of less

common languages, such as Arabic or Persian. The U.S. government is encouraging the learning of these languages through funding.

Interpreting initially entered academia just to meet a pragmatic need, not to become an object of a study. Research questions about the practice, practitioners and their role, essential for understanding the complexities of an interpreted event, were shadowed by the need to train practitioners ready to meet an immediate market demand. That is the main reason why many of the principals governing the profession today are a result of personal experiences and opinions rather than of empirical research. (Angelelli, 2004, Pöchhacker 2004, Gile 1994, Göstl 2010)

2.1 Development of interpreting profession

The interpreting practice became professionalized after the International Association of Conference Interpreters, AIIC (*Association Internationale des interprètes de conférence*) was founded in Paris in 1953. AIIC is based on a code of ethics and professional standards adopted in 1957, which regulated interpreters' working conditions and established a high profile for this profession on an international scale. Interpreting enabled communication in any setting, but the main focus of attention was conference interpreting, which was also a leader in establishing standards for both training programs and professional associations. Shortly after the formation of AIIC, the American counterpart, the American Association of Language specialists (TAALS) was established in Washington D.C. in 1957. In addition to the development of international conference interpreting, substantial progress is also visible on the field of community interpreting. In 1978 the National Association of Judicial Interpreters (NAJIT) was set up in USA, and later court and medical associations of interpreters were established.

According to Angelelli (2004), the main problem of interpreting training programs is that they theorize about how the interpreters' role should be played, instead of trying to understand the complexity of the role that interpreters play as they facilitate communication. Pure theorizing leads to distortion of reality of the interpreter at work, which limits the opportunities for understanding the multifaceted and complex role they play. Training interpreters to make the communication between parties who do not share a language as smooth as it would be if the parties did have a common language is actually presenting an unattainable goal as an attainable reality. This results in a tension between the prescribed and the actual role of the interpreter. One must be aware of the fact that different settings and different people impose different restraints and needs on the interpreted

communicative events they facilitate. By playing such a role, an interpreter undergoes a constant change in order to satisfy the imposed needs and constraints. These facts are important for analyzing codes of ethics and standards of practice of different professional organizations.

2.2 Development of research on interpreting

Daniel Gile (1994) proposes four distinct periods that characterized interpreting research:

a) The early writing period (1950's – 1960's)

During this period, the interpreters and interpreting trainers began to think and write about the field. Several remarkable texts on interpretation were written by Herbert, Rozan, Ilg (Gile 1994). They wrote reflectively, about their thoughts and personal experiences, but their texts had no scientific validity since they were not researchers. Their writings were not empirically grounded, but they shaped the conceptualization of interpreting and the role the interpreters were supposed to play and identified most of the fundamental issues that are still discussed at the present time. The first academic study was conducted by Paneth in 1957 (Gile 1994).

b) The experimental period (1960's – early 1970's)

In this period, the cooperation with scientists from other disciplines and cooperation within a circle of interpreters was initialized. Researchers from different disciplines, such as cognitive psychology, neurolinguistics, and psycholinguistics proposed their mainly experimental studies (Treisman, Oleron and Nanpon, Goldman-Eisler, Gerver, Barik). They were interested in the aspects of interpreting related to the cognitive processing of information, and they investigated the influence of and reactions to various factors of cognitive performance, such as native language, SL, EVS, pauses in speech delivery, noise, etc. The studies were mostly concerned with psycholinguistic and cognitive processes in interpreting, but paid little to no attention to the role of the interpreter. Interpreter was seen as a cognitive being, not as an individual in contact with others performing a social and political role, and there were only a few replications and experiments.

c) The practitioners' period (1970's – early 1980's)

Towards the end of the sixties, more practicing interpreters tried to do research on interpreting. Ingrid Pinter from Vienna was the first conference interpreter (and psychologist) who defended a Ph.D. dissertation on interpretation (1969). In the course of the years, even more studies were conducted, and M.A. theses and PhD dissertations on interpretation were written. However, the results of such studies are considered to be theoretical or conjectural, rather than empirical, since

these individuals generally worked in isolation from other scientific communities, unaware of other studies on the same subject matter.

The main studies were conducted in Paris, by the ESIT group, where Danica Seleskovitch developed her *théorie du sens* (Theory of meaning), which idealized the view of interpreter and interpreting. Major principles of *théorie du sens* are that the interpreting is based on meaning instead of on language and linguistic structures, and text comprehension and text production are spontaneous if the working languages are fully mastered. Combining the language and world knowledge, they capture the only possible meaning of an utterance and render it into another language. Interpreting is no longer seen as simple transcoding of SL into TL – the interpreters extract the message of SL as an ordinary listener would, and they reformulate it into TL. The meaning is a construct that exists on its own, rather than as a result of the co-construction of the parties involved in interaction. The theory of meaning does not take into account any of the social factors present in the communicative act of interpreting, which is why it received numerous criticisms, since it ignores an important fact: interpreting cannot happen in a social vacuum. It has no empirical underpinning, and it sides with the professional ideology which considers interpreters as bilingual 'ghosts'. No matter how faulty it is, it influenced significantly the teaching and learning of interpreting. (Gile 1994, Pöchhacker 2004)

d) The renewal or the 'Renaissance' period (late 1980's – today)

During the 1980s, the field of conference interpreting experienced considerable changes and methodological reorientation, with innovative ideas introduced by Catherine Stenzl, Jennifer Mackintosh and Daniel Gile. In Eastern Europe interpreters such as Kopczynski, Salevsky and Čenkova expressed interest in more scientific studies on interpreting, since interpreters have little experience in actual research and critical thinking. In the 'West' a cognitive psychology approach was prevailing, promoted by Barbara Moser-Mercer and Sylvie Lambert. During this time, research on conference interpreting focused mostly on information-processing aspect of interpreting, and not on the communicative event and its participants. Only recently, the expansions emerged towards a socio-cultural approach and to the role and context in which interpreting occurs. (Gile 1994)

The Interpreter's Newsletter, published in 1988, which turned into a specialized journal of interpreting research, was important for the promotion of this practice and for connecting interpreters from different parts of the world. During this period, the field of interpreting studies was object to development and diversification.

The main event in this period was the international symposium on conference interpreter training at the University of Trieste in 1986. The need for a more scientific and interdisciplinary approach to the study of interpreting and for cooperation between the researchers was expressed at the symposium, at the same time emphasising that interpreting should be considered as an autonomous discipline.

During the 1990s, the interpreting studies have developed fast, but despite this academic progress, there still are not too many interpreting scholars, and research output is rather modest. Pöchhacker stated that "Translation studies as a whole is clearly subject to dynamic forces resulting from the multi-faceted nature of its object and from the diversity of (inter)disciplinary lines of approach. (Pöchhacker 2004: 44)

Since interpreting was considered to be a subdiscipline of translation studies, Gile and other interpreting scholars cooperated with The European Society for Translation Studies (EST). Gile launched the International Interpretation Research and Theory Information Network (IRN). This inspired interpreting scholars all over the world to investigate the field of interpreting, which showed the paradigms of the neurolinguistics and cognitive psychology, addressed key professional concerns and conceptual issues.

In the 21st century, PhD-level programs in interpreting have been developed, with approaches based on cognitive psychology and linguistics. An international conference on quality in interpreting was organised by the team of scholars from the University of Granada in 2001. PhD programs in interpreting studies have also been launched in the Far East, and thus acquired a status of a global discipline.

Interpreting as a discipline is nowadays accepted within the wider field of translation studies and simultaneously respected as one of its subareas "whose volume and degree of specialization demand separate coverage" (Pöchhacker, 2004: 44).

3. CONCEPTUAL APPROACH

Before starting a research in interpreting studies, one must first understand the concept of this phenomenon and be familiar with theoretical framework, which will be elaborated on in the following chapters. As first researchers took interest into interpreting and started theorizing about it, several concepts for better understanding of the aforementioned phenomenon emerged. These concepts are called memes, and will be discussed in this chapter.

3.1 Memes of interpreting

Andrew Chesterman established the notion of memes in his concept *Memes of Translation*. He considers memes as metaphors clarifying the concept of translation, and since interpretation and translation are closely connected disciplines, Chesterman's memes also affect the interpreting studies. These various concepts developed due to an interdisciplinary approach to the interpreting studies. The notion of memes was shaped in 1970s, and it "refers to ideas, practices, creations and inventions that have spread and replicated, like genes, in the cultural evolution of mankind." (Pöchhacker, 2004:51)

3.1.1   Verbal Transfer

The interpreting process is a process of transferring words and structures from SL to a TL. Interpreting as verbal processing has been studied from both linguistic and psychological point of view, the former regarding certain lexical and structural SL and TL correspondences, and the latter concerning mental process as such. As technology developed, the interpreters started to be conceptualized as digital data processing devices – as they interpreted, they performed a combination of cognitive skills (speech recognition, memory storage and verbal output generation) which accounted for the complex task of interpreting.

