Cognitive and Psychological Aspects of Interpreting

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Monograph edited by

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Preface

Interpreting — as a spoken transfer of meaning in one language (i.e. the source language) into the equivalent meaning in another language (i.e. the target language) — has been practised since time immemorial as people speaking different languages have always needed to communicate for various purposes. In the earliest times, when writing systems had yet to be devised, speaking was the primary form of communication and hence to bridge the gap in a shared vehicle of communication, people of different linguistic backgrounds engaging in international contacts oftentimes had to rely on interpreters who knew those people's languages and could render the meaning originally expressed in the source language in the target language. Many of them were ad hoc interpreters, i.e. non-professionals who spoke two languages well enough to provide the platform for making this bilingual communication successful. However, due to the immediacy and temporariness of interpreting, there were rather few recordings of this activity. This of course manifested itself in rather scanty material for scholarly studies. What is more, the first professional interpreting schools were established not a long time ago and therefore it is only recently that interpreting (and its various aspects) has started to be the object of scholarly analysis as a complex linguistic, mental, cultural and interactional activity. With the exception of several aspects of interpreting which have been studied more extensively by interpreting scholars (e.g. interpreting training, interpreter profile, interpreting professionalisation etc.), it seems that the psycholinguistic, psychological and cognitive nature of interpreting has not been given due attention so far. This has created a niche in interpreting studies which this volume seeks to partially fill.

This volume, which is thought of as an attempt at shedding some more light on different psychological and cognitive aspects of interpreting, continues the publishing activity of the Department of Translation Studies functioning within the structure of the Institute of English Studies of the University of Wrocław, Poland, since 2012. Like in many other academic centres in Poland, translation and interpreting scholars were previously scattered across other units of the Institute of English Studies (in particular in the former Department of English Linguistics, now the Department of English and Comparative Linguistics, and in the former Department of Applied Linguistics, now the Department of Second Language Learning and Teaching). It is the creation of a new unit — the Department of

Translation Studies — that gave a boost to more and more extensive studies of various aspects of translation and interpreting pursued by the faculty members of the Institute of English Studies of the University of Wrocław.

Being a member of the open and welcoming community of translation and interpreting academics, the editor of the volume invited several scholars working in other institutions in Poland and abroad to contribute the outcomes of their scholarly work within the field of interpreting studies. Hence, the editor wishes to thank all of them for their participation in the project, for writing the chapters of this book which will hopefully make this volume an important input to the psychological and cognitive studies on interpreting. The editor is also very indebted to professor Agnieszka Stępkowska (University of Social Sciences in Warsaw, Poland) for her thorough, insightful, thought-provoking and inspiring review of the chapters included in the present volume.

The monograph contains eight chapters, grouped under three headings: Cognitive aspects (the first four chapters), Psychological aspects (the next two chapters) and Interpreting training (the last two chapters). The first chapter, authored by Julian Maliszewski (Częstochowa University of Technology, Poland), discusses the aspects of cognition and cognitive phase of the preparation for interpreting. Thus the author emphasises the role of developing cognitive skills in interpreting training, illustrating this by referring to court/legal interpreting. In the second chapter, thanks to the adoption of the legal and communicative perspectives, Ilona Gwóźdź-Szewczenko (University of Wrocław, Poland) analyses the cognitive aspects of interpreting practised in criminal proceedings and challenges the idealised image of an omniscient, impartial, emotionally distanced and invisible interpreter. The third chapter — authored by Iwona Sikora (Częstochowa University of Technology, Poland) — provides insightful observations concerning sight translation (and its different theoretical, practical and cognitive aspects) performed in notarial offices. The author draws several interesting analogies between cognitive and psychological processes occurring in sight translation and those taking place in simultaneous interpreting and written translation. The next chapter co-authored by Alina Bryll (University of Applied Sciences in Nysa, Poland) and Marta Wiśniowska (Częstochowa University of Technology, Poland) explores some cognitive processes occurring in the course of interpreting from L2 (language B) into L3 (language C). The authors discuss the role of the mother tongue (L1, language A) in the transfer of linguistic knowledge between two foreign languages. Ewa Kościałkowska-Okońska (Nicolaus Copernicus University in Toruń, Poland) in her chapter studies creativity as an important feature of interpreting. She argues that creativity greatly facilitates the process of interpreting as this property allows the interpreter to receive the input and produce the output with greater ease and less stress. The next chapter, written by Małgorzata Kamińska (University of Applied Sciences in Nysa, Poland), addresses the issue of stress experienced by interpreters during the activity of interpreting. Apart from providing the theor-

etical background of the psychological studies on stress, the author offers several tips about how to overcome stress acting in interpreting as an adverse affective factor. In the next chapter, Katarzyna Stachowiak (Adam Mickiewicz University in Poznań/University of Warsaw, Poland) describes an interesting study on multitasking carried out in three groups of subjects with various commands of English. The outcomes of the study bring new light on how the experiment participants handle multitasking and working memory when confronted with multimodal stimuli. The final chapter of this volume, authored by Pavol Šveda (Comenius University in Bratislava, Slovakia), examines the role of visual aids in simultaneous interpreting training. The author presents the study and draws interesting conclusions corroborating the hypothesis that when in contact with a visual presentation, interpreting trainees are likely to generate qualitatively better output.

As can be seen from the above brief summary of the contents of the volume, the authors of the chapters touch upon a variety of psychological and cognitive aspects related to interpreting practice and interpreting training. It is hoped this volume will — at least partially — fill the gap in psychological and cognitive studies on interpreting and, perhaps, stimulate more scholarly discussion and debate on the issues presented herein.

Marcin Walczyński
Editor

Cognitive aspects

Julian Maliszewski

Częstochowa University of Technology, Poland

Verbum et Cognitio — cognitive pragmatics in legal translation and interpreting

Abstract: The article focuses on basic aspects of cognition in legal interpreting. The cognitive phase within the preparation of an interpreting procedure is one of the most important and complex, though unavoidable, operations connected with accuracy in interpreting. The efficient and competent interpreting depends not only on the linguistic skills in both directions — a perceptive and productive replay with automatic code-switching (from the source language into the target language), but also on substantial knowledge in a certain interpreting domain and broad intellectual facilities. The "interpreting-technology" assumes a few basic operations such as meaning and sense detection, proper use of the acquired cognitive resources and selection ability used in the analysis of the special lexicon.

Key words: specialised interpreting, translation, eidetic memory, cognition, denotative and connotative memory.

1. Prolegomena

Specialised interpreting has been treated as a peculiar part of more general translation processes. The newest trends show that interpreting requires extraordinary abilities and skills for the preparation for and for performing this complex linguistic transfer from the source language into the target one. In the numerous theoretical papers dealing with the problems of the interpreting of specialised texts, little attention is dedicated to the issue of an interpreting strategy. The already existing compilations do not provide any comprehensive clue to how to translate specialised texts correctly.

Researching the solution which would enable the achievement of such an objective, in many theoretical studies on the process of interpreting, the investigator is particularly led to a crucial cognitive approach. Iwona Legutko-Marszałek claims that:

Der Prozess Übersetzens soll als eine kreative, strategische und wissensbasierte Leistung einer Person gesehen werden, die auf der Grundlage eines zu übersetzenden Textes in unterschiedlichen Situationen und Handlungszusammenhängen und für unterschiedliche kommunikative Zwecke inhaltliche Äquivalenttexte in einer anderen Sprache erstellt. (Legutko-Marszałek 2011: 63)

The above view expressed by this Polish researcher might be referred to interpreting. In particular, the issue of the extralinguistic knowledge, including the communication setting and the particular circumstances of the interpreting process, plays a key role in the interpreting procedure.

In the cognitive approach to interpreting, working out a practical paradigm of processing the source text seems to be the most significant issue. Such a practical paradigm enables interpreters to include both linguistic and substantive aspects of a specialised text. In one of her recent papers, Hanna Risku (2014: 334) claims that:

The central goal of cognitive science approach to translation studies is to model the cognitive process in translation actions. The ultimate aim of such modelling enterprises is to establish a deeper understanding of how translations are produced, thus identifying the main factors on which the translation process depends and how these factors influence each other.

One of the best solutions in the cognitive approach to translation and interpreting is mastering the basic substantial and content-related (extralinguistic) knowledge of a particular science or professional domain. It is one of the key success factors in the interpreting process.

Radegundis Stolze, German researcher, when determining the requirement for mastering technical knowledge by translators and interpreters, uses the term "expert knowledge" regarded as the first step preceding their preparation for working with a specialised text:

Das Expertwissen des Translators bezieht sich also im Unterschied zu dem des Fachmanns mit Fremdsprachenkenntnissen, auf die besonderen Techniken des fachsprachlichen Redens in unterschiedlichen Bereichen, die jenem nur für sein Fach intuitiv bekannt sind. Es umfasst vor allem das Wissen darum, wie fachliche Kommunikation sich in spezifischer Weise sprachlich darstellt und wie dies mit Fragen des Übersetzens zu verknüpfen sei. Der professionele Übersetzer hat mit unterschiedlichen Bereichen zu tun, und Translationskompetenz [and *per analogiam* ESP operational skills — J.M.] bedeutet unter anderem den kognitiven Zugang zu den verschiedensten Kommunikationsbereichen. (Stolze 2007: 8)

The cognitive aspect emphasised by Stolze is linked to the empirical and practical method, which favours mastering communication skills in translation and interpreting proceedings. Consequently, mastering communication skills brings the most expected result — the ability of professional thinking. That specific way of thinking is based on the ability to verify a specific structure of a specialist text, i.e. determining the text origin and purpose. In that matter, Stolze suggests the tetrapodic paradigm: who writes the text, when it is written, where it is written, and what is the purpose/goal of the text (Stolze 2007: 8–9). Stolze's tetrapody refers to the discourse disc worked out in 2002 by Danuta Kierzkowska (2002), Polish scholar, and the first two circles of the disc relate to the four major elements of the text origin specified by

(Kierzkowska 2002: 75). The above-mentioned paradigms do not include the crucial issue of language level and language register. Both concepts overlap not only in terms of language competences but also the substantial (extralinguistic and content-related) knowledge necessary to generate a specialised text. The acquisition of the knowledge is of the same importance as is the language acquisition.

Contemporary communication factors and determinants constitute increasingly complex challenges for specialised language interpreters and translators. To meet all the challenges, the legal translation and interpreting theorists search for new developments enabling them to master the process of producing specialised terminology as an outgoing basis for the complex process of translating or interpreting professional (including legal) texts. Scholars employ an interdisciplinary methodology to describe the processes accompanying linguistic and translation operations, mostly directing themselves towards communication psychology and psycholinguistics (Maliszewski 2008; Gross-Dinter 2005).

Hanna Risku claims that through the analysis of all cognitive aspects of specialised translation and interpreting the scientific investigation focuses on very specific aspects:

The research focuses on the interaction between translators and their environments and the resulting dependencies. In doing so, it addresses heterogeneous areas like cooperation with subject matter experts and colleagues, terminology management and contacts with customers. In essence, this perspective enlarges the object of process research, which can then be styled as extended translation, i.e., as a form of coupled system between human organisms and external entities. Thus, in addition to the experimental, quantitative line of empirical research, we will also need descriptions of translatorial cognition and action in its dynamic and social setting. (Risku 2014: 336)

The above statement proves that the cognitive approach to legal translation and interpreting implies the contribution of a variety of extra-linguistic factors.

In this paper we want to present an intrinsic report on the author's own study concerning the practical use of the cognitive aspect when working upon a specialised text. The study is based on the present paper author's translation and interpreting experience and expertise, its purpose is to enhance the preparation for the difficult process of interpreting.

2. Knowledge experience and cognitive-based legal interpreting

In the process of preparing for specialised interpreting, the knowledge resulting from experience plays the key role within the cognitive aspect. In this perspective, immediate full access to knowledge and lexical storage is becoming one of the fundamental operations in recalling both explicit and implicit resources. Therefore, it appears possible to deliberately use the proper semantic association to arrange the interpreter's own resources of terminology and to work out a para-

digm of the explicit and implicit knowledge management necessary to work with specialised texts or translation.

One of the most important factors of developing extralinguistic knowledge which supports the process of preparing for interpreting is well-stipulated and projected knowledge management.

Gerhard Budin, Austrian linguist, in his paper "Knowledge Management in Translation" begins his reflection on knowledge management from the already known yet still up-to-date division into implicit and explicit knowledge. Budin refers to priming in his considerations, even though the term has never appeared in his paper:

> Eine erste wichtige Unterscheidung ist die zwischen implizitem und explizitem Wissen. Implizites Wissen ist immer an einzelne Menschen (und ihren mentalen Zustände) gebudnen, ist subjektiv, unbewusst. Durch Kommunikation können wir implizites Wissen externalisieren, anderen Menschen Miteilen. Dieses explizite Wissen ist oft durch schriftliche Repräsentation objektiv vorhanden und dient so anderen Menschen als Grundlage für Lernprozesse. Wissen, das von einer Gruppe von Menschen geteilt wird, ist auch soziales Wissen über Traditionen, Meinungen, Bedeutungen etc. und somit Teil einer bestimmten Kultur. (Budin 2002: 75; Maliszewski 2015: 11)

Budin's model, although still supported in many translation and linguistic papers, appears particularly important in view of the deliberations of Luigi Anolli (Anolli 2005: 24–49) concerning the detection of meaning. The paper of this Italian psychologist and linguist deals with the aspects of meaning not included in the two-tier division, i.e. explicit-implicit, based on commonly known terms (connotation-denotation or intension-extension). The triad proposed by Luigi Anolli (2005: 42) is based on the relevant aspects of developing meaning, namely referential, inferential, and differential facets. Such an approach to building as well as to discovering new meanings requires not only linguistic preparation but also the non-linguistic one, involving the penetration of the field covered by the language or the translation operation constituting specific meta-pertinent realities in which the semantisation process takes place. Therefore, according to Anolli (ibid.), the approach is a starting point for the reflection on the variability and stability of meaning and — consequently — of terminology.

Anolli's considerations refer to a popular lexical scheme postulated by German linguist and translator — Dieter Möhn, where the three spheres: intra-lexical, inter-lexical, and extra-lexical correspond to Anolli's referential, inferential, and differential facets (Möhn 1980: 357–359).