Words contain meanings and serve as the elementary language structures. The interpreters reproduce a speech from one language into another, and the difficulty of their task depends on the nature of the verbal material. In the early 19th century, a German theologian Friedrich Schleiermacher held that the language used in transacting business was so straightforward, that interpreting was "a merely mechanical task that can be performed by anyone with a modest

proficiency in both languages, and where, so long as obvious errors are avoided, there is little difference between better and worse rendition." (Pöchhacker, 2004: 54)

Interpreting was considered to be a language-switching operation performed more or less naturally by any bilingual speaker. This idea was based on the phenomena of automaticity and inter-idiomatic relations. To a truly bilingual person (and thus a perfect mediator), the two languages were inter-convertible at all times, which enabled the interpreter to perform the task as an automatic reflex rather than an act of volition. Shaped by contemporary psychological approaches, bilingualism researchers measured the degree of automaticity of word-translation tasks depending on how fast the bilingual subjects responded to the verbal stimuli.

Based on the analogy of electrical signal transmission, in the 1940's translation was viewed as a combined decoding and encoding operation involving the switching of linguistic code signals. In that sense, the interpreter as a special type of 'transmitter' between a 'source' and a 'receiver' was seen as 'switching signals' of one information-bearing 'code' to those of another. This conception of code-switching, or transcoding, became one of the most firmly rooted metaphors of translation among psycholinguists and linguists. In early psycholinguistic experiments the focus was on the extra time required by the 'code-switching operation' in simultaneous interpreting in comparison to the monolingual repetition of verbal input known as shadowing (Pöchhacker 2004: 54).

Because of its specific grammatical and lexical structures, German posed a challenge for interpreters and thus became a target for syntax-oriented studies of simultaneous interpreting. Scholars at the University of Leipzig, who considered linguistics was the most promising scientific framework for the study of translational phenomena, tried to identify lexical equivalence relations and also syntactic regularities and correspondence rules determining the 'optimum moment'. They later realized that interpreter's processing of linguistic signs could be overridden by knowledge-based anticipation. In the late 1960s it was obvious that the interpreting process could not be explained as a direct linguistic transfer of lexical units and syntactic structures, but was mediated by some form of cognitive representation or memory. (Pöchhacker 2004, Setton 1999)

3.1.2   Cognitive Information Processing Skills

Cognitive psychologists compared various mental structures and procedures responsible for the processing of the verbal data to digital data processing (computing) as a metaphor of the human

information processing system. Gerver (1975) defined the interpreting task as a fairly complex form of human information processing involving the reception, storage, transformation, and transmission of verbal information. The main research issues include the processing capacity of the human information processing system, the possibility of dividing attention over various tasks (multi-tasking), and the structure of its memory and function of its memory components. Language processing is further divided into subtasks such as phoneme and word recognition, lexical disambiguation, syntactic processing and knowledge-based inferencing. These issues in language processing have influenced conference interpreting and its processes. The meme of cognitive information processing was highly influential for the construction of models of interpreting process. (Pöchhacker, 2004)

3.1.3 Making Sense

Another important meme, closely connected to the meme of processing is the concept of interpreting as a communicative activity, performed by a human being in a particular situation of interaction. This perspective sees interpreting as a combination of speaking and listening activities performed in order to enable communication. The idea of interpreting as a communicative activity is mostly expressed in a meme of making sense, which conceptualizes the interpreter's task as grasping the intended meaning of an original speaker, and expressing it for listeners in another language. (Pöchhacker, 2004: 53) This sense making meme is in a great deal a result of studies made by cognitive-science researchers inspired by information-processing meme.

"To interpret one must first understand" (Seleskovitch 1978:11). At the beginnings of cognitive processes research, the interpreter's function of enabling mutual understanding in the service of international communication was stressed, and the interpreter's task was to understand what had been said in a source language, and to express the ideas in another language in a way that they would make sense to the target audience.

At that time the consecutive mode of interpreting was the most popular, and since this particular mode required good communicative skills (listening and speaking appear at different stages of interpreter's performance), the translation part almost had a status of counterpart to interpreting. At that time translating had a reputation of an analytical code-switching operation, whereas interpreting was seen as the spontaneous and synthetic grasping and conveying sense.

Seleskovitch (1978) emphasized the need for a meaning-based approach by offering a simile of representing an object by a painting (an interpretation) vs. a photograph (a translation). Prior knowledge is a very important aspect in the concept of interpreting as 'making sense'. In order to understand the speaker, the interpreter must have a good knowledge of the subject matter. Seleskovitch (1978) investigated the cognitive dimension of language understanding. She argued that interpreting and understanding in general, demanded activation of previous knowledge that combined with perceptual input in order to develop a conceptual mental representation.

Seleskovitch (1978) also emphasizes that the interpreter must convey a message in a way that the audience will understand, that is, the verbal form of the message must be best suited to ensure understanding by the audience. Furthermore, while the speaker and interpreter to some extent share the socio-cultural background, it is not the case with the target audience. That is why the interpreter must adapt the speaker's utterance to the prior knowledge of the audience. If it happens that the speaker and the listeners are of unequal social status and educational backgrounds, and the interpreter must ensure understanding of utterances that are broader than the scope of listener's socio-cultural knowledge, he/she may have to paraphrase, explain or simplify in order to achieve the communicative effect desired by the speaker. (Pöchhacker 2004)

3.1.4   Production and Mediation

As translation scholars widened their scope of research, several closely linked supermemes relevant for interpretation emerged – text/discourse production and mediation. They are both closely linked to the cross-cultural dimension of mediated communication, whereas the former is shaped by theories on text, discourse and translation, and the latter by the sociology of interaction.

Interpreting is a production-oriented activity, whether it is seen as a process or as a communicative activity. Language production can be described in different analytical terms. From a rhetoric point of view, interpreter must be a good public speaker, psycholinguistic point of view focuses on temporal features of a speech, such as pauses, cognitive psychologists focus on information content. Before 1970s, linguistics mainly focused on lexical meaning and syntactic structure, which changed over the course of years, as different concepts of language production developed. Beaugrande and Dressler (1981) developed an approach in which a text is seen as a complex web of relations guided by a communicative intention. Interpretations too, have been

described by certain aspects of textuality, such as cohesion, coherence, and intertextuality, foregrounding the orality of the interpreter's output.

The interpreter is not so much an intermediary between the languages, but between individuals and the positions they represent. The communicating parties will often come into conflict, and the interpreters have to enable understanding. One simple example is simultaneous or overlapping talk, where interpreters must keep the discourse flowing, and possibly intervene if one of the parties shows a lack of understanding. It is their job to stay neutral and invisible, not to become a third party involved in conversation. This shows a complex issue of what interpreters are expected and allowed to do, besides relaying message, in order to facilitate understanding in a communicative event. Interpreters often have to mediate between unequal power relations and different socio-cultural backgrounds. Therefore, interpreters are also cultural mediators since their output must be adapted to communicative needs of the target-cultural audience (Pöchhacker 2004).

This role of a cultural mediator can also be seen as a point of cultural interface. The interpreters bring together different cultures and represent the culturally hybrid societies of the future. Therefore it can be said that interpreters represent transgressing community boundaries. They are intermediaries who allow for and embody the meeting, coexistence and mutual reconciliation of cultures. The position the interpreter has in a society reflects that society's attitude towards other cultures and intercultural exchange. (Pöchhacker, 2004)

4. THEORETICAL APPROACH

4.1 Models
Different concepts of interpreting focus on different aspects of the memes of interpreting, elaborated in the form of models. A model is a representation of an object or a phenomenon, an assumption about what something is like and how it functions. As a basic form of theorizing they can express intuitive assumptions and ideas (memes) about a phenomenon, and they single out features and relationships that are of a particular concern to the analyst, and they can also explain how or why a phenomenon occurs. If it includes all factors and relationships which may have an impact on the phenomenon under study, they can be used for predicting the occurrence of future phenomena. Most models are prescriptive, used for a particular level of analysis. Pöchhacker (2004) differentiates several levels of analysis:

a) Anthropological, which refers to the role of interpreters in the history of intercultural relations.

b) Socio-professional, which focuses on societal structures and investigates interpreting as a profession in society.

c) Institutional, which narrows the focus to particular social institutions, such as international organizations, parliament, courts.

d) Interactional, which focuses on a particular type of communicative event.

e) Textual or discursive, which concentrates on the text as the material instrument in the communicative process.

f) Cognitive, which focuses on mental processes underlying language use. (Pöchhacker, 2004)

One must bear in mind that these levels are not separate categories, but rather variable focal points. The greatest focus of the researchers was however on the level of cognitive processes and on level of interaction. These two levels reflect the two supermemes of interpreting, processing and communicative activity, and these two will be explained further.