In the cognitive approach to specialised (in the broad sense) and legal (in the near sense) translation and interpreting there appears one more important element, not studied extensively so far, performing an important role in the search for an optimal method of recalling explicit memory: it is eidetic memory[1]. Using

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[1] This general term can be adapted in our linguistic and translatological considerations — from this perspective, eidetics concerns the exact memory focused on the basic semantic elements of a particular term or definition (cf. Maliszewski 2015: 10–11).

the memory resources, we must also take into account eidetism understood as the ability to memorise lexical models, patterns and phrases, like the ability of evoking or recalling detailed images of something seen previously. Such an approach to eidetism is important especially when recalling explicit memory in a foreign language. Implicity which appears in priming related to a mother tongue is not an obstacle in reaching the semantic resources because when acquiring the mother tongue we also acquire the spontaneous capability to disambiguate polysemic expressions. In contrast, implicity which appears in priming related to the foreign language must be gradually shaped and maintained. Eidetic memory involved at work on specialised foreign language is, consequently, one of the most important factors of developing iterative memory and iteration is the ability to restore the recurring lexical and syntactic pattern characteristic of the specialised field (especially in legal language, where syntactic models are important not only due to their stylistics but also due to the fact that they often generate new figurative meanings). The training of memory by eidetic evoking of words, terms, notions and, consequently, patterns and phrases learned earlier can be significantly optimised by the use of word association games where the iteration of provided semantic models helps in enhancing to process an increased number of lexical resources. As a result, the desired cumulative process of gathering explicit memory makes it easier to recall it, particularly in demanding situations like, for instance, in interpreting. The collection of explicit memory enables to develop memory called "ordering memory". Again, it is implied by conceptual priming constituting the combination of the explicit concept with the association capability, perfected gradually. As a result, specialised translators and interpreters will gain efficiency in searching for the appropriate semantic areas in the source and target languages and maintaining the proper equivalence of the performed translation.

Granting the thesis of Franciszek Grucza (1999: 2–3) that the activities undertaken in specialised lexis acquisition and later in translation and interpreting, should be divided into two main categories of action: cognitive and creative operations, resulting in the completion of specialised terms, it has to be emphasised that the whole lexical preparation of special lexis processing is performed in the first stage of the learning activities and is of the greatest importance for a further shape of lexical equivalence (also in the first translation attempts).

In the cognitive stage of specialised lexis preparation, the primary task for the learner is the analysis of terms and names, aiming at avoiding their ambiguity. The result of such "anti-polysemic" selection should be, first of all, the arrangement of accurate semantic equivalents or of functional, already transposed names, terms and expressions so that the second language activity and use can fulfil the primary criteria imposed on all kinds of specialised lexis processing:

— correctness,
— unequivocal meaning (monosemy),
— stylistics neutrality,

— systematic coherence i.e. accordance with existing system of names and legal terminology,
— conciseness i.e. avoidance of redundancy and maintenance of language economy. (Hickmann 1997: 64–65)

Jill C. Anderson discusses the problem of polysemy and ambiguity with reference to both linguistic and legal aspects:

The form of ambiguity in question inheres not in individual words, but at the level of the sentence. What triggers a split in readings are verbs that linguists classify as "opaque," which are perfectly common in legal texts: intend, impersonate, endeavor, and regard are among them. In ordinary speech we resolve their dual readings unconsciously and without difficulty. In law, however, our failure to notice multiple readings of ambiguous language has left a trail of erroneous judicial determinations and doctrinal incoherence across a broad swath of law, from disability rights to white collar crime to identity fraud to genocide. Drawing on examples from these areas, we use the tools of formal semantics to expose the ambiguity of opaque constructions and to make visible the family resemblance among the ways we misinterpret them. It then turns to the question of why lawyers misread and what we can do about it. (Anderson 2014: 1522)

We may regard the above procedure proposed by Hickmann as a specific form of generative and transferential operations. They constitute an equally difficult process of creating the sense of the phrases being heard as well as the whole texts in which an interpreter mostly compensates various deficiencies in the communicative potential of both the source and target languages (Grucza 1999).

Both Hickmann and Grucza made a tangible and verifiable cognitive model helpful in the preparation and performance of interpreting. The cognitive models in translation and interpreting proposed in various papers are not tangible enough and do not provide sufficiently verifiable ways of their use within the preparation and further performance of interpreting.

Hanna Risku, in a way similar to Hickmann's and Grucza's, refers to cognitive approaches postulated presently:

… cognitive approaches have not established neatly presented models of cognition that include the factors needed to explain the cognitive processes. This is probably due to the fact that not only are they themselves still in a relatively early phase of development, but also that the concrete factors which influence cognition in an individual case are, by definition, situation-depended. If we take the claim seriously that cognition is a distributed process that not only includes the brain, but also the body and the environment of the brain, we will have to decide what parts of the potentially relevant environment need to be taken into account in a specific translation process research study. (Risku 2014: 338–339)

Thus, on the basis of the theoretical considerations of Hanna Risku, there might be initiated an attempt at working out the strategy of interpreting specialised legal texts. Such an objective compels the investigator to search for the answer to the following issues: (a) What lexical and terminological preparation should be made before the reception and analysis of a specialised legal text? (b) Can various linguistic preparation be sufficient in the preliminary interpreting preparation stage? (c) What other preparation should be undertaken by the interpreter dealing with any kind of legal text?

Searching for the answer to the above questions requires directing to *sui generis* "semantic and linguistic mnemonics technique". The term is created to cover the most essential cognitive aspect in translation studies — the ability to recall the lexical and terminological resources very fast as they constitute a starting point for the work with specialised texts. The concept of explicit and implicit memory, known for many years in psycholinguistics, should be complemented with another pair of terms defining the usefulness of mnemonics in the interpreting preparation stage. Too general a division into explicit and implicit memory in specialised translation should be expanded with denotative and connotative memory. These two categories seem very helpful in the cognitive approach to interpreting. The denotative memory supports fast access to terminology resources as it includes any lexical resources which are ready to be recalled at any time. As a rule, it is of micro-structural importance since it relates to quite simple cognitive operations consisting in duplicating the linguistic terms and concepts learnt by the acquisition of specialised language in a particular domain. Denotative memory facilitates the proper understanding and application of legal terminology on the lexico-semantic level and the morphosyntactic level as well as it enables correct spelling and punctuation. Thus, the denotative memory as a typical iterative skill is treated as a starting point constituting a type of cognitive threshold and fundamental input in the preparation for interpreting (cf. Kußmaul 1995; Gerding-Solos 2000).

Connotative memory seems a little bit broader and more important as it constitutes a full cognitive operation in the creative phase of interpreting preparation. Here the interpreter comes to a higher level, which enables the comprehension of the sense and ideas of the source text, the ability to find the creative solutions to translation problems, observing the cohesion and coherence between the output and input of a legal system, and — eventually — the capacity to conduct the assessment of the cognitive phase by interpreting "coaching" (cf. Gerding-Solos 2000).

The connotative phase also enables the operations enumerated by Juliane House:

> … the structural characteristics; the expressive potential and the constraints of the two languages involved in translation; the extra-linguistic world which is differentially "cut up" by source and target languages; the source text with its linguistic-stylistic-aesthetic features that belong to the norms of usage holding in the source lingua-cultural community; the linguistic-stylistic-aesthetic norms of the target language; the target language norms internalised by the translator; intertextuality governing the totality of the text in the target culture; traditions, principles, histories, ideologies of translation holding in the target lingua-cultural community; the translational "brief" given to the translator by the person/institution commissioning the translation; the translator's workplace conditions; human factors: knowledge, expertise, ethical stance and attitudinal profiles of the receptors of the translation as well as knowledge, expertise, ethical stance, attitudinal profiles of the translator as well as his/her subjective theories of translation. (House 2014: 6)

At the level of cognitive translatological and interpretative considerations, the interpreter should take one additional factor into account. This is the volatility of a

spoken text[2]. The volatility can be treated as a disturbing factor in the selection of proper terms and equivalents in the course of interpreting. Usually, volatility leads to a significant reduction and decrease of terminological reserve and to the confusion of the acquired lexical and terminological reserves. Volatility corresponds to ambiguity, leading to huge linguistic laps.

Peter Sandrini underlines the importance of this problem:

> The differences between … user groups with respect to legal dictionaries [and lexicon — and in general — specialised terminology and — consequently — to equivalent finding skills — J.M.] are smaller than their common requirements: all of the groups of users need to fully understand the legal concepts present in the source text, their legal implications and the way the concepts influence the meaning of the text. These concepts and their terms may be unfamiliar to them where they belong to a foreign legal system or the foreign terms refer to familiar concepts, in the case of a multilingual legal system. Both translators and legal experts establish a cognitive relation between the concepts in the foreign language text and the knowledge elements they are familiar with. Translators, for example, must be familiar with the legal system to which the concepts in the source text belong as well as the legal system to which the concepts in the target text belong. (Sandrini 2014: 237)

This quasi-remedium constituting a difficulty frequently arising in the daily work of the interpreter can be found in the connectivistic approach, naturally related to cognitivism. The old definition of connectivism was coined two decades ago by George Siemens (cf. Siemens 2005) but is still discussed in the new contemporary circumstances by other scholars. Connectivism assumes not only the constant ability to improve the interpreting skills, but also the efficient terminology recalling skills:

> Connectivism could be a learning theory for the following reasons. First, connectivism is characterized as the enhancement of how a student learns with the knowledge and perception gained through the addition of a personal network. It is only through these personal networks that the learner can acquire the viewpoint and diversity of opinion to learn to make critical decisions. Since it is impossible to experience everything, the learner can share and learn through collaboration. Second, the sheer amount of data available makes it impossible for a learner to know all that is needed to critically examine specific situations. Being able to tap into huge databases of knowledge in an instant empowers a learner to seek further knowledge. Such a capacity to acquire knowledge can facilitate research and assist in interpreting patterns. Third, explaining learning by means of traditional learning theories is severely limited by the rapid change brought about by technology. Connectivism is defined as actionable knowledge, where an understanding of where to find knowledge may be more important than answering how or what that knowledge encompasses. (Duke, Harper, Johnston 2013: 413)

Such a modernised approach to connectivism treated as remedium against volatility and possible terminological laps cannot do without situated cognition — also called situated or embodied action (cf. Pospeschil 2004: 45).

Based on the situated cognition model many crucial aspects of interpreting in which numerous external factors play a leading role might be clarified. The model

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[2] Volatility is always the main feature of a spoken text (*Verba volant — scripta manent*). Volatility means instability and can lead to terminological misunderstandings.

of situated cognition has become a starting point for attempts to work out an interpreting paradigm. The paradigm is based on the recognition that in any situation interpreters strive to act and respond in a scheduled way, basing on their *bagage cognitif*, i.e. linguistic and intellectual experience collected so far, which facilitates working out the interpreting scheme. However, each interpreting process carries a different scheme. It was already mentioned in 1998 by Hanna Risku who claimed that "Schemata dürfen nicht mit dem Handeln in konkreter Situation gleichgesetzt werden Sie geben nur vage Hinweise auf mögliches Verständnis; der ganze Rest ist eher ein situatives Handeln" (Risku 1998: 40).

Lucy Suchman underlines the recentivistic aspect of interpreting, where the interpreter is subject to specific diegetism, being directly engaged in the communication process between a sender in the source language and a recipient in the target language. She puts it in the following way: "… moment-by-moment interactions between actors, and between actors and environment of their action" (Suchman 1987: 179).

The consideration of situated cognition, where we "make sure language to delineate the collective relevance of our shared environment" (Suchman 1987: 180) includes the most important factor of bilateral interpreting (consecutive and simultaneous) in diverse domains and situations. Here the significant impact of the external environment factors on the interpreter takes place. Some of those factors play a paramount role in the effectiveness and accurateness of interpreting: comprehension and situative acting, situation-defined impacts on interpreting. The above-mentioned factors build a natural bridge between cognition and emotionality.

3. Cognition vs. emotionality

It is worth emphasising that in legal interpreting an interrogator writes down what an interpreter says and not what an interrogatee says. The other factor is emotionality which is present during each process of interpreting (especially simultaneous or booth interpreting in business negotiations, police and court interrogation), which makes it more difficult for both parties (the source language speaker and the interpreter) to form clear and explicit statements. The atmosphere of excitement is, because of obvious reasons, characteristic of persons lodging, raising or declaring requests, formulating offers etc., or trial attendants such as claimants, defendants etc. (who suffer from body injury or property loss or are suspected or accused of committing an offense).

The question of business partners receiving the offer or — in legal procedures — the testimonies of witnesses who have not been directly involved in the court trial are much more coherent and easier to translate. Thus, an important element which conditions the correctness of transposition is the extensive concentration

of an interpreter which helps him/her to grasp the sense of a statement in the source language, its conceptualisation and transformation to the target language by means of the most accurate designates (cf. Pieńkos 1999: 134).

The emotional factor of interpreting, as a quasi-"disturbing" element of the interpreting performance, can be partially neutralised with good cognitive interpreting preparation. Taking into consideration all the emotional factors, legal interpreters have to perform one more extremely important task. They have to eliminate the difference in levels between the interlocutor (interrogator) — as a strong part of the dialogue, and the interlocutee (interrogatee) — as a weak part of mutual communication, by using their own linguistic advantage towards the participants of interrogation.

The interpreter usually has to dominate over the interlocutee/interrogatee who is in a stressful situation and does not know the style of the work of their dominant partner or any legal authority. However, the interpreter must also dominate over the interrogator who is familiar with neither the language nor the ethnic characteristics of the interrogatee (cf. Pieńkos 1999: 134–135; Anderson 2014: 1520–1522). Such an approach, which aims at eliminating all the barriers except for the language barrier, disciplines interpreters protecting them from the danger of redundancy, which is a frequent problem experienced by consecutive interpreters.

Let us use an example here. Interrogations at Polish police stations are protocoled. Let us emphasise again that the protocol includes the text which is dictated by an interpreter not an interrogatee. Here, an interpreter has one more important task to do — to precisely check the translated text, which very often differs from the statements of an interrogatee. In this case the interpreter should always take a firm position because there are police officers who claim that they know better how to formulate certain parts of the text. However, this kind of police officers' interference leads to distortions which violate the interrogatee's interests and which must be eliminated by the interpreter who makes final corrections to the text prior to its being signed by a party of interest. Arguments and conflicts between a police officer and an interpreter are frequent because usually the interpreter tries to accurately and equivalently interpret the text which is being spoken by interrogatees at all costs even when it is not convenient for interrogators. Such "small conflicts", which appear when the interpreter reads aloud the protocol to an interrogatee, appear during the protocoling of testimonies of people accused of a penal act. Here, contrary to the court, "the last word", i.e. the decision cannot be made by an interrogator, as he/she does not decide whether the accused person should be found guilty. The interpreter is able to work out his/her own tactic concerning agreeing upon the content of the protocol with the real content of the translated material. Using his/her confidence, the interpreter should always get direct access to an interrogatee in order to make final corrections of the text. It is worth emphasising that police officers do not usually have objections and allow for these kinds of adjustments, trusting that the interpret-

er does not connive with the interrogatee — as they see each other for the very first time. These kinds of adjustments are usually suggested by defendants when they participate in interrogation. The opposite situation is also quite common. The interrogatee either trusts the interpreter or he/she fears the interrogator so much that he/she resigns from reading out the protocol. Here, the interpreter must be persistent; he/she should always, regardless of a will or postulates of interrogatees, read aloud the whole protocol in order to avoid any inconsistencies. Frequently, it is the interrogatee who asks to make corrections or complements, if necessary.

Conclusions

A number of conclusions can be drawn from the above discussion. First of all, the work of an interpreter is a very specific form of oral (consecutive or simultaneous) translation which is carried out in difficult, extreme conditions which require extraordinary linguistic and mental abilities. The basic form is interrogation whose level of difficulty is defined and conditioned by a legal situation of an interrogated person. Secondly, the process of preparation and implementation of the transposition consists of a very short cognitive preparation phase which is caused by the temporality of the interpreter's work in comparison to the generative-transferential part. Additionally, the cognitive framework of interpreting involves two collections of lexical items. The first one is relatively simple and standard as it relates to specific legal and juridical vocabulary. However, the other one, incomparably more difficult, is related with the subject of interrogation. An interpreter must patiently enrich his/her specialised vocabulary from different areas in order to be able to fulfil his/her duties. Among the most frequent areas we can mention business, legal medical and technical terminology as well as other kinds of specialised and social jargons. What is more, the interpreter is a guarantor of the interests of both interrogatees and interrogators. Therefore, the interpreter's responsibility is to ensure the accuracy of transposition, which is further confirmed by an interrogatee after the text of the protocol has been read. This action must not be omitted by the interpreter.

This paper has presented only the most significant aspects of pragmatics of legal interpreting therefore it should be borne in mind that there are many more equally important aspects of this form of oral translation which, however, require a separate discussion.

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Cognitive aspects of an interpreter's immersion in communicative constellations taking place in criminal proceedings

Abstract: The aim of this article is to present an analysis of the cognitive aspects of communicative situations in which the interpreter participating in the criminal proceedings takes part. The interpreter is an active participant in all stages of criminal proceedings — from the preparatory procedure until the closure of court proceedings. In order to examine and specify the place of the interpreter in the interactions related to the course of criminal proceedings, the author assumes that this process can be viewed from two perspectives: from the legal one (the course of the proceedings) and from the communicative one (the act of special, multistage, heterogeneous and complex communicative constellation, in which the interpreter becomes "immersed"). Such an approach allows the author to look at the interpreter as a person having psyche and a specified temperament and personality. Thus the author questions the "wishful" assumption about the subjective recognition of the interpreter as a transparent receiving and sending entity.

Key words: interpreter, criminal proceedings, communicative situation, communicative model, interaction.

Introduction

Criminal procedure is a set of legal norms which govern the proceedings conducted in order to execute material criminal law. Its main objective is to determine whether a prohibited act, i.e. a crime, has been committed and in consequence to identify the perpetrator and bring them to justice under criminal liability (Grzegorczyk and Tylman 2007; Waltoś 2008). The notion of criminal proceedings covers both the preparatory procedure conducted by enforcement bodies and court proceedings. The goal of the preparatory proceedings is to identify an offence and

its perpetrator and subsequently to gather and secure the evidence of guilt. There are two forms of preparatory proceedings: investigation and probe. Investigation is conducted in case of crimes, sometimes also misdemeanours. Essentially, investigation is carried out by the prosecutor; yet in some cases investigation is carried out by the police. Probe is conducted mainly by the police (or another applicable enforcement body), but always under the prosecutor's supervision. Specific stages of criminal procedure as well as model situations in which interpreters participating in such proceedings are likely to find themselves were presented in the book *Tłumacz w postępowaniu karnym* [Interpreter in criminal proceedings] (Poznański 2007).

The objective of this study is to present the cognitive aspects of communicative situations in which interpreters taking part in criminal proceedings participate. For an interpreter is an active participant in all the stages of criminal action: starting from the probe until the closure of court proceedings. In order to examine and determine an interpreter's place in interactions related to the course of criminal proceedings, it is necessary to assume that the trial itself can be perceived from two perspectives: from the legal perspective with respect to the course of the proceedings related to the trial or from another angle where the whole process is perceived as a specific, multi-stage, heterogeneous and complex communicative constellation in which the interpreter is specifically "immersed". This look will enable us to see interpreters as individuals possessing their own psyche, temperament and personality, who undergo complex mental processes — and therefore to undermine a well-known thesis on the objectification of an interpreter as a transparent receiving and sending entity.

1. Interpreter in criminal procedure

The interpretation of the notion of "court interpreter" is ambiguous in itself, and it is for two reasons. According to Pöchhacker (2004: 14), the definition of *court/legal/judicial interpreting* in various contexts frequently refers to both written translation and oral interpretation. What is more, it does not only refer to in-court interpretation or interpretation made at the court's order, but it concerns various communicative situations — such as interpreting for other uniformed services, e.g. the police, or for the needs of official institutions such as the notary public, registry offices etc. (Pöchhacker 2004: 14). *Stricte* in-court interpretation is referred to as *courtroom interpreting* (Pöchhacker 2004: 14). The terminology referring to this field used by the authors of academic papers is diversified. However, for the needs of this article the term "court interpreter" was kept as the most frequently used one which in the best way reflects the specificity of legal and administrative interpretation for courts, the police, prosecutor's offices or other public administration bodies.

From the point of view of social interaction, the definition and the goals of court interpreting are construed with regard to various aspects. However, it is unanimously emphasised that its main objective is a complete and exact translation of the transmitted message (Edwards 1995: 63). In a similar way, Sandra Hale defines it as a most exact translation of the communication from the source language into the target language (Hale 2004: 8), perceiving at the same time accuracy and impartiality as very complicated and disputable indicators. An interesting opinion is expressed by Claudia Angelelli (2004: 7), who perceives the purpose of interpretation from the perspective of linguistic inter-cultural communication and points to the fact that a superior issue is to facilitate this communication, which changes the usual perception of a court interpreter from a *stricte* linguistic angle, i.e. bringing the role of an interpreter to a role of a transparent, mechanical translator. Ruth Morris also leans towards such an understanding (1995: 41), according to which the role of a court interpreter is to remove the barriers which make communication and mutual understanding impossible. Similarly, Hewitt (1995 in: Mikkelson 2008: 81) defines a court interpreter in terms of a court clerk, whose task is to remove barriers to communication and therefore to enable equal access to judicature. As far as the environment of a communication situation in which the interpretation process takes place is concerned, it is interpretation before a specific institution (Jacobsen 2009: 158), whether it is a court or, for example, the police bodies. From the point of view of the participants of communication, one of them (not counting the interpreter) is always an expert in the area (a judge, attorney-at-law, interrogating policeman etc.) whereas the second main participant belongs to a "language minority", in most cases not being an expert in the specific area, so that their position is weaker (Jacobsen 2009: 159).

2. Research status

Comparing court interpretation with other types of interpretation, it must be admitted that it has finally become an object of very thorough theoretical studies (cf. Wadensjö 1998: 51–52). Wadensjö ascribes this fact to the establishment of international conventions relating to human rights and relevant regulations of domestic law as well as to the necessity to ensure the reliability of the legal system itself. As Pöchhacker noticed, the first academic papers and research devoted to court interpreting date back to the 1980s (for example, Christiane Driesen, Ruth Morris, Susan Berk-Seligson) (Pöchhacker 2004: 36). The breakthrough in this field came in 1995, when the first conference was organised by the Critical Link under the name: *Interpreting in Legal, Health and Social Service Settings* (Pöchhacker 2004: 41). The Critical Link International is an international non-profit organisation established in 1992 in Canada. Its objective is to promote progress and development of interpretation with regard to social, medical and legal servi-

ces. These conferences, bringing together translators and interpreters, individuals and legal entities providing translation services, members of professional associations gathering interpreters and translators as well as other members of this social community take place regularly every three years. Selected presentations delivered during these conferences are published in post-conference materials and some of them are available on the websites of organisations, which certainly contributes to a large degree to the development of the research concerning court interpreting. The European Union plays an important role in the professionalisation of this area, within its activities conducted in the field of judicature and within the Grotius-Agis projects (Hertog 2003; Kierzkowska 2007–2008). An association that gathers court interpreters and professional organisations is the EULITA (European Legal Interpreters and Translators Association). Its objective is to support the right to a fair trial as well as to improve the quality of written translation and oral interpretation. This organisation enables court interpreters to exchange experiences and information as well as strives towards the constant improvement of court interpretation services. The situation concerning professionalisation and institutionalisation as well as the academising of court interpretation is a subject of numerous discussions and this trend will be most probably maintained.

Numerous research projects conducted since the 1990s focus mainly on *courtroom interpreting* (Hale 2006: 205–206), which is caused by the character of a communication situation — court proceedings are in the majority of cases public and access to research material is easier than in case of e.g. police probes. The research is most frequently conducted by court interpreters themselves or by former court interpreters, who tackle issues encountered in the course of their own practice (ibid.). The informational and reporting value of this research is high, but unfortunately its cognitive virtues are not paired with educational aspects. Hale (2006: 207) also points to the fact that this research frequently indicates defects and inaccuracies in translation, and therefore can evoke a false impression that the accuracy and exactness of this type of interpretation cannot be achieved. Research concerning court interpreting interweaves with the research conducted in multiple academic disciplines: from linguistic research to sociolinguistics, sociology, anthropology, psychology and pragmatics. In general, researchers focus on several key areas related to legal language and language of the law (various types of questions and the way they are translated by the interpreter, the transmission of the style and register of witnesses' testimonies, pragmatics and achieving pragmatic equivalence) whereas the interpreter's role becomes objectified and brought to what is expected from an interpreter (perceiving an interpreter as a service provider, i.e. through the prism of interested service recipients — lawyers, judges, prosecutors etc. as well as the representative of a person for whom the interpreter was appointed) (Hale 2006: 208–225; cf. also Pöchhacker and Shlesinger 2010: 2–3). The empirical research of the mental aspect of the interpretation process (i.e. the processes taking part in the

interpreter's mind) also dates back to the 1980s. This research was initiated following the preliminary examinations conducted for over 25 years by three scientists: Pamela A. Gerloff (1988), Hans Peter Krings (1986) and Wolfgang Lörscher (1991) (in: Płużyczka 2011: 182), who used the so-called think aloud protocols (TAPs) in the analysis of the translation process. Further years brought with them a wave of applying TAPs to research — experiments in translation studies and finally, after 2000, more focus began to be put on particular elements of the translation process, including translation competence (e.g. Englund Dimitrova 2005; Jakobsen 2005, Shih et al. 2006). However, empirical studies in the field of court interpreting have been a target for research for a relatively short time (Hale 2006). The first important publications in this field are, following Pöchhacker, the diploma thesis of Ruth Morris from 1989 entitled *The Impact of Court Interpretation on Legal Proceedings* (Pöchhacker 2004: 36), as well as the work of Susan Berk-Seligson of 1990 entitled *The Bilingual Courtroom* discussing the issue of court interpretation in the United States. However, research in this field is still in its infancy and its numerous aspects remain undiscovered. There still remain some gaps related to the consequences of interpretation, i.e. the impact of interpretation on the process of criminal proceedings — there is no research concerning interpreter's personality and its impact on the result of interpretation. Another gross deficiency is a lack of the analysis of the whole interpreting environment, i.e. the communication situation *sensu largo*, in which the interpreters are immersed and which certainly influences their work.

3. Interpreter's position in the light of Roman Jakobson's traditional communication model

The model presented by Roman Jakobson (1960) was selected as a communication model. Jakobson's vision was frequently modified and criticised, nevertheless it has been perceived as the most universal one until today. However, defined defects — frequently concerning the shortages in the description of oral communication — in our case are extremely important, because analysing interpretation, we have to focus on this very form of communication. Jakobson modelled the process of verbal communication in direct, face to face contact. This model is also applicable to codes other than verbal language, but is limited to the situations in which a communicator is aware of their communicative intention. Jakobson characterises this relationship in the following way: **Sender** addresses the message to its **recipient.** In order to be effective, a message must refer to a **context** (i.e. must mean something) perceptible to the recipient and either verbalised or possible to be verbalised; furthermore a **code** is necessary, common in the whole or at least in part to the sender and the recipient (or — in other words — to the one who codes and the one who decodes the message); and finally there must be **contact** —

physical channel and mental relation between the sender and the recipient, which enables both of them to establish and continue the communication process (Jakobson 1960). This is expressed with the use of the following model:

<div align="center">

context

communication

sender …………………………………………………………. recipient

contact

code

</div>
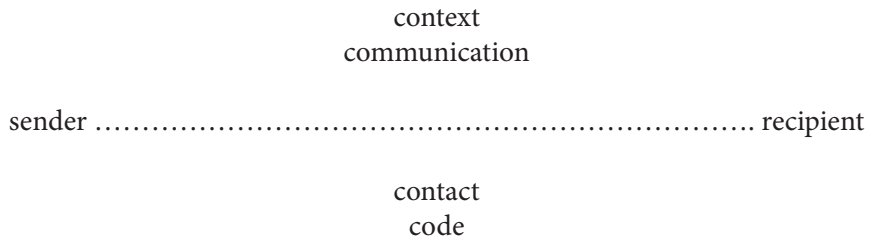
Speech, unlike other forms of exchanging information, is an immediate, direct, mutual and impermanent medium, difficult to be codified. Spoken interaction is a type of linguistic act in which a language user takes part in a direct dialogue, face to face with the interlocutor. In interaction, language users take part in turns as speakers talking to one or more interlocutors and subsequently as listeners: in this way participants mutually create a conversation, i.e. negotiate the meanings in accordance with specific strategies. Taking the above mentioned qualities of oral interaction into consideration, it must be stated that Jakobson's model seems to have significant limitations. The main charge against it is that it presents the communication situation in a linear and one directional way which — according to some researchers — does not reflect the dialogue situation (cf. Kruk-Junger 2013: 72). Nevertheless, it seems that Jakobson's idea was that the model reflects a single communication event understood as an utterance. In speech, we deal with the interchangeability of roles; which is why the whole interaction of this type should be treated as composed of numerous subsequent messages. A model understood in such a way can be successfully applied to oral communication. The communication participant initially acts as a sender, i.e. the one who speaks. In the communication process, the interchanging of roles between the speaker and the listener is a fundamental quality of the dialogue although in this manner of communication a monologue (one speaker) or a multilogue (multiple speakers/listeners) is also possible. A message recipient is the one who listens/receives the message at a specific time. A message is the content of the transmission, the announcement itself. The effectiveness of transmission depends on the context, i.e. on the phenomena covered by the communication which is known and perceptively available to the recipient. Jakobson demands that the context is verbalised or possible to be verbalised. However, this postulate should be treated quite roughly — such verbalisation does not need to depend on conveying a message in words as it can be expressed in a non-verbal way. This remark refers to the code, i.e. communication language, constituting a set of signs symbolising the transmitted idea. The code has to be common to the sender and the recipient to a sufficient de-

gree to ensure that the content of transmission coded by the sender is aptly received or decoded by its recipient.