4.1.1   Interaction models

Interaction models focus on the constellation of interacting parties and on the process of communication, or more specifically, on the role of discourse in communicative interaction.

4.1.1.1 Constellation

R.B.W. Anderson (1976) proposed a basic, linear constellation in which an interpreter assumed the central position of a mediator between two monolingual parties. Later on, a triangular representation with the interpreter at the apex was proposed, and these constellations foregrounded the role of the interpreter as a more or less active participant in interaction. Gile (1995) proposed a simple model of the interactional constellation in a conference setting, where a monolingual speaker addresses a large audience, part of which cannot comprehend the language of the original speech. In his model, clients also play a significant role, although they are not directly involved in the interaction process. There are also a lot of other agents influencing interpreters' working conditions, for example conference organizing staff, document services, technicians and colleagues in the interpreting team (which is very important in relay interpreting).

Bistra Alexieva (1997) proposes a multi-parameter model of interpreting constellations on the basis of seven scales relating to socio-situational constellation of interpreting parties:

a) DISTANCE vs. PROXIMITY
   - Between the speaker, the addressee and the interpreter
b) EQUALITY/SOLIDARITY vs. NON-EQUALITY/POWER
   - Status, role and gender of the speaker and addressee and interpreter in some cases
c) FORMAL SETTING vs. INFORMAL SETTING
   - Number of participants, degree of privacy and distance from home country
d) COOPERATIVENESS/ DIRECTNESS vs. NON-COOPERATIVENESS/ INDIRECTNESS
   - Relevant to negotiation strategies
e) SHARED GOALS vs. CONFLICTING GOALS

Through these scales, Alexieva reaffirms the role of culture in the perception of interpreting as interaction. (Pöchhacker, 2004.)

4.1.1.2 Process of communication

Early communication models of interpreting were shaped by the mathematical theory by which communication was seen as signal processing – a message originating from a source is encoded and transmitted through a channel for decoding by a receiver. In this case the interpreter is seen as a code-switching station. Kirchhoff proposes a more elaborate representation in 1976, but she also sees language as a code, and language processing as encoding and decoding. She also proposes a dual system of communication in which two separate parts of the communication system are linked together by the interpreter, a side participant outside the situation.

Fernando Poyatos (qtd. in Pöchhacker 2004) represents the verbal and non-verbal systems involved in simultaneous and consecutive interpreting in a form of a matrix cross-tabulating acoustic and visual sign-conveying systems with various constellations of auditory and visual co-presence.

4.1.1.3 Discourse

After the pragmatic turn in linguistics, several authors focused on notions of text and discourse in their models of mediated interaction, Stenzl (1983, qtd. in Pöchhacker 2004) being the first one. She used insights from text and translation theory for a model of interpreting as an interaction process. She gives an account of the communicative information flow in SI by elaborating on the text-theoretical translation model, which centres on text processing by the speaker, interpreter and the receiver. The key features are intention (function), situation, socio-cultural background, context,

knowledge, and text. This model was designed for SI as a dynamic flow model, as both interaction and processing model, which showed what happens between interactants and it also showed processes within the interpreter. It covers considerable ground as a general account of the communicative flow in interpreting.

Sylvia Kalina (1998) proposed a model of knowledge-based text production and comprehension in interpreting. Her model focuses on the cognitive dimension of text processing, not so much on the dynamic one. It represents 'communicative mediation' as a text/discourse based process which begins with a speaker's mental discourse model and leads to a mental discourse model constructed by a TL addressee on the basis of linguistic knowledge and world/situation knowledge.

4.1.2   Processing models

Processing models are mostly designed for the simultaneous mode, and they involve multiple task performance, processing stages and mental structures. Early models made by Herbert (1952) focus on the nature of the translational process. According to him, interpretation consisted of three parts: understanding, conversion and delivery. He questioned the interpreting technique, not the mental processes. Seleskovitch (Pöchhacker 2004: 97) on the other hand, did a cognitive analysis, representing interpreting as a triangular process, with sense at pinnacle. According to her, the most essential process was understanding and expression of 'sense', and not linguistic transcoding. She defined sense as conscious, made up of the linguistic meaning aroused by speech sounds and of a cognitive addition to it, and nonverbal, meaning dissociated from any linguistic form in cognitive memory. The cornerstone of the interpretive theory of translation was the idea that translational process was based on a deverbalized utterance meaning rather than on linguistic conversation procedures (transcoding).

García Landa (Pöchhacker 2004: 97) proposes a triangular model with a reference to psycholinguistic research. According to this model, two acts of discourse are connected by the principle of equivalence of sense, which basically means that the speaker's intention and the original act of discourse equals the interpreter's perception of the intended sense, which in turn becomes the interpreter's intention for the target discourse, which equals the client's perception of the intended sense. Garcia Landa offers a conceptualization which involves attention thresholds, memory

structures (working memory, long-term memory activation), discourse components and situational variables to reflect the process of discourse comprehension and production.

Lederer (1978) however departed from the triangular process model and proposed a model involving eight mental operations, with two or more running concurrently at any time. She distinguishes three types of operations:

a) conscious successive and concurrent operations (listening, language comprehension, conceptualization, expression from cognitive memory)

b) continuous underlying operations with intermittent manifestation (awareness of situation, self-monitoring)

c) intermittent operations (transcoding, retrieval of specific lexical expressions)

Lederer relates the main processing stages (perception, conceptualization, expression) to the function of working memory and long term memory.

Kirchhoff (1976) uses the terminology of information theory and her basic process model includes decoding, recoding, production and monitoring. In order to account for syntactic divergence between the SL and TL, she includes a short-term storage of input segments in memory. Her multi-phase model focuses on linguistic surface structure, unlike *théorie du sens* and its focus on conceptual processing. Her goal was not to model the process of interpreting at its best, but to account for psycholinguistic processing difficulties. Her analysis focuses on notions such as 'cognitive load' and 'processing capacity', since she related her model to psychological processing constraints of the interpreter. Each task requires a certain amount of processing capacity, and concludes that multiple task performance becomes a problem in cases when task completion exceeds or reaches the individual's processing capacity limit.

Gile (1995) proposed his Effort models to show that there is only a limited amount of mental 'energy' (processing capacity) available for the interpreter's processing effort. He defines three basic efforts: listening and analysis (L), production, (P) and memory (M). The sum of the three efforts must not exceed the interpreter's processing capacity. He uses these effort models to account for a number of processing difficulties and failures and to explain the effect of problem triggers (proper names, numbers, compound technical terms) which may result in 'failure sequences' and require special 'coping tactics'.

These models were developed by interpreters, not by cognitive scientists. The focus was on simultaneity of task components, and they make no specific claims about the existence and interplay in the brain of particular mental structures and procedures.

4.1.2.1 Cognitive processing models

Gerver (1975) developed the first psychological processing model for SI on the basis of experimental findings regarding interpreter's time lag, memory use, and output monitoring. He devised a flow-chart model of the mental structures and procedures which were involved in output processing and output generation. The model features memory structures (short-term buffer store, long-term memory system, output buffer) and procedures at control of the interpreter (discarding of input, pretesting of output, output monitoring and back-tracking to improve previous output. Gerver's model is a psychological, rather than a linguistic description of the interpreting process, but is not explicit about the translation process as such. He distinguishes linguistic surface elements (sounds, words, sentences) from the deep level of meaning, as understood by the interpreter. He also suggests that grasping the relational meaning structure is crucial to the translation task, and acknowledges the potential role of expectation-based processing central to Chernov's model.

Barbara Moser (1978) devised another model of memory structures and processing operations in SI. Her model is based on a psycholinguistic model of speech comprehension. Attention is drawn to input processing stages up to the level of meaningful phrases and sentences. She assumed there exists a close interaction between the input-driven sequential process and knowledge in long-term memory. The pivotal features of her model are the search for the conceptual base (which serves to activate TL elements for semantic and syntactic and semantic word and phrase processing on the way to output articulation), and a construction of a prelinguistic meaning structure with various types of knowledge (conceptual network, contextual knowledge, general knowledge). This model assumes a number of decision points at which processing is either moved forward or looped back to an earlier stage. One of these points concerns 'prediction', which allows for the elimination of all processing stages except feature detection up to the activation of TL elements. There is a high degree of interaction between the bottom up and the top down process.