In the case of a meeting of persons who do not speak the same language or have insufficient command of it, a need occurs to introduce an interpreter into the communication situation, who will be a specific mediator in the transmission of the coded information. The undoubted universality and simplicity of Jakobson's model resulted in the fact that — as the most popular one — it was incorporated into many subsequent more elaborated linguistic theories. In a situation when the communication occurs via an interpreter, its model can be presented with the use of the following formula (cf. Levý 1998: 44; Pisarska and Tomaszkiewicz 1996: 21 as well as Tryuk 2007: 66–68).

situational context

sender …… message I …... **interpreter** …... message II …… recipient

code I   code II

contact

It is worth mentioning that communication takes place in a specific contact, i.e. on the condition that the parties to communication meet and the contact is possible thanks to a communication channel — understood as a tool for the transmission of the message (in communication it is the physical contact of partners taking part in the interaction). Małgorzata Tryuk describes it in the following way: "Due to the presence of an interpreter … communication process takes on a form of a trialogue in which all participants play their role" (Tryuk 2007: 178). The generating of message II presented above is a result of numerous aspects and many dimensions of mental operations taking place in the interpreter. If we take a look at the product generated as a result of the interaction, we can notice that it is composed of utterances created and received interchangeably by each of the parties. Thus, in order to enable interaction, i.e. to mutually create a conversation, specific cooperation principles are necessary that exceed the knowledge of vocabulary or grammar structures. In other words, the interpreter is a specific kind of meaning mediator, who — for the interaction to be successful — must possess proper qualifications, both linguistic and paralinguistic, thanks to which they can perform their work correctly. Therefore, the interpreter plays a key role in communication and is located somehow in the centre of interaction (Kruk-Junger 2013: 111).

If we take into consideration what we know about interaction from the research conducted in the field of psycholinguistics and neurolinguistics, it will become clear that the translation process takes place not by means of ears and mouth, but it is a process happening in the mind. This process is conducted thanks to e.g.

the co-existence of several types of operations taking place simultaneously in the mind. These are reception processes consisting in the organisation of the understanding of a message in two directions — *from the whole to the part* — i.e. from the knowledge of the world, conversation rituals etc. to the understanding of the expression as well as *from the part to the whole*, i.e. from phonological (recognition of sounds) and grammatical decoding to the understanding of sentences and texts. In addition, there occur mental operations related to formulating an utterance: the interpreter switches immediately from receiving and understanding the encoded information, through a plan for its interpretation, grammatical and phonological coding and a phonetic plan, i.e. the so-called internal speech, to the articulation of the message. All these processes take place in a fraction of a second. Similarly, the change of the translation direction takes place in a fraction of a second. Unlike a reader of a written text, the primary recipient of oral interaction takes active part in the communication process, which is reflected in e.g. the possibility to ask questions. Recipients frequently become participants of the conversation as feedback senders; they react to the communicative situation in real time, which must be taken into consideration by the interpreter in the translation process (Kruk-Junger 2013: 133). The complex character of the interpretation process results from the fact that it is a process accompanied by the constant making of quick choices in unfavourable conditions. An omnipresent time pressure can constitute a significant hindrance here. According to Piotr Kwieciński (1997: 34), an interpreter

… must synthetically acquire the configuration of all the significant, changing elements; without the possibility of long consideration, somehow 'in the run' (during receiving source material) make a series of decisions concerning the form of target message (starting from the entire text until its smallest components) and in an instant reach corresponding verbal expressions in the target language.

4. Interpreter's immersion in a communication constellation

Working in a communication triangle in which the interpreter would act solely as a sending-receiving transmitter would be optimal, however such situations are very rare. Due to the fact that the majority of the described situations are multilogues and the actual division of interlocutors is varied and, first of all, inflexible — e.g. during an interrogation, a site inspection or a court hearing — I decided to introduce the notion of *communicative constellation*. For the word "constellation" evokes a certain spatial system, therefore also certain multidimensionality, changeability, configuration and uniqueness of each communicative situation, Jiří Levý paid attention to that when he construed the communicative model, emphasizing its processional aspect (what the course of communication is, who the communication participants are, what its purpose is etc.) (Levý 1998: 44). In particular cases we can see that

the communicative chain can be broken and looking at the parties to the process one can see that they can independently enter the communicative situation and distort it. Interpreters participating in criminal proceedings are introduced into such complex communicative situations, in which they — to a large degree — assume responsibility for the communication between the parties. Therefore, it is difficult to imagine that in such a situation the interpreter can be neutral or transparent (Angelelli 2004: 25). Interpreters' actions and choices are a result of the entirety of the communicative situation, i.e. they depend on the interpreters' feelings and sensations as well as on the perception and reactions of the remaining participants of the interaction, social factors and information searched for and acquired by interpreters; on the other hand, they are limited by regulations imposed by institutions and the society (Angelelli 2004: 36, 41). What is more, interpreters have to control their reactions, because any "unconditioned reflex", e.g. showing compassion, aversion or even a delicate smile or involuntary grimace etc., can be understood in two ways: either the interpreter is an ally of the interpreted person or, on the contrary, they "keep the side" of the representatives of the law: an interrogating policeman, a prosecutor, a judge, an attorney of the latter party etc. Wadensjö also confirmed the interpreter's visibility (1998 in Mikkelson 2008: 85), describing them as active participants of a multiplied trilateral communicative situation.

In the course of interpretation it might also occur that the interpreter comes out of the role of the *tube of the interpreted person.* Fenton (1997: 30–31) states that interpreters play an important role in the distribution of forces in the communicative constellation as they control the language, which is often a very important instrument used by officials and representatives of the law in criminal proceedings. This is, according to the author, one of the reasons due to which the interpreter's role is frequently narrowed to a very instrument of the transmission of speech. In fact, it is not so. There are numerous situations in which the interpreter becomes the main person in a specific communicative situation, e.g. excluding the law officers from communication (the interpreter communicates with the witness in a language which is not comprehended by the law officer) (cf. Kinnunen 2010: 129). According to Wadensjö (1998: 105), interpreters not only translate but also coordinate communication among other parties (e.g. they have an influence on who will speak, on the pace of speech, on the continuation of interaction etc.). These manifestations of coordination on the side of the interpreter were divided by Wadensjö into the text-oriented and interaction-oriented ones. Text-oriented aspects include, for example, the interpreter's requests for clarification of certain facts, giving some time for interpretation, making a break in the speech and other remarks or comments concerning the interpretation. Interaction-oriented initiatives put forward by interpreters include other requirements concerning the observation of the principles of the interchanging of speakers, preserving proper intervals, calling for speech or silence. The issue of changing participants of com-

munication was also tackled in the 1990s by Roy (in: Mikkelson 2008), who stated that interpreters are key partners in communication.

The interpreter's presence in criminal cases influences the real course of the proceedings in numerous ways (Colin and Morris 1996). The findings of Berk-Seligson (1990/2002: in Mikkelson 1998), also confirm the above statement. It follows from them that the very fact that the proceedings are conducted in the presence of an interpreter influences their course, i.e. the way members of the jury evaluate the witnesses' testimonies. Furthermore, according to the author, interpreters can change the testimony of the witness with their interpretation. The presence of the interpreter during the court proceedings can also influence, for example, the way in which the participants in the interaction will communicate with each other (address the interpreter directly instead of addressing the latter participant to the communication) (Colin and Morris 1996: 23). Frequently this may be about drawing the interpreter's attention or finding their favour. A very important issue should be emphasised here, i.e. the fact that interpreters, although in the majority of cases want to help the interpreted person (being in some kind of trouble) to understand the situation and terminate the case in a positive way, feel the need of being loyal towards a primary sender (who is also most often a contractor of the service having their own expectations and wanting to achieve their goals through the process of communication). It is confirmed by the fact that interpreters during their work are subject to various influences following from expectations and attitudes of the parties to interaction. The scope of the interpreter's influence on the course of interaction depends on various factors. The one that is most important, according to Colin and Morris (ibid.), is the quality of interpretation — a good and competent interpreter makes the course of court proceedings, interrogation etc. smoother. Having in mind that the interpreter can be the only person who understands both languages used during the communicative situation within criminal proceedings, their role in interaction is very important and they possess a specific advantage (Edwards 1995: 63–64). The interpreter can not only "distort" the conventional communicative situation, e.g. in the situation when the interpreted person addresses the interpreter directly or consults something with them. It is also important that the interpreter's presence breaks down a classic communicative scheme. Generally speaking, in case of interpretation for legal institutions all the parties involved: sender, recipient and interpreter are situated in various spatial systems — most frequently relatively close to one another, both in physical dimension and in time. Interpreters are located somehow in the centre of the communicative situation and in optimal cases they have an eye contact with the message sender. However, in practice the issue concerning the contact is a very complex matter which influences the interpreter's behaviour to a large extent.

The impact of the contact on the interpretation process can be understood as the concern of locating the interpreter (in a literal and metaphoric sense) in relation to other participants in the interaction and it can be analysed from the

perspective of a person assuming the reins of the information flow. For the interpreter can somehow helm the communicative situation, or even give a course to it, it seems that the judicial bodies during the situation including interpretation are bothered not so much by the interpreter's entries and interrupting the continuity of communication as by the fact that something out of their control is taking place, something that is understood by the interpreter and the interpreted person only (cf. Hale 2004: 160–210; Morris 1995: 41). As mentioned before, this follows from the fact that the interpreter destroys a communication scheme to which a person who typically gives the course to the proceedings (i.e. a police officer or a prosecutor) is used to. The interpreter can involuntarily intervene into a manner of interrogation by breaking the tactic used toward the interrogated person because being a person not introduced into the arcane of interrogation they can miss something or not understand some tricks used by the interrogating officer. Due to the above, the interrogated party can gain time thanks to possessing partial comprehension of a language in which the interrogation is conducted and their ability to guess the sense of questions; they can also prolong the interrogation process by claiming that e.g. they do not understand some aspect very well etc. Due to the above, some interrogation strategies (e.g. acting through surprise) may prove to be inefficient as the interrogated party gains some time. The interpreter, acting under time pressure, frequently has to select what should be finally translated and which information is redundant or unnecessary. It can also happen that due to the above, a certain element is omitted which would have a great importance for the interrogator, e.g. a moment of hesitation, an oblique statement, using a specific lexeme instead of another one — all of which could influence the further course of proceedings.

The classic models of communication based on Roman Jakobson's vision emphasised the possession of common codes used by the sender and the recipient which constituted a basis for reciprocal understanding. In the analysed communicative situations, where the code is somehow transferred through the interpreter's prism, it is known that we deal with various codes, which in Levy's depiction are perceived as particular national languages (Levý 1998: 44). It is known, however, that the "language product" generated in a national community is not homogeneous. People write and — first of all — speak in various ways. This lack of homogeneity is conditioned by three groups of factors: sender's characteristic features (their belonging to a specific language community), their individuality, relationship between the sender, the recipient and the interpreter intermediating in the communication as well as the conditions in which the act of communication takes place — its purpose, sphere, situation and manner of technical implementation. Therefore, each use of language is featured by numerous communicative indicators which reflect the listed factors. Grouping these examples of language use, we receive an individual language which most frequently turns out to be a multi-layer creation being the result of the overlapping of several sub-codes which cannot be reduced to a common denominator.

It follows from the fact that within the frames of particular national languages there exist sub-codes which can be of ideological, aesthetic, regional or affective character. These overlapping sub-codes can be connected with a social background or belonging to a specific social group, therefore they are also indirectly related to education (sociolect), place of residence, coming from a specific region (dialect), performed profession (professiolect), education, a set of individual features (idiolect), specific stylisation being the result of a selection of particular words (idiostyle), a model of behaviours evoking a particular sociotype, disease etc. — for example speech distortion caused by speech impediment as well as a series of numerous other factors, not listed here, such as slang or jargon — which can be different for each communication participant. Age is another feature that influences the individual's language, e.g. the language used by children or by the elderly. Another important issue is connected with the communication participants' position in the social hierarchy (official position, seniority etc.) as the relationships of superiority and subordination are frequently revealed — very rarely the one of equality. Another fact which must be paid attention to is that the language of utterance adopted before a judicial officer can be different from the individual language of an interrogator — for both the interrogating person and the interrogated party apply various tactics, therefore they can select the vocabulary accordingly in order to e.g. ingratiate themselves with the judge, seem an expert in a certain field or suggest coming from another social background than the actual one.

The knowledge possessed by the interpreter during performing their work is never complete. This concerns both orientation in general topics and the knowledge of sub-codes which possess a whole array of registers and terminology in both languages. One has to know slang expressions as well as terms coming from a high legal register. Therefore, it is clear that the knowledge must contain both literary and specialist language as well as colloquial one, frequently including slang. It can influence both the possibility of understanding a specific element of the code and proper expression of a message in interpretation. Due to the above, it turns out that coding and decoding are much more complex processes. When denoted meanings are established by the code, the connoted meanings are determined through specific sub-codes, i.e. dictionaries common to certain groups of speakers but not necessarily to all the bearers of a specific national language.