Chernov (2004) elaborated on the expectation-based processing (prediction), which is fundamental to SI process. His model deals with redundancy of natural languages emphasizing the distinction between message elements that are new (rhematic), in contrast to those already known

(thematic), stating that the interpreter focuses on components that carry new information. A lot of information is processed by organizing available knowledge in a mechanism of probability prediction, which operates concurrently on different levels of processing (levels of textual and situational context: syllable, word, phrase, utterance). Anticipation of sound patterns, grammatical structures, semantic structures and message sense is an essential mechanism underlying the comprehension process. His model is compatible with *théorie du sens* because of its focus on message sense construed with the help of knowledge-based expectation patterns, and with Moser Mercer's models, since it incorporates insights on knowledge structures from cognitive science.

Setton (1999) proposed a processing model which was largely compatible with both connectionist rule-based computational approaches, but he essentially focuses on the level of intermediate cognitive representation of meaning. He made a cognitive-pragmatic analysis of SI, in which he addresses all relevant aspects of comprehension, memory and production in SI.

5. METHODOLOGICAL APPROACH

In forming ideas about an object of a study, it is essential to gain detailed knowledge about it, which implies the use of empirical data. Methodology refers to the body of methods and procedures employed in a particular branch of study. Theoretical perspectives, as well as conceptual and methodological choices have to be made explicit. Engaging in scientific research requires adherence to the rules and standards established for a particular scientific community. There are different ways of doing science – across disciplines and within a given field of study and the researchers are therefore faced with some fundamental choices regarding their methodological approach.

Research is in principle carried out in order to explore, describe or explain, leaving aside personal motives or interests of a researcher. Depending on a given purpose and object of study, a researcher chooses an overall methodological strategy for dealing with empirical data. These strategies may be classified in numerous ways, but in interpreting studies there are mostly two approaches- observational and experimental, used mostly by Gile (1995). Observational research studies a phenomenon as it occurs, naturally, whereas experimental research makes a phenomenon occur precisely for the purpose of studying it. There is also a survey approach, which collects data by eliciting them from informants, and is prominent in applied social research.

The field of interpreting studies is considered to have considerable variety of approach as well as wide scope for methodological development. In research of interpreting all three of the basic strategies, fieldwork, survey and experiment have been adopted. Also, a great attention has been given to hypothesis testing in controlled experiments, in line with the cognitive-processing meme and the experimental research tradition of cognitive psychology.

5.1 Paradigms

The notion of paradigm in interpreting studies is used to determine different research models in interpreting studies community and examine their status and mutual relations. Thomas Kuhn (Pöchhacker 2004: 67) was the first one who analyzed scientific disciplines and change processes in terms of paradigms and paradigm shifts. According to Kuhn (Pöchhacker 2004), scientific thought and research are shaped by paradigms, which are made of the basic assumptions, models, values and standard methods shared by all members of particular scientific community. Due to scientific progress, there are always new conceptual and methodological approaches, which results in paradigm shifts. An old one is substituted by a new one. As for the interpreting studies, because of their multi-dimensional context they can be viewed from different perspectives.

It is obvious that interpreting research does not have a unifying paradigm, there are several conceptually and methodologically distinct research traditions, but the main paradigms are interrelated and complement each other, rather than compete with each other. The various paradigms and interrelations which will be described in this chapter could be viewed as a cluster situated between the field of professional practice and training on the one hand, and the cognitive, linguistic, and social sciences on the other. This cluster reflects a high degree of diversity and overall coherence between the various paradigms.

5.1.1   Théorie du sens (IT-paradigm)

The initial paradigm of interpreting studies was formed by Danica Seleskovitch (Pöchhacker 2004) at ESIT in Paris. After she established doctoral studies program in traductologie at Sorbonne Nouvelle in 1974, she supplied her interpretive theory of Translation, also known as *théorie du sens,* as the theoretical core of the research model at ESIT.

The paradigm of the so called Paris school may also be referred to as the IT paradigm, since it was built around the interpretive theory of translation (IT). The core of this research was the

meme of making sense, which Seleskovitch formulated in a triangular model, and which highlighted the conceptual result of the interpreter's comprehension process, as the crucial stage in the translation process. She first applied this approach to the study of note-taking in consecutive interpreting, and then her disciple and colleague, Marianne Lederer (1978), applied it to simultaneous interpreting. The ESIT research model confirmed the view of interpreting as a knowledge-based process of making sense rather than dealing with linguistic aspects of languages. They argued that interpreting was *not* translating words, *not* verbal transfer ('transcoding'); interpreting research was not concerned with languages as a system (*langue*, in Saussure's terms) or language-pair-specific differences; and it was *not* founded on linguistics, *nor* an object of experimental psychology or psycholinguistics.

The IT paradigm did not regard scientific experimentation as a necessary or valid approach to inquiry into interpreting. It was stressed that professionals had an empirical knowledge derived from successful practice and that the latter was best studied by observation and reflection with the aid of recordings and transcriptions. This paradigm focused on the ideal process, on interpreting at its best. On the basis of well chosen authentic examples, it illustrates how and why the conference interpreters were able to perform a highly professional communication service. This paradigm strongly appealed the discipline of conference interpreting since it addressed issues of professional practice and training, and it also provided prescriptive answers, even without resource to empirical studies. It determined the problems considered important, the types of questions asked and the methods used for answering them. This paradigm was the first effort to raise the study of interpreting to scientific status in academia. (Pöchhacker, 2004: 68; Baker 1998: 112)

5.1.2 Shift in paradigms

At the Venice Symposium several research topics were proposed, concerning measurement of bilingualism and linguistic aptitudes, nonvocal communication and computer instantiated translation. Also, the issue of the role of experiments in research on interpreting was raised.

The first experimental studies on interpreting made by psycholinguists and psychologists in the 1960s imprinted the field with regard to methodology. To psychologists, simultaneous interpreting was interesting because it was an experimental task for the study of language processing in general. Gerver (1976) was aware of complex issues of experimental design which have plagued many experimental studies on interpreting, which are

Defining and isolating both the independent and dependent variables, as well as being able to find experimental designs capable of handling the multiplicity of factors involved and the relatively small numbers of sufficiently skilled interpreters available at any one time in any one place with a particular combination of languages. (Gerver 1976:167)

Barik (Pöchhacker 2004: 70), on the other hand, was aware that text types and delivery modes are significant input variables, so he chose his experimental input material accordingly – he had spontaneous, semi-prepared and prepared speeches, and one reading of a printed article.

Seleskovitch (1975), in her study on note-taking, asserted that her greatest concern was to ensure that the experiment faithfully reflected reality wherever possible. But in her study she concluded that an experiment may alter the phenomenon it is designed to reproduce under controlled conditions – in a laboratory setting even some of her professional subjects adopted an interpreting style different from their everyday practice. This is the main reason why Paris school was sceptical about the experimental research. Lederer (Pöchhacker 2004: 71) even denies the need for laboratory experiments:

Interpreting is a human performance in which cognitive activity is first and foremost; it therefore leads us into the field of psychology with no need to resort to special experiments; in this field the connection between thinking and speaking can be observed as it materializes with each segment of speech.

In the course of the 1980s several conference interpreters, including Gile, Mackintosh, Moser-Mercer and Stenzl (Pöchhacker 2004: 71) expressed the need to move beyond the notions established by the Paris School, and to take a more descriptive, empirical approach on interpreting. They undermined the prescriptive idealization of the interpreting process imposed by Paris School. Stenzl made a lucid analysis of methodological issues in empirical research, which resulted in her often quoted conclusion:

The literature on simultaneous interpretation offers a limited range of experimental data and theoretical approaches, but practically no systematic observations and descriptions of interpretation in practice … It is fascinating to speculate about the mental processes involved in interpretation, but speculation can do no more than raise questions. If we want answers to those questions they will have to be based on facts rather than mere assumptions.

(Stenzl 1983, qtd. in Pöchhacker 2004: 72)

Gile (1990) seconded Stenzl's appeal for systematic descriptive studies in his disputation on speculative theorizing *vs.* empirical research, directed against Seleskovitch and the IT paradigm, calling it unscientific. He also observed the methodological pitfalls of experimental studies and recommended observational research. Gile saw the progress in conference interpreting research by division of tasks between the interpreters and specialists in cognitive sciences, stating that "the best results require the contribution of experts in scientific disciplines such as cognitive psychology, psycholinguistics and applied linguistics." (Gile 1994: 156).

Barbara Moser-Mercer (1994) also seconded Gile's negative attitude towards the IT paradigm, stating that the conference interpreting research community is divided into two incompatible groups:

> The first group prefers explorations which require precision of logical processes, and where members are interested in the natural sciences and quantification; the second group prefers explorations which involve the intellect in a less logically rigorous manner, where members are interested more in a liberal arts approach and general theorizing.
>
> (Moser-Mercer 1994: 17)

Her account is based on the Kuhnian notion of paradigm, which she uses in a broader sense of "the specific intellectual preference, rules and research approach of a particular scientific community (Moser-Mercer 1994:18).

All of the abovementioned researchers who challenged the IT paradigm are united in the aspiration to more demanding standards of scientific research and openness toward other theoretical and methodological approaches, and other disciplines, too. This new paradigm they created was focused on the interpreting process, but unlike the IT paradigm, it was guided by the view of interpreting as a complex cognitive information processing skill, and the best perspective to study it was the one of cognitive sciences.

5.1.3   CP- Paradigm

The CP paradigm is based on cognitive processing and it tries to explain the interplay of language and cognition. Gerver (1976) made this paradigm virtually open-ended, stating that linguistic, motivational, situational and other factors beyond the cognitive mechanics cannot be ignored. Gile's Effort models (1995), which reflect the long-standing psychological concern with the issue of

divided attention, constitute a key theoretical ingredient of the CP paradigm, similar to Seleskovitch's (Pöchhacker 2004, Baker 1998) triangular model in the IT paradigm.

Since research in the CP paradigm has been receptive towards methods and findings from the cognitive sciences, interpreting researchers have embraced the principle of interdisciplinarity. At Trieste Symposium, Franco Cervatin (Gran and Dodds 1989: 266) stated that research on interpreting must be controlled, since interpreters working scientifically within the field run the risk of deforming their theories through their daily practice. He also emphasized that real characteristics of interpreting research as a true science should be intuition and measurability, rather than personal experience. Here, it is emphasized that research should be conducted on interpreters, not by interpreters, and with help from other disciplines.

5.1.4 NL- Paradigm

Cervatin's proposition was vindicated by the neurolinguistic approach to interpreting research, spearheaded by neuropsychologists Franco Fabbro in cooperation with Laura Gran (1997). Their studies, which were based on neurolinguistic findings on the organization of language/languages in the brain and on intricate experimental designs involving tasks such as dichotic listening and verbal-manual interference, centered on the hypothesis that bilinguals in general, and interpreters in particular, exhibited a characteristic pattern of cerebral lateralization, that is, asymmetric distribution of linguistic functions in the brain. Based on this notion, Gran (1989) sought to apply the experimental findings for training purposes, and Valeria Darò (1989) extended the neuropsychological approach to a broader range of speech-related topics.

Within this area, interdisciplinary work was also pursued at the universities of Vienna and Turku. In association with neuropsychologists, Kurz used EEG mapping to visualize differential patterns of cerebral activation, whereas Jorma Tommola teamed up with neuroscientists using positron emission tomography (PET) to study 'the translating brain'. Tommola presented this 'neuro' approach as a research model in contrast to the cognitive-behavioral approach, here labeled as the CP paradigm. One could therefore speak of a neurophysiological/ neurolinguistic or NL paradigm that is closely linked to advanced neuroscientific imaging techniques. (Pöchhacker 2004: 75)

Although the increasing popularity of neuroscientific methodologies suggests considerable future potential for the NL paradigm of interpreting research, on the other hand it is highly

dependent on the sustained interest of neuroscientists in the study of interpreting. Taking into account its specific focus on the level of brain function and its considerable methodological challenges, it is highly unlikely that the NL paradigm will become a widely shared research approach in the near future. However, it has remained a significant feature of interpreting studies and is reflected in many of the key socio-academic initiatives in the field. Although numerous publications and symposiums reflect a substantial degree of interaction between interpreting community and other disciplines, Laura Gran comments that

> We interpreters have got in closer contact with psychologists, linguists, experts in communication etc. Much as we owe to these scholars however, we shall have to become more and more aware of the specificity of our discipline, identify our own problems, set our own goals and be able to use the tools we need to inquire into the various facets of the interpretation process. (Fabro and Gran 1997: 26)

She states that interpreting research is a paradigm of its own, a conceptual and methodological approach shared by the community of interpreting scholars at large, and a research policy determined by those with a professional background and academic responsibility in the field of interpreting.

Those focused on the mental process of interpreting use the CP paradigm, which can be seen either as a competitor of the original IT paradigm, or as a successor carrying on the former's work on a broader and more scientific basis. This view is illustrated by Setton (1999) and his cognitive-pragmatic analysis of SI. His interdisciplinary approach to corpus-based linguistic analysis can be said to reconcile the IT and CP paradigms. It offers a more sophisticated account of 'sense' in the light of modern research in cognitive science, and it builds context processing into the analysis of linguistic input.

5.1.5   TT- Paradigm

The paradigms described so far have did not account for a broad range of socio-communicative issues. During the 1980s, a new approach emerged from translation-theoretical frameworks to fix these issues by focusing on a more systematic analysis of the situational and socio-cultural context. Hans Vermeer (1989) formulated his skopos theory on the premise that the skopos (Greek for 'aim, 'function' or 'purpose') for which a target text was commissioned constitutes the controlling principle of translational activity, over and above the traditional criteria of source-target

correspondence such as equivalence, invariance, or fidelity. The skopos is essentially determined by the communicative needs and expectations of the target audience and its situational context and socio-cultural environment. This skopos-oriented, or functionalist approach is inspired by the memes of making sense as well as text production and mediation.

Kirchhoff (1976) also shared the idea of target orientation, acknowledging the need to adapt the source text to the communicative needs of receivers with a different social background. Stenzl (1983, qtd. in Pöchhacker 2004) also shared this notion, stating that widening of research framework was necessary, along with adaptation of a more functional approach which considers interpretation in the context of the entire communication process from speaker through the interpreter to the receiver.

Pöchhacker (1994) used the functionalist theory of translational action as a foundation for conceptual models and empirical analyses of interactional, situational and textual features of simultaneous conference interpreting. But on the whole, relatively little empirical research on interpreting has been carried out within the functionalist school of thought.

By the end of the 1980s, the target-oriented paradigm of Descriptive Translation Studies, centered on the notion of translational norms had become extended beyond its initial concern with literary translation. Schjoldager (1995, qtd. in Pöchhacker 2004) was the first who applied the translational norms to empirical research on interpreting. A principal implication of this target-text-oriented translation-theoretical approach, TT paradigm, is an analytical interest in the textual product, with regard to both its structural (intratextual) and its pragmatic dimensions. That means that the interpreter's output would not be viewed as a window on cognitive processes, but as a product and instrument in the macro-process of mediated communication. This paradigm included methodologies from areas of text linguistics and discourse studies.

The TT paradigm also focused on was the way the communicating parties relate to each other and interact from their particular socio-cultural positions. This paradigm was not so strongly linked to the conference interpreting professions as the IT and the CP paradigms; it was influenced by approaches to communication and culture in anthropology and sociology, which facilitated its extension to the study of liaison interpreting in various cross-cultural settings. Although the work in this direction remained largely at a conceptual and didactic level, it provided for an interface between the functionalist paradigm and the interactionist approaches, which were to underpin the emergence of a new paradigm of interpreting research in the 1990s.

6. INTERDISCIPLINARY APPROACH

Being a rather young discipline, the field of studies on interpreting has taken into account conceptual and methodological approaches of other, more established disciplines. Most people tend to believe that interpreting has borrowed approaches and methods from translation, but that is not the case, since translation is limited to a written medium. Translation and interpreting studies do share the same theoretical foundations, epistemology and methodology, to be exact, but the research on interpreting has been shaped by approaches from other, non-similar disciplines, such as psychology, linguistics, sociology, etc. All of the disciplinary perspectives mentioned, from all the domains of psychology to the specialized frameworks for the study of language use in social interaction, have contributed to research on the phenomenon of interpreting.

The need for an interdisciplinary approach to research of SI lies in its distinct features. Simultaneous interpreting is done in a soundproof booth, the interpreters receive a message through headphones only once, and transfer it into a TL immediately. They depend on the speaker's speed of delivery and have to respect strict temporal constraints. They have a limited processing capacity. These features define the specificity of SI as a type of interlingual communicative activity. It involves pairs of texts whose linguistic phenomena and regularities are relevant, but one must go beyond the purely linguistic framework and refer to other disciplines and research in speech and language performance. Psycholinguistics has the right scope to handle SI research, since it studies language both as a system and as a capacity. Communication theory is also important, since SI is a form of verbal communication.