In addition, it turns out that both expectations of the communication participants and the assessment of the interpreter's work change, depending on the situation, as the type of meeting and its participants can make other demanded qualities of interpretation be put forward in the first plane (Tryuk 2007: 134–140). On the one hand, the interpreter has to transfer the individual language of an interpreted person and on the other hand, they have to adjust the interpretation to the language competence and general knowledge of that person, therefore they are forced to adopt a certain attitude towards the needs exceeding the interpretation process *sensu stricto*. It can be said that the interpreters find themselves "between

a rock and a hard place". If an interpreted person signals a lack of understanding of a message, then the judicial officer does not perceive this as a result of misunderstanding a too hermetic legal language and language of the law, but as an effect of incorrect interpretation. The other way round the situation is similar: an illegible message of an interpreted person is also perceived as a result of bad quality interpretation, not as a result of the specificity of individual language. Despite this, the opinion encountered most often is that the interpreter should become an *alter ego* of an interpreted person — i.e. of both the lawyer using legal language and language of the law interwoven with their own idiolect as well as the interrogated person's individual language (e.g. a witness, the accused). For this reason, the interpreter's transparency and impartiality in a communicative situation are emphasised most often — interpreters should not draw attention to themselves (Fowler 1997) — as well as the loyalty towards the speaker: "Impartiality means that a professional must carry out professional duties to the best of his/her ability regardless of who the client is in terms of gender, race, social and economic status, ethnicity etc." (Gentile et al. 1996: 58). Loyalty commits court interpreters not to identify themselves with either party to the proceedings: either with the court, lawyers or the accused or witness for whom the interpreter translates (cf. Gile 1995; Nartowska 2012). However, it often happens that lawyers have some expectations towards the interpreter which can be contradictory to the principle of the interpreter's impartiality or loyalty. In the subject literature the dependency between the place where the interpreter is situated physically and their understanding of the role is also pointed to. Helge Niska pays attention to the fact that in the courtroom the location of the interpreter close to the accused and far from the judge and the prosecutor can be perceived as the confirmation that the interpreter is a kind of assistant to the interpreted person (Niska 1995: 298–299) and vice versa — identifying the interpreter with the institution can take place in a situation when they are placed in the direct vicinity of a judge or a prosecutor. The interpreter also has to be prepared for the behaviours that exceed the frames of professional contact and can be revealed in both requests to make friends on a private basis as well as in aggression and mistrust. Both attitudes follow directly from two extreme visions which a recipient might have regarding the interpreter. The first occurs when the interpreter is perceived as a supporter or assistant, the second — when they are perceived as an enemy and an ally of a hostile institution. It must be noticed that problems related to this side of interaction are analogous to the ones that appear when analysing the representatives of institutions, i.e. expectations, attitude and scope of possessed knowledge.

Very little is known on how interpreters themselves perceive their role; what is more, research conducted in this area is scarce and not related to one another. Angelelli proved (Angelelli 2004: 83) that interpreters themselves perceive their role in close relation to a communicative constellation and the terms conditioning individual speech (cf. also Kruk-Junger 2013). However — as may be assumed —

a consequence of the interpreter's immersion in a communicative constellation should be first of all introducing an interpreted person into the communicative act in such a way as they would join an analogous situation taking place in their mother tongue (cf. Mikkelson 1998). Neutrality, which is emphasised by numerous researchers (Edwards 1995: 63–64), is also difficult to be preserved — this can result from e.g. a lack of keeping the standards by the judicial institutions. Referring to the examples coming from my own interpreting practice I would like to present some blatant situations in which my postulated impartiality was shaken. It happens frequently that the interpreter waits for the interrogation or a hearing together with the persons who will be interpreted afterwards. These persons — unaware of that — can talk about things which they do not want to reveal during the proceedings or which they want to present in another light. Knowing this, it is difficult for an interpreter to remain neutral. The interpreter's "transparency" can also be shaken by the very representatives of the judicial system, e.g. a judge, requesting the interpreter to assist the interrogated witnesses in some way — help them to settle the costs related to their travel or show them a place in the neighbourhood where they can eat something (*sic!*). During one hearing I was literally non-verbally exhorted — through gestures — by the attorney for the aggrieved party, whom I interpreted, not to interpret some passages of the testimony (in which he threatened the accused party).

Equally important are all kinds of interruptions taking place in the communicative constellations which can distort or even make receiving and sending messages impossible. In interpretation such difficulties as noise, technical problems, especially with the use of microphones, simultaneous speeches of more people etc. are pointed to, although it seems that these issues are treated by the researchers as trifling ones, not as a serious problem that influences the quality of interpretation deserving a separate analysis. It is enough to mention a standard lack of working conditions present in e.g. police facilities. In a small room the interpreter sits almost "stuck" to an interrogated person whereas at the second desk another interrogation is frequently conducted. This can result in the situation that the message can be wrongly heard or distorted. It is also often forgotten that interpreters are people possessing their own senses and the interrogated ones tend to have problems with their hygiene or they can sweat due to stress. This is only one of the aspects omitted in the analysis of the work of an interpreter participating in criminal proceedings.

In relation to the research conducted on interaction, the interpreter's neutrality is frequently questioned (Angelelli 2004: 48). Maintaining impartiality, the breaching of which can be reflected not only through verbal expression but also through body language, is difficult to achieve and requires great effort (Edwards 1995). For these reasons, in Edwards's opinion it is not proper for the interpreter to talk to the accused or witnesses either before or during the proceedings (Edwards, 1995: 65). In short, the situation is recommended

that the interpreters "do not have their own opinion" concerning a specific case. Pragmatic level is an important aspect of each communicative situation in general. From the pragmatic point of view, it is necessary to differentiate between a free communicative situation and a specific communicative situation which may arise during conducted criminal proceedings (cf. Fowler 1997: 194). The role of the persons participating in such communicative circumstances is somehow limited and planned in advance, whereas the illocutionary value of their speech is very important. The interpreter's task is to reflect the importance of the speech in such a way that it is possible to transmit it as construed and understood by the message senders (cf. Jacobsen 2003 in: Mikkelson 2008: 85). Berk-Seligson (1990/2002: 25) proves in his research that the interpreter during the proceedings frequently influences or changes the pragmatic intention of speakers, making a common mistake of "word by word" translation or semantic translation (sentence after sentence) at the expense of the pragmatic aspect of speech, i.e. the sense of the message in a specific context (Hale 2004: 5). Hale further states that during this type of interpretation short pieces of speech are frequently applied and in order to understand them the interpreter has to base on the situational context. It can be said that the interpreter's objective should be to achieve a pragmatic equilibrium and therefore equivalence on the level of the illocutionary act (Hale 2004: 6). As Wadensjö emphasised (1998: 42), the need of a pragmatic approach in interpretation is revealed by the fact that the interpreter not only interprets from one language to another and *vice versa*, but also performs "modulating" acts such as persuasion, consent, lies as well as posing questions, accusations, forming negations or coordinating the interaction. One of the main dilemmas in interpretation is related to the problem of literality *versus* freedom. The interpretation of this type as a specific communicative process is perceived in many ways. According to the older and yet still dominant approach, it is to be a mechanic and transparent process of literal translation (Morris 1995: 27). As viewed in more modern approaches, it is a specific and at the same time particular communication process, in which interpretation activities are based on the reasonable understanding of the sender's speech (Morris 1995: 27–28). Morris is also of the opinion that in order to provide proper interpretation one has to break with the standard procedure consisting in literal translation. This situation is complicated by the legal liability of interpreters, which certainly *does* influence the adopted interpretation strategy (cf. Wadensjö 1998: 45). It is worth adding that the inconsistency between the theory and the images of the interpreter's role and practice results in the situation where there are contradictory requirements and expectations towards interpreters. However, interpreters' position should not be diminished, as their role at various stages of criminal procedure certainly has a large impact on the proceedings, although in practice this is the very fact which is not taken into consideration to the degree it deserves (Wadensjö 1998: 45).

Concluding remarks

Saying that the interpreter's immersion in a communicative constellation has no consequences follows from a lack of knowledge concerning this type of interpretation, extreme simplification as well as the application of *stricte* wishful thinking, which has nothing in common with empirical observations. Idealised views of an ideal interpreter who is impartial and distanced emotionally, invisible and possessing all the sub-codes of particular national codes points to a certain striving, but does not reflect the actual situation, as ideal interpreters do not exist and the communication *via* language is imperfect in itself.

The role of the interpreter immersed in communicative situations related to criminal procedure is a very complicated subject involving numerous aspects, not only due to the issues concerning the interpretation process itself, but also because (as I have already mentioned on many occasions) each communication participant has a different view of the interpreter's position (Berk-Seligson 1990/2002: 2). In didactic literature the view is prevailing according to which interpreters are invisible participants of communicative situations in which they are perceived only as transmitters between the languages, resistant to all the factors accompanying the communication act. This very traditional perception of interpretation as the transcoding of the sense by the impartial and "invisible" linguistic intermediary not as a complex interaction with the participation of numerous people — each of them contributing specific knowledge and convictions — shapes an unreal image of the situation. In addition, this takes place in a specific social context, having a strong reflection on its course. And although, as we have seen, contemporary theoretical research, based mainly on the achievements in the field of pragmatics, proposes to consider those and other variables in the analysis of interpretation, they are not to be fully applied in the description of the analysed interpretation process. The specificity of the communicative situation causes various problems which do not occur in such a number in other types of interpretation — e.g. a huge weight of responsibility as well as the constant making of quick choices in unfavourable conditions. As an interpreter strives to achieve possibly the highest accuracy in interpretation (Hale 2008: 119), the issue of coding and decoding is brought to the foreground, as is the issue of sub-coding as well as the superior topic of placing the interpreter in non-static, variable and complex communicative situations. Due to the above, we have to perceive interpreters as subjects instead of seeing them according to the traditional understanding as a *transparent objective translators*. Interpreters are not simply language intermediaries. On the contrary, they should be perceived as the main players in a bilingual inter-cultural communication (see Hale 2004: 13–15).

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On theoretical, practical and cognitive aspects of notarial translation

Abstract: *Notarial translation* is a specific form of interlingual transfer which combines several aspects of other translation modes. The aim of this article is to present the theoretical and practical aspects of *notarial translation* with special attention paid to the translation process and cognitive operations performed by the translator. In the first part, the article presents the definition of *sight translation* as a mode of *notarial translation* in the context of *legal translation* and *simultaneous interpreting*. Next, it discusses the composition and characteristic features (lexical, syntactic and stylistic) of documents which require certified translation and may be the source of difficulties in *sight translation*. After that, the process of *sight translation* in the notary's office is described with special attention paid to practical issues such as the stages and participants of the translation process, the nature of the translation input and output, and the differences between *sight translation* and other modes. Finally, the process of *sight translation* in the notarial context is analyzed from the perspective of the psychological and cognitive processes which are activated in the translator's mind and which make this type of oral interlingual transfer possible.

Key words: notarial translation, sight translation, specialized translation, certified translation, cognitive processes.

Introduction

In their professional practice certified translators are frequently requested to translate documents drafted in a notary's office. The Polish Act on Notaries stipulates that notarial activities shall be performed in the Polish language (Ustawa o Notariacie, art. 3, ust. 2, 1991) and if it is not possible because "a person participating in notarial activities … does not know Polish and a translation into another language known to this person is not attached to this notarial activity, the civil law notary is obliged to translate the deed or any other document personally or with the help of a translator" (Ustawa o Notariacie, art. 87, ust. 1, 1991: 54) [translated

by I.S.]. The act further specifies that "at the request of a party, the notary may additionally perform the notarial activity in a foreign language, using their own command of this foreign language demonstrated in the way specified for certified translators or with the assistance of a certified translator" (Ustawa o Notariacie, art. 3, ust. 2, 1991: 1) [translated by I.S.]. As can be seen, the Polish law clearly stipulates that the presence of a certified translator is indispensable if one of the participants of the notarial activity is not able to communicate in Polish, otherwise such activities may be legally ineffective and invalid. The translation should be provided by a certified translator or by a notary who has obtained a license of a certified translator by passing a state examination for certified translators and interpreters pursuant to Article 2 (1) (6) of the Act on the Profession of a Certified Translator. The information that these conditions (i.e. that the text was translated by a certified translator or by a notary with a license of a certified translator into the language known by the foreign person) have been complied with should be included in the introduction to the notarial deed. The most common method of translation used by certified translators in a notary's office is *sight translation*. Sometimes also *consecutive interpreting* or *written translation* may be needed.

The aim of this article is to present the theoretical and practical aspects of *notarial translation* with special attention paid to the translation process and cognitive operations performed by the translator. In the first part, the definition of *sight translation* as the mode of *notarial translation* will be presented in the context of *legal translation* and *simultaneous interpreting*. The next section of the paper will focus on the types of notarial documents which require certified translation, and further it will discuss their composition and characteristic features (lexical, syntactic and stylistic) which may be the source of difficulties in translation. Next, the process of *sight translation* in the notary's office will be described with special attention paid to practical issues such as the stages of the translation process, the nature of the translation input and output, participants in the translation process, and differences between *sight translation* and other modes. Finally, the process of *sight translation* in the notarial context will be analyzed from the perspective of psychological and cognitive processes which are activated in the translator's mind and which make this type of oral interlingual transfer possible.

1. Defining notarial translation and sight translation

Translating and interpreting documents for notarial purposes is a specific form of interlingual transfer. As already mentioned, the method most frequently used in translation of notarial documents is *sight translation,* which, in comparison to *written translation*, is the mode most time- and cost-efficient and most appropriate in situations in which the presence of a certified translator in a notary's office is required.

Sight translation is defined as a specific type of translational activity, in which the translator silently reads a text written in one language and simultaneously transfers it orally into another language. Because of the presence of the written input and oral output, *sight translation* is described as a hybrid of translation and interpreting combining features of these two modes. Owing to the dual nature of this activity, there is lack of consensus on how it should be defined or named (González, Vásquez and Mikkelson 2012), and in various classifications translation/interpreting scholars at times ponder whether this type of interlingual transfer has more in common with interpreting or translation. The Polish term for *sight translation* is *a vista translation*. *A vista* in musicology means reading and performing a piece of music without preparation, whereas in Polish banking terminology it refers to a deposit account payable at request. This aspect of immediacy and lack of preparation is emphasized by Kopczyński, who in his definition of *a vista translation* as "tłumaczenie na żywo z tekstu" (1997: 1) (i.e. live translation from a text) underlines the fact that the translation takes place in real time, the input is presented in the written form and that the translation is performed without earlier preparation. As mentioned by Lambert, *sight translation* may be perceived dichotomously "as a specific type of *written translation* as well as a variant of oral interpretation" (2004: 298). However, according to Moser, *sight translation* is more similar to *simultaneous interpreting* due to the involvement of such variables as time pressure, anticipation and the oral modality of the task (after Lambert 2004). According to Pieńkos (2003: 149), however, *sight translation* from the methodological perspective should be classified as a type of *consecutive interpreting*, and, on account of its oral nature, as a variant of *simultaneous interpreting*. Gile, on the other hand, defines *sight translation* as "oral translation of written texts" and excludes it from the field of *interpreting*, which in his classification is reserved for "the oral translation of oral discourse" (Gile 2004: 40). Summing up, in the majority of typologies *sight translation* is classified as one of the three basic modes of *simultaneous interpreting* (the other being *simultaneous interpreting proper*, *whispered interpreting — chuchotage*) (Kopczyński 1997; Pieńkos 2003; Tryuk 2007) due to the oral modality of the translation product, the simultaneity of the comprehension and production phases as well as the cognitive load which is similar to the one of *simultaneous interpreting*.

Sight translation is sometimes referred to as *sight interpretation*. However, these two terms are not synonymous as *sight interpretation* is in fact another variant of interlingual transfer. According to Jiménez (2000), there exist several types of *sight translation*, the classification criteria of which are the degree of complexity, (lack of) preparation and the access to the source text:

1. *sight translation proper* — an oral transfer of a written text seen for the first time performed without earlier preparation,

2. *prepared sight translation* — an oral transfer of a written document with some time given for earlier preparation of a text (Jiménez talks about little time

for preparation, but in certain situations in a notary's office the translator may be given more time or even prepare the text in advance),

3. *consecutive sight translation* — either synthetic or explanatory — an oral summary for gist translation or explanatory translation of a written text,

4. *sight translation in consecutive interpretation* — a non-linear oral transfer of a written text read by a lecturer — the interpreter translates from a copy of a text read by a lecturer, which replaces to a certain degree interpreter's notes, and to which the interpreter was given access beforehand; the interpreter has to follow both the written text and the lecturer and watch out for any modifications or omissions which may be introduced while the text is read aloud (Jiménez 2000; Bowen and Bowen 1990),

5. *sight translation in simultaneous interpretation with a text* — also called *sight interpretation, recited interpretation* or *documented simultaneous interpretation*. *Sight interpretation* is defined, for example by Lambert (2004: 299), as a type of *simultaneous interpreting* in which the input is presented both orally and visually — the interpreter sitting in a booth is provided with a written copy of the text spoken by the presenter, and can consult it while interpreting simultaneously what is being said. As already mentioned, *sight interpretation* is sometimes confused with *sight translation*, but, as can be seen from the above, there is a considerable difference concerning the mode of text presentation. While in *sight translation* the text is presented only in a visual form, in *sight interpretation* the source text is provided both orally and visually, with the auditory input being the dominant one. *Sight interpreting* takes place, for example, during conferences when interpreters receive a text of a speech to be interpreted simultaneously (so they interpret what they hear but at the same time they can consult the written version) or when they interpret visual aids such as slides, tables or graphs presented to the audience.

As far as *sight translation* is concerned, it involves information processing of elements and patterns characteristic both of *simultaneous interpreting* and *written translation*. Among the features which make *sight translation* similar to *simultaneous interpreting* is the synchronic processing of the input and output, which means that the reception of the source text and the production of the target text occur simultaneously. It requires from the translator divided attention between visual input and oral output and good coordination of the reading and production processes. Consequently, *sight translation* resembles *simultaneous interpreting* in that it requires simultaneous monitoring and correction of production while decoding and comprehending the source text. Moreover, in *sight translation* the product is an oral text which may be imperfect in terms of style or certain grammatical elements and due to time pressure translators may omit some information or terminology and provide a summary translation of the original. What is more, in *sight translation*, like in *simultaneous interpreting*, the translation produced is usually a final version since there is little or no time for corrections and translators, like interpreters, usually rely exclusively on their knowledge and memory,

as they have no access to resources such as dictionaries or lexicons. Additionally, *sight translation* is similar to *simultaneous interpreting* in that the translator works under significant time pressure and has limited time for corrections or memory search, which consequently requires good concentration and divided attention (González, Vásquez and Mikkelson 2012; Biela-Wołońciej 2007).

On the other hand, the features which make *sight translation* more similar to *written translation* are, first of all, the written form (paper or electronic) of the source text which is presented through a visual channel. In *written translation*, the author and the client are usually distant, absent and do not participate in the translation process. While in general this is true for *sight translation*, in the notarial settings it depends on the arrangement — if the documents for translation have been prepared earlier either by clients or some other institutions — the author is absent; if the documents have been prepared by the notary — the author of the source text is present. Another similarity to *written translation* is that the documents presented in a written form tend to be more complex and intricate with longer sentences and may be more packed with specialized terminology than the spoken language. This higher terminological density of the written form may pose significant challenges to the translator, who needs to be familiar with the topic and specialized terms contained in the translated text. Furthermore, another aspect making *sight translation* similar to *written translation* is the written form of the input which in both modes is permanent and non-transient. It means that the source text does not disappear the very moment it is read (as it does in *simultaneous interpreting*) and consequently the translator can access and consult it at any point of the translation process (González, Vásquez and Mikkelson 2012; Biela-Wołońciej 2007). Theoretically, it means that in the case of any difficulties the translator may go back to clarify the meaning, introduce necessary corrections, ask for explanation or even consult a dictionary (preferably, an on-line dictionary). Practically, however, there is usually little time for such operations, but the awareness that the text is accessible during the whole translation activity and does not disappear irretrievably lowers to a certain extent the stress factor which is experienced in *simultaneous interpreting*. Another feature shared with *written translation* is the nonlinear reception of the source text, which means that the translator can move backwards or forwards, for example, to find the lost subject in a long complex sentence, or anticipate the meaning of the whole passage (González, Vásquez and Mikkelson 2012). Finally, another aspect which makes *sight translation* similar to *written translation* is the earlier access to the source text. In certain situations, court interpreters, certified translators as well as simultaneous interpreters may review the source text before translating it, which enables them to comprehend its general sense and even prepare terminology, if necessary. In fact, allowing the court translator sufficient time to get familiar with the text content is a practice recommended by the American National Association of Judiciary Interpreters and Translators (NAJIT) (Erickson

et al. 2006) or by TEPIS — Polish Association of Certified and Specialized Translators (Kierzkowska 2005, § 70).

Some of the above-mentioned similarities to *written translation* (prior and nonlinear access to the source text, permanent nature of the text, visual channel of presentation) make *sight translation* a less demanding and stressful task than *simultaneous interpreting*, whereas others (especially, higher terminological density, more complex syntax and lexis) create additional challenges. Despite the similarities, *sight translation* is considered to be closer to *interpreting* than to *written translation*, especially on account of its oral modality and the simultaneousness of the reception and production processes (Dragsted and Hansen 2009).

Sight translation has a number of various applications, including (business) meetings and negotiations (where written documents such as preliminary contracts, business correspondence, or invoices, etc., are sight translated), in *consecutive* and *simultaneous interpreting* during conferences and presentations (before a conference interpreters may sight translate a document to review vocabulary and prepare for the interpreting assignment; during a conference there may be a need to sight translate visual aids presented — in this case it is called *sight interpretation*), or dictating draft translations (to be later processed with text-to-speech recognition applications). *Sight translation* is as well a common mode of interlingual transfer employed in *community interpreting* for communication in medical, legal or social service settings (hospitals, courts, police, schools and other social life institutions). Furthermore, *sight translation* has a variety of applications in *legal translation* and *court interpreting*, when a certified translator has to sight translate a wide spectrum of official and legal documents which may appear in court proceedings, e.g., witness statements, medical and police reports, affidavits, orders, sentences, probation orders, birth certificates, personal letters, identity documents, etc.

As mentioned above, *sight translation* is extensively used in legal and official contexts, and therefore it may also be seen as a subtype of *legal translation* and *court interpreting*. In fact, American National Association of Judiciary Interpreters and Translators (NAJIT) recognize *sight translation*, apart from *simultaneous* and *consecutive interpreting*, as the official mode of legal interpreting for court purposes (Erickson et al. 2006). In the Polish context, *sight translation* (known as *a vista translation*) is mentioned in the Polish Code of Certified Translators as one of the modes of interpreting, which certified translators, apart from *written translation*, should be able to perform in court settings (Kierzkowska 2005). Moreover, the official status of *sight translation* as a type of *legal (certified) translation for court purposes* is confirmed by the fact that in the oral part of the state examination for a certified translator carried out by the Polish National Examination Board the candidate has to interpret consecutively two texts from Polish to a foreign language and sight translate two texts from a foreign language to Polish (Rozporządzenie Ministra Sprawiedliwości 2005). Finally, *sight translation* is considered to be a use-

ful pedagogical tool and transitional skill in interpreter training used in preparation for *consecutive* and *simultaneous interpreting*.

Returning to *notarial translation*, there are several ways into which it can be classified. It belongs to the category of *simultaneous interpreting* due to the mode of interlingual transfer employed in this activity (*sight translation* and sometimes *consecutive interpreting*). However, with regard to the type of documents which are sight translated in a notary's office, *notarial translation* can also be classified as a type of *legal translation*. *Legal translation* is defined as a type of *specialized translation* (Cao 2010), and in the broadest sense it may refer to the translation of any text type within the field of law — or, in other words, any documents required in legal settings by the civil and criminal law justice systems, i.e., for various types of state institutions and organs, including but not limited to, courts, police, business, administrative and educational institutions. Moreover, *legal translation* may be classified into several categories according to the subject matter, status and functions of the source language texts (Cao 2010). For example, within the last category, in which legal texts are grouped according to their function, Šarčević (1997: 11) differentiates the following three types of *legal translation*:

— laws, regulations, codes, contracts, treaties, and conventions which are normative texts with a "primarily descriptive" function, whose purpose is to instruct individuals on the recommended, prohibited, or permitted course of action;

— judicial decisions and legal instruments used to carry on judicial and administrative proceedings such as actions, pleadings, briefs, appeals, requests and petitions — which are descriptive legal instruments with prescriptive parts;

— scholarly works, including legal opinions, law textbooks, articles — which are purely descriptive in their nature.

There are other classifications possible; for example, according to Jopek-Bosiacka (2009), *legal translation* comprises civil law and commercial agreements, companies and partnerships documentation, normative acts, European Union acts, and court documents. It is also worth noting at this point that within the scope of *legal translation* Jopek-Bosiacka (ibid.) differentiates *court translation* as a special category of *legal translation*, which is performed mainly by certified translators.

Generally speaking, the scope of *legal translation* is very broad, as it may pertain to the translation of any text used for communication in legal circumstances. Some of these documents, if used for office and legal purposes, need to be translated or authenticated by a certified translator, who will confirm that the translation corresponds to the content of the original document and transfers its meaning correctly and accurately. Only such translation will be formally accepted and admitted to official, legal and administrative matters. Consequently, we may consider *legal translation* to be a broader concept, comprising the subtype of *certified translation*. As Kubacki (2012) claims, the classification of *certified translation* depends on the type of the institution in which this type of translation is provided. Accordingly, the services provided in court will be named *court interpreting/translation*, whereas
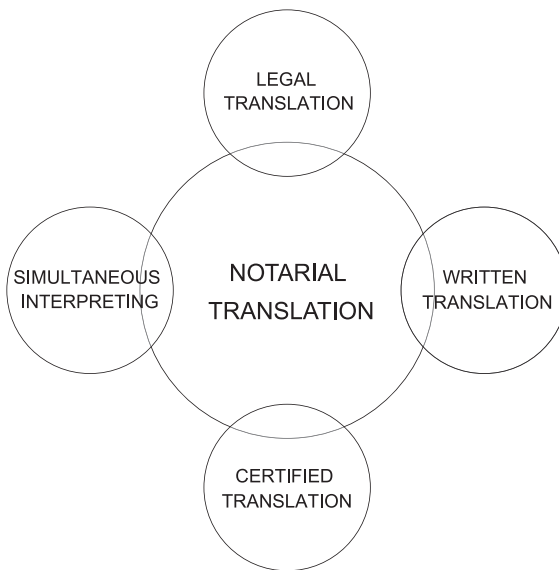
Figure 1. Notarial translation

those rendered in a notary's office will be named *notarial translation*. Following this line of reasoning, *notarial translation* can also be described as a type of *certified translation*, as all translation activities in a notary's office to be legally binding have to be performed by a state-authorized certified translator.

Summing up, *notarial translation* is a complex translational activity, which belongs to the realm of *legal translation* on account of the type of documents translated, and requires interpreting skills, as due to the mode of delivery and cognitive effort, it is similar to *simultaneous interpreting*. However, it also bears some similarity to *written translation* owing to the modality of the input, and additionally has to be performed by a state-authorized certified translator.

2. Practical aspects of notarial translation — the structure and stylistics of a notarial deed

Documents which are translated in a notary's office are of official and legal character and in the Polish context these are usually notarial deeds drafted by a notary for a specific notarial activity, such as formation documentation, partnership agreements, property sale agreements, powers of attorney or donation agreements.

The powers and duties of notaries public in common law countries differ significantly from those of civil law notaries in continental Europe countries.

Notaries public have a rather limited scope of powers in comparison to civil law notaries and generally serve as public officials, whose duties are basically to administer oaths, take sworn statements, and verify the identity of a person who executes a legal document (Berezowski 2015; The Faculty of Notaries Public in Ireland; New Jersey Notary Public Manual). Civil law notaries, or Latin notaries, in Roman law-based systems are legal professionals educated in the field of law, whose scope of duties is wider than that of notaries public, because, apart from authenticating legal documents or confirming the identity of persons executing legal documents, they are authorized to draw up notarial documents such as wills, contracts and deeds for the sale of real estate or donation (Berezowski 2015; Civil Law Notary).

As above mentioned, pursuant to the Polish Act on Notaries of 1991 all notarial activities should be conducted in the Polish language (Ustawa o Notariacie, art. 3, ust. 2, 1991). If one of the parties to the notarial activity is not able to communicate in and understand Polish, then notaries are obliged to use the services of a certified translator or translate all necessary documents by themselves, provided they have obtained a certified translator qualifications as stipulated in the Act on the Profession of a Certified Translator of 2004 (Ustawa o zawodzie tłumacza przysięgłego 2004). Another person possessing the same qualifications as a certified translator is a consul, who is authorized to translate and authenticate the translations of documents from Polish to the official language of the host state and *vice versa*. The activities performed by a consul have the same legal force as the services provided by a certified translator in Poland (Ustawa o funkcjach konsulów 2002).