6.1 Socio-cultural approach

Sociolinguistic approaches could be seen as overlapping with psycholinguistic ones, but can also be seen as distinct because of their focus on interactional and cultural dimensions. Interactional sociolinguistics combines anthropological, sociological and linguistic perspectives on linguistic, cultural and social level and it also shows how role relationships and expectations as well as social, cultural and other prior knowledge shape meanings in communication. The ethnography of communication and the field of intercultural communication also share these presumptions, that culture guides the way people think and interact. Such theoretical and methodological frameworks

are relevant to the mediation of communication across cultures. But as the conference interpreting became the mainstream in 1970s, approaches from cognitive science became more important than socio-cultural perspectives, and it remained so until the emergence of interpreting domain in non-conference settings. R.B.W. Anderson (1976) conducted a research on issues such as situational constellations and role conflict, as well as the power and relative status of participants regarding their social class, education and gender. Another significant scholar is Erwing Goffman, influenced by Wadensjö (1998), analyzed face-to-face interaction and participation in discourse. His work was very important for dialogue interpreting.

Apart from sociology, interpreting studies have also been viewed through the perspective of cultural studies, which investigated the power and the cultural status of interpreters throughout history.

6.2 Psycholinguistic approach

Psychology and its methodological and conceptual approaches have mostly influenced the study of (simultaneous) conference interpreting. Even in this discipline, major reorientations and paradigm shifts took place, the major one being the shift from the level of conditional reflexes to the level of cognitive workings in studying the verbal behaviour. The focus is also no longer on lexical and grammar processing skills, but on the study of strategic discourse processes. Concerning the research, it is no longer conducted through constructed laboratory tasks, but it studies real-world fields of expertise.

Concerning the studies of interpreting discipline, there is no single psychological approach, it is rather investigated through different interdisciplinary subfields of psychology, such as cognitive psychology, educational psychology, psycholinguistics and neuropsychology.

Interpreting involves the transfer of meaning from a discourse in one language to a discourse in another language, and this transfer constitutes a mental process which relies on the ability to process information. The psycholinguistic approach searches to establish how interpreters process information. With modern technology it has become possible for a researcher to make a dual-track audio recording of both the original SL speech and the interpreter's TL rendition, which can then be transcribed for analysis. The only downside of this method is that important features of natural speech are lost in this process, e.g. intonation, stress, rhythmic characteristics, which are all important for SI.

Pioneers of interpreting research were psychologists and psycholinguists, with greatest interest in the phenomenon of simultaneous reception and production, which was considered impossible for a long time. This attitude is reflected in a statement made by Soja Kotschkina at a Psychologists conference in 1964, which basically said that attention can not be divided and that simultaneous interpreting is not actually simultaneous, it would only be possible if the message was summarized and interpreters talked faster than speakers. The psychologists were interested in the field of SI because they were hoping to get general information about human attention, memory, linguistic and cognitive behaviour.

David Gerver (1975, 1976) was the leader of a psychological SI research. He concluded that psychologists had been giving too little attention to abilities of simultaneous interpreters, in spite of an extensive field for research (attention, memory, bilingualism, analysis and development of abilities crucial for interpreting).

Chernov, a chief interpreter for the UN, cooperated with psychologists and psycholinguists. He considered that the basis of psycholinguistic research was probability prediction. It was a basic mechanism that made the SI research possible.

As simultaneous interpreting involves transfer of a verbal message between two languages, linguistics can not be ignored in analysis. In the 1960's and 1970's several models of the translation process were developed within the framework of linguistic theories of translation. SI is a process whose several aspects are embodied in an observable product, a sequence of speech sounds unfolding over time. At the same time it is not observable, because it is also a mental product in sense of a verbal message perceived by the audience. Only the models which study translation as a process are appropriate for studying interpretation.

Linguistics is a logical source for interpreting studies. It is a complex, interdisciplinary field characterized by changes in the theoretical framework. In the 1960s, when the interpreting emerged as a popular field of scientific studies, the focus of linguists was on language as a system consisting of phonology, lexis and grammar. But in the following years the field of linguistics developed several subdomains and methodologies, such as contrastive linguistics, sociolinguistics, text linguistics, computational linguistics, corpus linguistics, all of which influenced the study of interpreting.

Particularly important was the convergence of linguistics and the psychology of language, interesting to both linguists and psychologists, but also to philosophers of language and researchers

in artificial intelligence, which resulted in an interdiscipline characterized as cognitive science. It influenced the research in the field of text linguistics. Since the scope of analysis was widened to 'language beyond the sentence', the 'text' was analyzed both structurally and pragmatically. The focus on discourse resulted in a wide framework of discourse studies, which was convenient to communication researchers in anthropology, linguistics, philosophy, psychology and sociology. (Pöchhacker, 2004, Chernov, 2004)

Theoretical foundations of psycholinguistic research lie in the activity theory developed by Russian psychologists and psycholinguists Vygotsky, Lecnt'ev, Luria, Zhinkin, Sokolov, and Zymnyaya (Chernov 2004). This framework provides a basis for general research approach and specific methods. This basis lies in the principles of the unity of mental processes and human actions and the unity of language and speech. The same principles also underlie the isolation of semantic and sense structure as unifying the two aspects of human perception. These two aspects are the analysis of the semantic structure of a discourse (in its unity of redundant theme and informative rheme), and the model of simultaneous interpretation as a verbal activity (which is both integrated and complex, comprising speech recognition and production).

Another methodological principle is the principle of communicative significance – SI can be seen as a communicative verbal activity making bilateral communication possible, thus licencing the concept of analysable 'SI communicative situation'.

The third methodological basis of a psycholinguistic approach to SI is the principle of reciprocal activity of the brain in the process of sense perception, closely linked with the principle of anticipatory reflection of the outside world by a living organism.

6.2.1   Temporal Aspects

The research from a psychological point of view mostly focuses on the following temporal aspects:

a.   Segmentation

Eva Paneth did a research on phase-shifts of TL and SL segments in her MA thesis in 1957, and her work happened to be the foundation of future research of this aspect. She determined that the interpreters do not transmit what they hear, but what they heard, using speaker's pauses as much as possible, increasing their speech tempo if necessary. She also found that it is not their intention to avoid simultaneous listening and speaking. (Chernov 2004)

As for the psycholinguists, Frieda Goldman-Eisler (1972), who was interested in cognitive processes in SI, conducted an experimental research in which she dealt with segmentation and temporal aspects, such as speech tempo and pauses. Her goal was to get information about speech processing by analyzing simultaneous interpretations. The emphasis was on aspects such as simultaneity, pauses, segmentation of the input, and structural and semantic criteria was used for determination of authenticity of the output. In this experiment six professional interpreters, with different language combinations interpreted nine texts of different types and with different speech delivery tempo. Both the speeches and interpretations were recorded to enable a parallel reproduction. The questions of interest were the length and type of segments which interpreters listen to before they start interpreting, in other words, the ear-voice span (EVS), and how long it is. The second question was how the source text is segmented. Regarding the first question, they wanted to know how much information is necessary for an interpreter to start his/ her rendition, in other words, what the smallest unit necessary for interpreting is. Since the smallest EVS of an interpreter is one word, EVS could be measured according to the number of words (that is syntactic units consisting of NP and VP). The experiment showed that in 90-95% if the cases the EVS consists of at least one VP, and in only 7, 5% of the cases, it consisted of less than one syntactic unit. From these results, one can conclude that interpreters, before they start translating, need information about the sentence structure, not just lexical information. The experiment also showed that interpreters follow the speakers' rhythm and decide on the size of segments by themselves.

Lederer (Pöchhacker 2004) conducted a similar research by taping conferences. As a part of the ESIT group, she considers experimental research to be unnecessary, since cognitive aspects are visible in every speech segment. She accepts interpreting as a cognitive action whose research is contributed by findings from both psychology and psycholinguistics. Her research led her to a theory that semantic units have to be identified by interpreters themselves, in order to enable the transfer into another language. A transmission of words is not possible before the interpreter conveys the sense. She does not investigate the grammatical features of these units. She defines these units as syntheses, of particular words, stored in a short-term memory and some experiences and memories.

Lederer (Pöchhacker 2004) also observed that in case of a conference that lasted for a few days, in the beginning, as the interpreters are not so sure about the subject matter, they mostly concentrate on decoding and on linguistic transfer of the utterances in the SL. But as the conference

goes on, also grows their knowledge about the subject matter of the conference, which allows interpreters to summarize the speech in their own words.

Unlike Goldman-Eisler, Lederer conducted her experiments based on examples taken from a conference intepreters' natural environment. As Goldman-Eisler concentrates on segmentation and structure of segments, Lederer examines the segments according to their meaning and influence of prior knowledge to the choice of words and of interpreting strategy in a particular situation. (Chernov 2004)

b. Simultaneity and the use of pauses

In the course of the 1950's and 1960's, a general opinion was that only the automatic and always repeating actions could be done without full attention. Concerning the simultaneous speaking and listening of new input, it was thought that divided attention was limited. Ingrid Pinter considered this thesis in her dissertation and stated through appropriate exercises it was possible to advance the ability of simultaneous listening and speaking.