In Poland the duties of civil law notaries are regulated by the Act on Notaries of 1991, which states that a civil law notary is a person of public trust appointed to perform activities which the parties are required or desire to conclude in a notarial form and consequently legitimate activities performed by a notary have the nature of an official document. Pursuant to article 91 thereof, the notary prepares a notarial deed in situations when such a form is required by law, as well as when the parties express such a will, although no legal requirement exists (Prawo o Notariacie 1991). In accordance with the above regulation, Dunin-Dudkowska divides notarial deeds into two groups: obligatory deeds (notarial form is required by law) and non-obligatory deeds (notarial form is the wish of the parties). The first group comprises a number of documents such as transfer of ownership agreement, donation agreement, marital property agreement, articles of association and statutes of a joint stock company, limited liability company deed, minutes from general meetings, some powers of attorney and authentication of signatures. In the other group the notarial form is not obligatory for some types of agreements, testaments and declarations of will (Dunin-Dudkowska 2010). As stated in article 73 § 2 of the Polish Civil Code (1964), if the law

stipulates that a legal act should be made in a notarial form, an act made without observing this form is invalid. Therefore, taking into account the wide range of documents which have to or may be concluded in a notarial form, *notarial translation* may, in practice, pertain to any documents required in notarial activities in which one of the parties does not speak the Polish language. Among the notarial documents which may have to be sight translated by a certified translator are: real estate sale/purchase agreement, donation agreement, surrender of land ownership, transfer of the perpetual usufruct right to land, articles of association for a limited liability company, articles of association for a limited partnership, share transfer agreement, founding deed for a joint stock company and statutes for a joint stock company, resolution concerning lowering the share capital, declaration on the subscription for shares, etc. (Świgońska 2012). Moreover, there may also be a need to translate other documents which do not have to be drafted in a notarial form, but are necessary to complete a notarial activity, such as copies from land and mortgage registers, identity documents, copies of entries from a business entities register, copies of National Court Register entries, death records, etc. To provide a high quality translation, the sight translator should be familiar with the form of these documents and especially the form, structure, elements and specific language of the notarial deed.

A notarial deed is defined by Dunin-Dudkowska (2010) as a functional type of a text within public and institutional communication, with a specific structure, constructed in accordance with an accepted text type pattern. It is further characterized as a text of official and public character, governed by a rigid linguistic etiquette and strictly defined linguistic norms. A notarial deed is a document which is well thought-out and prepared beforehand, and therefore written in a precise and controlled way, with a clear and logical structure and a high level of cohesion. Moreover, as an official variety of a text type, a notarial deed lacks spontaneity and does not contain mistakes, redundant elements, erroneous or incomplete sentences which are typical of spoken language. A notarial deed is described as a text with a rigid structure, composed of three distinct parts. The main part, which consists of the record of the legal activity carried out, is embedded into a textual framework built of the initial and final parts. The introductory and the closing parts are the invariable components, which have to be included in all notarial deeds. The variable component is the body of the notarial deed, whose contents differ depending on the notarial activity performed, and "is built of autonomic texts organized around patterns typical of particular types of legal activities reflected in their corresponding text types (agreements, testament, power of attorney, minutes)" [translated from Polish by I.S.] (Dunin-Dudkowska 2010: 81). The typical structure of a notarial deed is as follows:

TEXTUAL FRAMEWORK

1. initial part (introduction/presentation of the parties)

a. repertory number,

b. TITLE (AKT NOTARIALNY),

c. the date and place of concluding the deed,

d. particulars of the civil law notary or their deputy drawing up the notarial deed, address of the notary's office,

e. particulars of the parties: names and surnames, parents' names, place of residence of the parties involved in the notarial activity, as well as their proxies and representatives,

f. methods of identification of the parties,

MAIN PART

g. subtitle,

h. statements of the parties concerning the declaration to participate in a specified legal activity and other necessary information — performing a specific legal activity,

i. description of the legal activity carried out (for example, for a real estate purchase agreement the main part will include the following information: declaration of the condition of the building, submitted documents, description of the object of the transaction, charges and encumbrances, price, date of release, specification of the person bearing the costs of notarial deed preparation, notary's instructions, land and mortgage register entry; for power of attorney — subtitle, declaration of will to appoint a proxy, specification of the type and cope of the proxy, indication of the person bearing the cost of the notarial deed).

TEXTUAL FRAMEWORK

2. final part

a. information on fees and taxes collected,

b. formula with a declaration that the deed was read, accepted and signed,

c. signatures of all persons participating and present during the preparation and conclusion of the deed,

d. signature and stamp of the civil law notary (Dunin-Dudkowska 2010; Prawo o notariacie, 1991, art. 92 § 1).

As Dunin-Dudkowska (2010) observes, the text type pattern of notarial deeds is the result of the act on notaries specifying the obligatory elements, as well as normative recommendations, exemplary educational texts for notaries, and authentic notarial documents. A certified translator should be familiar with the structure of a notarial deed, its elements as well as the terminology and expressions characteristic of each section, because they recur repeatedly in all notarial documents and familiarity with them simply facilitates the translation process.

According to the text typology presented by Zdunkiewcz-Jedynak (2008) and Malinowska (1995), a notarial deed belongs to the genre of official texts which are used in the sphere of law making and application, in administration and various types of institutions, or in regulations determining citizens' rights and obligations. Within the genre of official Polish, two stylistic varieties are distinguished: the official variety typical of various kinds of official and administrative documents and official-legal variety typical of legal acts. One of the distinctive features of the official style is its depersonalization, which is a characteristic tool of bureaucracy used to create distance and the air of formality. The official genre of a national

language is characterized by formal style, impersonality, conventionality, and precision of expression. These effects are achieved through specific linguistic means such as specialized terminology, bracketed definitions, lack of synonymy, use of performative and impersonal verb forms, use of formulas referring to legal acts and regulations, as well as various standardized means of text organization such as numbering and enumeration, reinforced with official stamps and signatures. According to Skubalanka (1995), official Polish is impersonal and schematic, whereas Wojtak (2004) among its characteristics enumerates directiveness (i.e. influencing the recipients' will), impersonality, official character of communication, elimination of colloquial expressions and expressive vocabulary, precision of expression (achieved through specific phrases, specialized terminology, lack of ambiguity, conventional text structure, clarity), and standardization in the sphere of text composition and structure.

In the light of the above, the language of notarial deeds belongs to the official and legal variety. As Dunin-Dudkowska (2010) specifies, the official style of this text category is manifested at three main levels:

— at the lexical and syntactic level — by means of specialized terminology, complex sentence structures and nominal structures;

— at the text structure level — by means of a schematic composition, segmentation of a text into clauses and paragraphs for better clarity;

— at the stylistic level — by means of standardized and conventional formulas for signaling the initial and final parts of the document, syntactic parallel structures, lexical repetitions and metatextual expressions such as "hereinafter referred to…".

She also notes that a notarial deed is a document which fulfills two main functions: performative by influencing and changing the behavior of its recipients and informative by informing the recipients about the changes of legal and administrative circumstances. She further indicates that notarial documents may serve only one aim (i.e. appointing a proxy) or several aims (or notarial activities) (i.e. establishing a company and drawing up its statutes) in a single document and they are accordingly classified as mono- and poly-intentional. The overall aim of a notarial deed is carried out by a sequence of illocutionary acts and by means of specific linguistic means (grammatical structures and specialized vocabulary). As further specified by Dunin-Dudkowska (2010), the performative function is realized by:

— performative verbs used especially in the third person singular (and sometimes also plural) in the present tense in the main part, where the parties express their intentions (e.g. *ustanawia pełnomocnika — appoints a proxy*, *wydaje nieruchomość — releases the property*, *udziela zgody — gives one's consent*, *sprzedaje nieruchomość — sells the property*, etc.);

— by performative verbs in the third person singular in the past tense in the narrative parts of the notarial deed — the introduction (the identification of the parties) and the closing part (notary's instructions and the final formula stating

that the act was read and signed) (e.g. *przewodnicząca oświadczyła — the chair-woman declared that*; *podjęto uchwałę — a resolution was adopted*, *tożsamość st-awających notariusz ustaliła na podstawie — the identity of the parties the notary established on the basis of*, *akt notarialny został odczytany, zaakceptowany i pod-pisany — the deed was read, accepted and signed*, etc.);

— by performative verbs expressing future actions in the main part in the section in which future obligations of the parties are stipulated (e.g. *stanowić będzie majątek osobisty — will be personal property*, *wydanie lokalu nastąpi — the release of the housing unit will take place on*, *nie będzie wnosić roszczeń — will not claim the property*, etc.).

Other grammatical forms which, according to Dunin-Dudkowska (2010), are used to fulfill the performative function, are modal verbs (e.g. *nie wolno — should not*, *może być przedłużony — may be prolonged*, *ma być zwrócony — has to be returned*, *wypisy można wydawać — copies may be issued*, etc.); passive voice (e.g. *cena zostanie zapłacona — the price will be paid*, *na przewodniczącego została wybrana — X was elected as chairperson*, etc.); and present participles (e.g. *oświad-czając, że — declaring that*, *postanawiając, że — deciding that*, etc.). Another characteristic feature is the reported speech which is used by the notary to report the legal activity carried out in an objective and impersonal way. Moreover, the official style of notarial deeds is also characterized by long, compound and complex sentences, usually enumerating several items. Another typical structure is the initial sentence of a notarial deed which begins with an adverbial of place and time and is followed by a predicate and a compound subject usually presented in a form of a list, complemented with detailed information about the participants to the notarial activity. A characteristic feature of such sentences is the inverted word order with a predicate coming before a subject, e.g.:

Dnia 20.12.2015 r. w kancelarii notarialnej notariusz Anny Kowalskiej przy ul. Krakowskiej 10 w X, stawili się Hanna Nowak oraz Jan Nowak.

On 20.12.2015 at the notary's office of the civil law notary Anna Kowalska at ul. Krakowska in X the following parties to the notarial deed appeared: Hanna Nowak and Jan Nowak.

As Dunin-Dudkowska (2010) observes, sentences of this type inform about the occurrence of certain circumstances and events. They use a compound subject and place all formal particulars in one sentence, which signifies their equal status and indicates the significance of the document content. The above-mentioned grammatical and syntactic features constitute a source of potential translation problems — especially long and complex sentences, with embedded clauses, compound subjects and long descriptions, e.g., of a property being sold in the notarial deed:

XX w imieniu swoich mocodawców YY and ZZ oświadcza, że są oni we wspólności mająt-kowej małżeńskiej właścicielami, stanowiącego odrębną nieruchomość, lokalu mieszkalnego nr 10, składającego się z dwóch pokoi, kuchni, łazienki — wc i przedpokoju o łącznej powierzchni użyt-kowej 40,00 m^2 (czterdzieści metrów kwadratowych), położonego na pierwszej kondygnacji budyn-

ku posadowionego w XX, przy ulicy Opolskiej nr XX, gmina XX, powiat XX, województwo opolskie, nabytego na podstawie umowy sprzedaży z dn. 10.10.2005 r., nr Rep. A XXXX/XX, objętego księgą wieczystą Kw nr OP X/YYYYY/Z prowadzoną przez Sąd Rejonowy w Prudniku, V Wydział Ksiąg Wieczystych, oraz że z własnością tegoż lokalu zawiązany jest udział wynoszący 210/10000 (dwieście dziesięciotysięcznych) w części nieruchomości wspólnej, która stanowi prawo użytkowania wieczystego do dnia 10 grudnia 2089 roku oraz części budynku i urządzenia, które nie służą wyłącznie do użytku właścicieli lokali, objęte księgą wieczystą Kw nr 39054 tegoż Sądu.

XX on behalf of her principals YY and ZZ states that in the statutory joint property of spouses they are the owners of a housing unit no. 10, which is a separate real property, consisting of two rooms, a kitchen, a bathroom — WC, and a hall, with the total useful floor area of 40.00 m^2 (forty square meters), located on the first floor of a building seated in XX, at ul. Opolska no. XX, commune of XX, district of XX, province of Opole, purchased on the basis of a sale agreement of 10.10.2005, Repertory No. XXXX/XX, registered in the land and mortgage register Kw no. OP X/YYYYY/Z kept by the District Court in Prudnik, V Division of Land and Mortgage Registers and that a share of 210/10000 (two hundred ten thousandths) in the joint property, which is the right of perpetual usufruct till 10 December 2089 and in a building and equipment which are not meant for the sole use of the housing units' owners is linked with the ownership of this housing unit, entered in the land and mortgage register Kw no. 39054 of the above-mentioned Court.

Such sentences may be troublesome in *sight translation*, as their complexity lowers their comprehensibility and consequently the translator has to concentrate in order to keep track of the sentence meaning, locate the subject and predicate, and not to get lost in the lengthy and convoluted explanations and descriptions.

At the thematic and lexical level notarial deeds operate mainly within the legal, economic and administrative sphere and describe formal relations and transactions taking place between the participants of notarial activities. This specialized legal, economic, and administrative terminology is another source of potential difficulties for the translator, who should be familiar with a wide range of specialized terms and idiomatic phrases characteristic of the legal and official language of notarial deeds. In *sight translation* the time pressure is lower than in *simultaneous interpreting* and in generally the pace of the translation process is regulated by the translator (González, Vásquez and Mikkelson 2012; Biela-Wołońciej 2007), who can theoretically stop the translation process and, if necessary, look up a problematic word or phrase in a dictionary. However, such a problem solving technique may be used occasionally; it is hardly imaginable that the translator would check more than one or a few words as it would look unprofessional. In *notarial translation* the translator sometimes may have the opportunity to review and prepare all the necessary terminology in advance, as it is quite a common practice that the notary prepares the draft of a notarial deed earlier and sends it via email to the translator. Nevertheless, sometimes unexpected changes in the character of the notarial activity may be required (e.g. instead of a donation agreement a sale contract is signed due to formal complications) or the translator does not receive a draft of the notarial deed beforehand. Therefore, the knowledge of specialized legal and economic terminology is one of the essential skills of the certified translator, who apart from linguistic skills

should also have a vast knowledge about the legal, economic and administrative institutions and procedures of the source and target language countries. Specialized terminology in notarial deeds revolves around the activities performed at a notary's office and is related to the following spheres: property transactions and relations (e.g. property sale, purchase, inheritance, donation, transfer of ownership right, joint property, mortgage, usufruct, lease and rental); commercial companies activities (e.g. establishing a company, drawing up company's formation documentation); appointing a proxy, family relationships and affinity, descriptions of marital status. As Dunin-Dudkowska (2010) observes, one of the characteristic features of notarial language is high degree of nominalization, which means that in terms of frequency nouns outnumber other parts of speech. The following groups of nouns can be differentiated:

— nouns related to the above-mentioned topics (e.g. *akt*, *odpis*, *hipoteka*, *pełnomocnictwo*, *testament*, *udział*, *wartość*, *mocodawca*, *nieruchomość*, *właściciel*, *spadek*, *cena*, *odbiór*, *spółka*, *wspólnicy*),

— complex noun phrases (e.g. *ustanowienie służebności*, *dokonanie wpisu*, *nabycie nieruchomości*, *podpisanie aktu*, *wykreślenie hipotek*, *zawarcie aktu notarialnego*, *zabezpieczenie spłaty wierzytelności*),

— present participles (e.g. *stawający*, *sprzedający*, *kupujący*),

— idiomatic expressions and syntactic groups (e.g. *wspólność ustawowa majątkowa*, *lokal użytkowy*, *wydanie przedmiotu sprzedaży*, *hipoteka umowna zwykła*, *prawo użytkowania wieczystego*, *umowa majątkowa małżeńska*, *kredyt mieszkaniowy hipoteczny*, *umowa spółki*, *zgromadzenie wspólników*).