Barik, Gerver, Simnjaja and Chernov (Chernov, 2004) conducted the first studies on simultaneity after the development of the multitrack recording device. The results were rather astonishing: approximately 70% of interpreters' listening and speaking activities happened concurrently with the speech of the lecturer.

c. Speech delivery

At the end of the 1960's Gerver investigated the influence of speech delivery on the interpreter by counting words per minute. He recorded a speech delivered in different speed, with 95-164 words per minute. He took five simultaneous interpreters to deliver the speech from French into English. In the end he concluded that the higher speed of delivery has a negative impact on interpreters. The accuracy of interpretation was lower as the lecturer spoke faster. A simultaneous interpreter must not only understand the speech acoustically, but also comprehend it semantically. In his study he used the hypothesis that an interpreter tries to make the best use of the pauses made by the speaker, in order to lower the burden of concurrent speaking and listening. After the experiment, Gerver found that interpreters used 83% of the pauses longer than one second.

The study showed that for an experienced interpreter, simultaneous listening and speaking is not a major problem, but the problems occur because of the speed of delivery, accent of the speaker, the way they speak, weak knowledge about the subject matter or terminology. (Chernov 2004)

6.2.2 Theoretical Premises about the Process of SI

Considering SI as a type of communicative verbal activity requires the introduction of a number of theoretical premises about SI process.

1. The assumption that SI proceeds at multiple, hierarchical levels underlies our analysis of redundancy and of the mechanisms of probability anticipation at verbal, meaning and sense levels in SL discourse perception and comprehension, and of anticipatory synthesis of the TL discourse.

2. The principle of dynamic development arises from the fact that since the message is delivered only once and that its perception and representation are concurrent indicates that the SI process is in continuous development.

3. The principle of cumulative sense perception arises from the need to comprehend and grasp the meaning of a complete discourse and to keep in mind the complete context of the foregrounded part of the discourse, the ongoing utterance and its anticipated message. It also underlies the analysis of the SI communicative situation.

4. The interpreter's mental actions and operations are discrete in nature, since they represent operations over certain units of meaning and sense.

(Chernov, 2004)

6.2.3 The object of Psycholinguistic Research

In speech psychology listening and speaking are two separate activities, which is not the case with SI, where those two are one single but complex activity. If we assume that the object of the interpreter's activity is the sense of the SL discourse, the objective of research would be the sense of the TL discourse.

SI is a structured activity which consists of several stages, actions and operations, from listening and perception to TL discourse generation. The unity and independence of SI activity can be both seen in its internal structure and its surface verbal performance.

The unity of SI activity is determined by the stage of spatial synthesis and by internal TL utterance program as borrowed from the SL speaker. These stages are subject to strict limits on the available processing time and amount of processable information, which often results in being incomplete or 'chunky'. In SI we may assume that there is concurrent listening and speaking performed under conditions of strong internal and external noise, and even 'defective' listening and speaking.

The unity of SI activity is determined by the inseparable linkage of listening and speaking, since in the absence of one of these two aspects SI ceases to exist and the act of communication is interrupted. Listening and speaking in SI are 2 opposing and 'mutually harassing' sides of a single whole, since neither of the two can be extracted from SI without its disintegration.

SI is a complex activity, depending on how many listeners there are and if the receiver and the addressee are the same person. SI unit must be linked to a unit of sense and to the level at which the SI process is being performed at a given moment. It depends on the performer of the activity (the interpreter) and on specific conditions and determinants of that performance. SI units must vary with different interpreters and for the same interpreter at different times during interpretation.

Only discourse can be the object of SI, is usually a speech contribution to a debate at an international conference, it is rarely a single utterance, but rather a whole sequence of utterances which form a single discourse by the laws of coherence and cohesion and by its topical unity.

Since SI is performed under extreme conditions, with severe constraints both on time available for processing and on the amount of information processed, the object and product of SI are to be found in its minimal competent, i.e. its semantic structure (not in terms of the whole communication as such, as is the case with written translation).

SI is performed in many forms and variations, at various speeds, in differing regimes (during pauses in original speech) and in varying language combinations. It could be translated either into or from native (A) or acquired (B) language, and from a passively known (C) language. Experiments are carried out with subjects at different level of expertise (professionals, 'amateur' bilinguals, students of SI, language students).

6.3 Cognitive-pragmatic approach

Setton (1999) tried to explain SI as a phenomenon of cognitive performance, relying on the findings of communicative linguistics and cognitive psychology. He believed that the study of SI can make a unique contribution to the study of language in use. He decided for a hybrid approach, because linguistics studies oral and written monologue or dialogue, testing sentences against native competence to discover language-internal use. Psycholinguistics makes experiments which are usually not done in neutral conditions, and are often driven by subjects' motivations. Before Setton proposed his model, theories had not managed to reconcile theories about language and theories about cognitive architecture. The models that had been proposed were mainly based on information-processing (IP) theory, but offered little or no corpus analysis in support. The IP theory divides SI act into distinct component processes, adopting models of coordination from cognitive psychology, but making simplifying assumptions about language in communication. The interpretive theory (IT), a more unified and holistic account, places greater emphasis on the role of context in communication, and on the speaker's intent over linguistic structure, but it glosses over possible limitations of the human language processing system. The IT account has been defended in detailed corpus analysis, but with little reference to contemporary pragmatic and cognitive theory. There is little or no dialogue between these two schools, which are sharply divided over training and theoretical issues, such as the importance of language-specific factors. Neither paradigm has ventured to explore the intermediate representations or mental medium of translation.

Because of its several distinct features, SI is a unique form of speech behaviour:

a) use of speech systems
   - overlapping (simultaneous) listening and speaking

b) goal orientation
   - comprehension is oriented to production, instead of discoursive exchange, as it is the case in everyday communication, or as it is the case in psycholinguistic experiments, to recalling words or competing with other tasks

c) external pacing
   - unlike in written translation, in SI the communication cycle (stimulus-processing-response) is externally paced, but relative immediacy of production which follows comprehension makes SI a potentially valuable source for understanding the course of comprehension and formulation

d) external sourcing

- the interpreter formulates and articulates someone else's thoughts, assumptions, reasoning, which makes SI data a valuable source of inference of how we derive other people's intentions from their speech

e) input and output in different languages

- translation is a mirror process of sovereign conversation, using the same code – it maintains the propositional content and intentionality (the message) while changing the code

- the language code is more difficult to master for the researcher than the alternating motivations and intentions of conversation, which must be inferred.

When doing a research on SI, besides these features, one must also bear in mind the interpreter's competence (resources and limitations), and the constraints and flexibilities inherent in languages, and their use in particular communicative communications.

All of these features and conditions search for a cognitive model which can accommodate a goal-oriented configuration of basic resources such as memory and peripheral processes. At the same time, to take linguistic phenomena into account, there is a need for a pragmatic theory. With his new cognitive model, Setton (1999) will try to show that the improvements and changes observed with training and experience are better explained by a development in the skilled use of pragmatic and knowledge resources, than by the improved coordination of limited processing capacity understood as the temporary storage, transformation and retrieval of linguistic forms. He also tried to reconcile the dimensions of cognitive coordination and the transmission of meaning through a better understanding of intermediate representation.

6.3.1 Theoretical framework

Among other things, Setton's model searches to define how language interacts with cognition, drawing on several theories.

Cognitive pragmatics lies at the boundary between two of the source disciplines of modern T & I theory: linguistics and cognitive psychology. It aims to develop an account of human language exchange which models cognition in communication. Translation studies have long been referred to contrastive linguistics or philology, but this changed with an emphasis on communicative, situated nature of text and speech, which demands that translation process and products be studied in

contexts (the time, society, purpose of communication). In addition to that, interest in cognitive processes grows, esp. in cognitive psychology, neuroscience and philosophy of language.

This approach tries to balance different dimensions of translation – in addition to information-processing models, it applies linguistics with new insights from pragmatics. Pragmatics is a branch of linguistics which addresses its applied, communicative aspects, such as the role of context and inference, the relationship between the explicit and the implicit in linguistic communication, and dimensions of meaning related to extralinguistic factors such as time, place and situation, and the knowledge available to the participants.

Languages encode different aspects of meaning and leave different parts to inference from extralinguistic sources. Interpreters must encode meanings in the TL, which are either logically implicit, or need to be inferred from other knowledge. The effectiveness of communication depends on mutual knowledge or assumptions shared by speakers and listeners. Interpreters are usually external to the proceedings, and speakers usually do not take their knowledge into account. Interpreters share neither the background nor motivations with speakers and addressees, so they rely more strongly on inference from textual, situational and other sources. Setton (1999) made a hypothesis that they construct a task-oriented mental model for that purpose.

Pragmatics is based on an observation that the meaning encoded in language forms underdetermines the meaning intended by speakers in producing utterance and derived by hearers in interpreting them. Meaning is derived both from what is encoded in words and grammar, and from the inferences drawn in processing these semantic representations in contexts. Pragmatics covers a wide range of linguistic expressions which index or evoke contexts external to the sentence, or types of context which may play a role in understanding, such as a shared culture or environment. (Setton, 1999: 5)

The model Setton proposed is based on several theoretical frameworks: the Relevance theory, cognitive or frame semantics, mental models theory, and speech-act theory.

Relevance theory (RT) as a central goal of pragmatics considers contexts for interpreting utterances, and suggests that inference in utterance interpretation can be modelled in a way that inference in independent thinking cannot. It is so because speakers actively guide hearers to intended meanings, or contexts for deriving them, and because the immediacy of speech exchange places utterances in accessible contexts. Relevance theory links cognition and communication, focusing on conversation, which is why broader context is necessary, since SI concerns longer texts, where the interpreter is

processing meaning not as an addressee, but for addressees. It deals with meaning derivation in speech exchange, based on Grice's inferential model and primary decoding of language forms, from which meaning is elaborated by inference in particular contexts.

Cognitive semantics links lexical meanings in comprehension to cognition, instead to a language-internal code. It provides an account of the organization of concepts in long-term memory and the mechanisms by which conceptual structures are recovered or evoked by items in texts. It provides an account of how conceptual structures may be organised in long-term memory and retrieved into immediate consciousness to support interpretation. The value of frame theory in the study of SI lies mainly in explanation of the interpreter's use of paraphrases reflecting extralinguistic knowledge. In cognitive semantics, context takes the form of structured concepts in the hearer's memory, which are evoked by items in the text.

RT and cognitive semantics describe the principles and mechanisms by which relevant contexts are marshalled for comprehension. But for a comprehensive account of intermediate representation in an intensive communication task like SI we also need an account of how they are economically maintained and organised. Conference interpreters have to store large amounts of information into their awareness for periods of a few days, much of which is new to them and will be forgotten after the event. Setton suggests that for a successful SI a mental model of the situation and the discourse must be created and updated in the interpreter's working memory.

Mental models theory deals with the way in which text-based meaning and relevant contexts are integrated and organised in working memory. It provides a basis for modelling the economy and efficiency of complex mental representation under pressure. The starting assumption in this case is that thinking is a manipulation of internal representations of the world, and that humans, as processors of information make use of three distinct processes in reasoning: a translation of some external process into an internal representation in terms of words, numbers or symbols; the derivation of other symbols into actions, or at least a recognition of the correspondence between these symbols and external events. The final and most elaborated cognitive representation is a mental model, a structural analogue of a real or imaginary state of affairs which is constructed in working memory from propositional representations of discourse and other tokens and concepts. People build interpretations beyond linguistically given meaning, citing as evidence the fact that people do not normally remember the surface form of sentences. These propositional representations of input discourse are mapped into the model by a mental language using logical primitives for

identity, set-membership, etc. models are supposed to be remembered easier than propositions, because they are more detailed and structured, and require more processing, but they encode little or nothing of the linguistic form of the sentences on which they are based. The main contribution of the mental models theory to Setton's research is its account of the economy of intermediate representation. Each communicative event, each speaker and discourse, is new to the interpreter, but must be rendered coherently. The efficiency of representation is critical to speed and adaptability: the single revisable model plausibly explains the ability of interpreters to maintain coherence through the discourse. It also suggests a different basis for assessing effort and coordination, at least as far as inferential load is concerned: the relationship between surface form and effort, which is assumed in IP models to be direct, may instead vary depending on whether the representational source for formulation is the more SL-oriented 'digital' proposition, or the more efficient, 'analog' and less language-specific mental model. (Setton 1999:17)

Speech act theory is relevant because the interpreter must appropriate and recreate the extended speech-act of another individual. An adequate psychological model must explain how they retrieve and recreate the speaker's intentionality through indications of illocution and propositional attitudes. Communicative intent is not an abstract quality conveyed by words of a sincere and motivated translation. It involves manifestations and representations which enter directly into the translation process and can be traced in the language forms themselves. Intentionalities have more persistent scope through the discourse than sentence-level features, and once identified, can be appropriated and used by the interpreters in their own production.

In addition to dealing briefly with large amounts of new information, conference interpreters also briefly represent many different speakers. Illocutionary force is important in SI in capturing a vital dimension of discourse which eludes description in terms of surface features: communicative intent. Searle defines speech acts as the expression of intentional states, which embed or modify propositional content. In speech-act theory, the informative function of language (stating and describing) has no special status among other types of illocutionary acts.

One must distinguish between informative, conative (persuasive), and social (including performative and ritual) functions of language. Speech act theory offers the possibility of distinguishing qualifications of propositional content from those of the illocutionary act, a necessary but subtle distinction in analysing discourse, since these different functions may be performed by the same surface item (e.g. a connective) in different contexts.

Cognitive pragmatics and cognitive semantics are the accounts of language in use which offer the most promising basis for a cognitive-linguistic model of the kind needed for SI. But to model translation, one needs to go further. The conceptual processing and non-linguistic input which seem to be necessary for almost any form of translation suggest that we might ultimately need to project an intermediate conceptual-intentional language – which may correspond to a psychological reality, as suggested by philosophers of language, particularly when confronted with the many 'holistic' but intuitively effective renditions in translation which show no clear equivalence between words and language structure.

These theories taken together suggest a wide range of determinants of meaning in discourse beyond what is delivered by grammar and lexical rules. In studying speech communication, one has to survey all possible sources of comprehension, but in simultaneous interpretation the order in which meanings become available is significant. Pragmatic, syntactic and semantic components of meaning may become available in any order, and some may be able to combine in the absence of others to produce a truthful formulation based on explicit encoded meaning or 'safe' implicature. The order in which information for meaning assembly comes in may be to some extent language-specific, to some extent specific to a discourse type or mode, and to some extent specific to individual speakers.

The processing model proposed here for the SI task strives for a plausible balance between interactivity and modularity. Simultaneous interpreters must sometimes formulate on the basis of partial meanings, either because the utterance is still incomplete or because, not being addressed, they receive less than full meaning available for the addressees. It is clear that the translation of fragments is possible, but it seems that such fragmentary partial meaning is heterogeneous in nature: it may consist of some clue to attitude without a complete proposition, or vice versa, to an envisionment of participants without an event, state or action. In describing SI it is inadvisable to start with assumptions about levels of processing, since the partial assemblies which are used for formulation are not likely to correspond to a level of meaning delivered by a given component in the brain.

7. CONCLUSION

This paper summarizes the most important theories about the concept of simultaneous interpreting. It shows how over the course of years, many researchers have taken interest in this phenomenon, trying to explain it. The problem lies in the fact that simultaneous interpreting is a complex process which can not be fully explained.

Through history, the role of the interpreter has constantly been changing. Initially, interpreters were just invisible language transmitters, but nowadays they are considered to be cultural mediators and participants in conversation. It is their job to enable communication and ensure understanding.

Besides the role of the interpreter, it is also interesting to follow the change in the research on interpreting – from the beginnings when it was seen simply as a verbal transfer, which faded over the course of years, especially when Seleskovitch emphasized the importance of understanding. She proposed a view of interpreting as knowledge- based process of making sense. The downside of her view is that it focused on the ideal process, and it did not consider scientific experiments as necessary, and there was a need for a more scientific approach. Since interpreters had little experience in actual research and critical thinking, they had to cooperate with scholars from other disciplines. These scholars mostly concentrated on information-processing aspect of interpreting, not on the communicative event and its participants. Psycholinguistics, for example, studied lexical or structural features and mental processes, neglecting the act itself.

Because of its complexity, simultaneous interpreting demands an interdisciplinary, or as Setton calls it, a hybrid approach of best available techniques. A single approach can not possibly explain all of its aspects. Setton combined linguistics and cognitive psychology, in order to reconcile the previous theories and approaches. In my personal opinion, this approach is the best because it is open towards other theoretical and methodological approaches and disciplines. It focuses on interpreting process from two points of view, seeing it as a complex cognitive information processing skill on the one hand, and investigating how the interpreter processes information on the other hand.

There is no doubt that the research in the field of interpreting studies will continue to develop, and it will be interesting to follow what new conclusions will be drawn from the future studies.

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