According to Dunin-Dudkowska (2010), verbs constitute a significantly less numerous group, with past and present third person performative verbs being the most common (e.g. *zawierać*, *kupować*, *sprzedawać*, *powoływać*, *wnosić*, *udzielać*, *zobowiązywać się*, *potwierdzać*). Other forms which frequently appear in notarial deeds are past and present particles used for describing nouns (e.g. *udzielony*, *płatny*, *opisany*, *zabezpieczony*, *wynikający*, *położony*, *obciążony*, *objęty*, *wpisany*, *prowadzony*, *wynoszący*, *mający*, etc.).

To sum up, a notarial deed is a highly standardized and specialized text of normative and utilitarian character. Its structural and stylistic features (high degree of objectivity and impersonality, rigid text structure, characteristic text organization, standardized formulaic character, explicitness and precision of communication, idiomatic and specialized legal, economic and administrative terminology, formal register, elimination of synonymy and ambiguity, lack of expressivisms and colloquialisms, and high frequency of nominal phrases) give the notarial deed its specific character of an official and legal text, and from the translation perspective constitute a source of potential difficulties in *sight translation*. The tricky areas are specialised terminology, long and complex sentences with compound subjects, convoluted descriptions, long enumerated lists of items or activities with detailed

descriptions blurring the word order, standardized legal and official language for-
mulas, and formal, conventionalized style.

3. The process of notarial translation — cognitive and psychological aspects

The process of *notarial translation* is composed of several stages. In a typical
workflow scenario, a certified translator is contacted either by a civil law notary
or one of the parties and informed about the date, place, and the character of the
notarial activity. Usually, the notary prepares a draft of a notarial deed beforehand
and, as above mentioned, sends it to the translator, who reviews it and prepares the
draft translation in advance. Thanks to this practice, the translator has a chance
to get familiar with the document content, verify specialized terminology and
pre-translate especially intricate fragments. Of course, sometimes certified transla-
tors are called to provide translation services at short notice and in such a case they
do not receive the document in advance and have no time for earlier preparation.
Thus, depending on the arrangement with the notary, the translator will either
perform sight translation proper without preparation or *prepared sight translation*.
The very translation process may be carried out in two working modes. In the first
mode, the notary reads out the previously prepared draft of a notarial deed in the
presence of all parties, introduces all necessary corrections and modifications; the
document is then sight translated by a certified translator, and if no further correc-
tions are necessary, it is accepted and signed by all the parties. In the second mode,
the translator sight translates the draft document first, next corrections are intro-
duced if such a need arises, and then the civil law notary reads out the final version
of the notarial deed, which is subsequently accepted and signed by the parties.

As far as the cognitive and psychological aspects are concerned *sight translation*
is similar partially to *simultaneous interpreting* and partially to *written translation*.
It resembles the simultaneous mode in this sense that the comprehension of the
source text and production of the target text occur concurrently. The simultaneity
of these two processes implies greater mental effort than in *written translation*, as
the translator has to process information in two channels at the same time. Addi-
tional mental load may also be created by the fact that the modalities of the input
and output in *sight translation* differ (the input is written and the output is spoken)
and the translator has to switch from the written to the oral mode. According to
Gile (1997), in *sight translation* the memory effort required is less intense than in
simultaneous and *consecutive interpreting* on account of the constant access to the
source text. For this reason, the translator's memory is less loaded as translators
do not have to store the units being processed in their short memory. In this sense
sight translation resembles *written translation*, in which the translator concentrates

on one translation segment at a time and does not have to divide their attention between the comprehension and production efforts. By contrast, in *simultaneous interpreting*, according to Gile's Effort Model (2009), translator's working memory is occupied with four efforts: 1) comprehension of the source text, 2) reformulation of the target text, 3) storing translation units which are being processed, 4) coordination of the three previous functions. Although in *sight translation* translators do not have to memorize the unit processed until it is reformulated into the target language while listening at the same time to the new translation unit being spoken, they still have to divide their attention between the comprehension and production stage. However, according to Gile (2009), the constant presence of the source text before the translator's eyes poses another difficulty as it increases the risk of native language interference. Consequently, to avoid source language interference sight translators need more intense concentration and anti-interference effort. Nevertheless, there also exist opposing views on whether the presentation of the source text in the visual form enhances or hinders translators' performance. According to Agrifoglio (2004), the continuous presence of the source language text affects the reexpression of the message in the target language as well as hinders the ability to coordinate the tasks of silent reading and oral translating. Lambert (2004), on the other hand, found out in her studies on the processes of *sight translation*, *sight interpretation* and *simultaneous interpreting* that the visual presentation of the source text supported the performance of her subjects.

There are two major constraints in *sight translation:* the simultaneity of the reception and production processes and the difference between the modality of the source input and the target output (lexical density, change from written to oral mode). Additional constraint in *notarial translation* is the specialized terminology of notarial texts.

The process of *sight translation* resembles *simultaneous interpreting* and differs from *written translation* from the perspective of information processing. According to Gile (1997), written translators process the text sequentially (they first read the source text unit, comprehend it, develop a meaning hypothesis, reconstruct the source language meaning in the target language, write down the translation, verify its fidelity, correctness and acceptability, introduce necessary modification and produce the final version), whereas in *sight translation* information processing occurs concurrently. This simultaneity of mental operations "imposes a severe strain on human channel capacity" (Lambert 2004: 296) and requires from the translator well-developed multitasking and divided attention skills. Although *sight translation* is often considered to be less demanding than *interpreting*, it is, in fact, a multifaceted process, which, according to Loreto (2007) involves the activation of a variety of mental operations, requires intense concentration, vast general and specialist knowledge, a range of specific linguistic and cognitive abilities, along with psycho-physiological qualities. In contrast to the sequential nature of

the *written translation* process, in *sight translation* the reception, deverbalization, comprehension of the source text, and then the reformulation and production of the target text take place at the same time. As a result, in *sight translation* the comprehension stage constantly overlaps with the production stage, which means that the translator's mind has to operate in two channels at the same time: in one channel the translator is reading, analyzing, comprehending and preparing for the translation of the next translation unit, while in the other she is producing the translation of the previously comprehended translation fragment. Weber (1990: 47–48) describes this process as a flow: "Once one of these [meaning] units has been clearly conceptualized in the speaker's own mind, he will then enunciate it, while at the same time concentrating on conceptualizing the following meaning unit, and so on". The cognitive load is enhanced by the simultaneity of these two processes and the effort invested into their smooth synchronization (Gile 2009; Agrifoglio 2004).
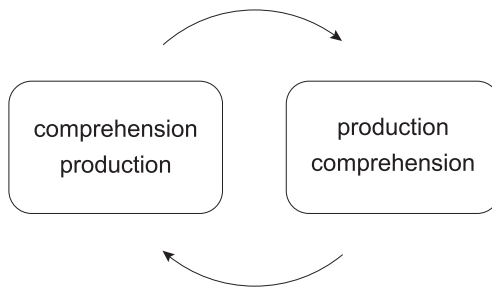
Figure 2. Simultaneity in sight translation
Source: on the basis of (Weber 1990).

Accordingly, in *sight translation* the translator's mind is constantly occupied with multiple processes, and additionally it has to work in two text modalities. This shift from the written mode of the input to the oral mode of the output, due to the different characteristics of these two text types, is considered to produce additional cognitive strain. In general, it is assumed that interpreters and translators adopt fundamentally different working methods and strategies (Gile 2009; Agrifoglio 2004). According to Dragsted and Hansen (2009) and Gile (2009), translators tend to spend more time selecting an appropriate equivalent and process one translation unit after another producing more literal or faithful translations, whereas interpreters tend to work faster, look for the main idea to get the gist understanding of a larger text fragment, store this main idea in their memory and then reformulate it using the strategies of condensation and compression. Consequently, translators may tend to focus more on words, whereas interpreters will reconstruct the message from the semantic content.

In view of that, the process of *sight translation* seems to combine the translators' and interpreters' working modes. According to González, Vásquez and Mikkelson (2012), in *sight translation proper* (without preparation) the translator scans the document to determine the topic, content and get the general idea of the document meaning. Then, the translator starts "translating sentence by sentence, focusing on one unit of meaning at a time. As the interpreter [in *sight translation*] is uttering the translation of one unit, her eyes are scanning the next unit and she is analyzing its meaning in preparation for translating it" (González, Vásquez and Mikkelson 2012: 902). Moreover, to be able to understand the whole translation unit and plan the target language form, the translator has to read ahead to identify key words, the subject and predicate of each sentence, and anticipate the meaning in the further parts of the translation unit (Agrifolio 2004). This ability is especially important in *court interpreting* and *legal* and *notarial translation* in legal and official texts, which frequently contain long and complex sentences. According to Błaszkowska (2012), in *sight translation* the translator does not concentrate on individual words and sentences but makes an attempt to take in the whole translation unit or its bigger fragment. Thus, in the reception stage the translator comprehends the sense of the translation unit, and then deverbalizes it in order to get rid of the source text verbal form. Thanks to deverbalization, the translator can reformulate the meaning of the message in the target language and avoid literal translation.

Finally, another translation difficulty and additional cognitive burden is the terminological density and specialized lexis of legal and official texts. According to Chafe and Danielewicz (1987: 86), writers have more time to choose the most appropriate words and then refine their choices, whereas speakers have to make their decisions quickly and for this reason written texts in general contain more varied vocabulary than the spoken language. In *notarial translation* the certified translator is additionally restricted by specialized terminology, which has to be rendered precisely and "faithfully" — the translator has no freedom to omit or choose more general terms that "come first to their mind". The official character of the situation and legal consequences of the performed notarial activity force the translator to choose the most appropriate equivalent. Consequently, in *notarial translation* the certified translator may read the text to obtain the general semantic meaning of the text, but in the production stage she has no freedom to use condensation or omission strategies, characteristic for *simultaneous interpreting*, but has to translate the text sentence by sentence, paying careful attention to all specialized terms. In notarial texts the translator has to look for the best equivalents and transfer specialized terms faithfully. This requirement concerns the lexical level of the text, whereas on the syntactic plane literal translation should be avoided and constructions typical for legal texts in the target language should be used.

Concluding remarks

Summing up, *notarial translation* is a specific form of interlingual transfer which combines several aspects of other translation modes. First of all, *notarial translation* is a form of *legal translation*, as it is performed on official documents drafted in a notary's office concerning legal, administrative or business matters. On this account *notarial translation* may also be classified as *specialized translation*, as it requires expert knowledge in the fields of law, economy, business and administration and familiarity with specialized terminology characteristic of these fields. In this sense *notarial translation* is an act of specialized communication, in which the participants engage in various legal activities, whose legal correctness and validity is guaranteed and confirmed by the civil law notary. Furthermore, *notarial translation* is usually performed by means of *sight translation*, which combines certain aspects of *simultaneous interpreting* and *written translation*. It is also a type of *certified translation* as it can only be provided by a certified translator or a civil law notary who obtained such a qualification by passing a state examination. The major constraints in *sight translation* creating a cognitive burden for the translator are the simultaneity of the reception, reformulation and production processes and the change of modality from written to oral, which, according to some studies, facilitates the translation process or constitutes a source of additional difficulties related to language interference. In *notarial translation* another constraint is the official character, specific structure, specialized terminology and complicated syntax of a notarial deed, which belongs to the genre of official texts. All these aspects of *notarial translation* require from the translator a specific set of skills of which *sight translation* and *sight translation*-related cognitive and psychological abilities are a significant component.

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Interpreting from L2 (English) to L3 (German) — a cognitive approach

Abstract: The paper is aimed at investigating cognitive aspects of interpreting from one foreign language (L2) into another foreign language (L3). The authors try to explain a transfer of linguistic knowledge between two foreign languages, mainly how trilinguals transfer semantic and conceptual information in the process of interpreting, and to what extent they exploit their native language (L1).

Key words: interpreting from L2 to L3, trilinguals, cross-linguistic interaction, mental lexicon of Polish-English-German speakers.

Introduction

Thanks to numerous studies, the awareness of human potential in the field of mastering multiple languages is growing. More and more attention is paid to the organization of the linguistic knowledge in the mind and the processes that occur during the production and reception in each of the languages spoken. Researchers are also interested in the potential correlation between the knowledge of several languages and the process of acquiring a new language, cognitive development, and linguistic identity.

Methods such as magnetic resonance imaging and electrophysiological tests are increasingly used to answer questions about what happens in our brain when we hear, understand, and speak in a second language. Using these similar methods, Swedish scientists under the direction of Johan Mårtensson from the University of Lund have discovered that learning the second language can affect the brain size of the learners (Mårtensson et al. 2012).

It is believed that bilinguals enjoy mental fitness longer than monolinguals. Grounds for such an opinion were provided by a survey carried out in 2007 by a

team of researchers from York University in Toronto. The survey was repeated twice (Bialystok et al. 2007). The latest results of subsequent studies suggest that bilinguals succumb to dementia later comparing to monolinguals (Bialystok, Craik and Freedman 2012).

Researchers from the University of Hyderabad and the local Nizam's Institute of Medical Sciences examined the medical records of 648 patients diagnosed with dementia, among whom there were 391 bilingual people. The research team, headed by prof. Suvarna Alladi, determined at what age the first symptoms of the disease appear with each participant of the research. As it turned out, people speaking at least two languages experience such symptoms, on average, 4.5 years later than monolinguals (Alladi et al. 2013).

According to another researcher, positive effects of bilingualism on the brain lie in the fact that with a bilingual person both language systems in the brain are active even when the person uses only one language. It works like an extra dose of exercise for the brain and improves thinking. In addition, bilingual people are able to observe more effectively what is happening around them, and this is due to the need to adapt to the frequent switch of languages depending on the situation, e.g. when talking in different languages with different family members (Bhattacharjee 2012).

The research results of Centre de Recherche Public de la Santé (Luxembourg Institute of Health) (Perquin et al. 2013) showed that people speaking more than two languages less often struggled with cognitive problems comparing to those who are bilingual, and trilingual persons are three times less likely to have experienced cognitive deficits than those who are bilingual.

A mechanism that allows individuals to retain bilingual mental capacity longer than monolinguals has not yet been clearly explained and requires further research. Scientists explain the phenomenon that bilingual people using two or more languages are forced to switch back and forth between lexical, grammatical, and phonetic systems, providing their minds with the natural training that allows them to maintain the mental alertness much longer.

Neuro-linguistic aspects of trilingualism

Learning and memorizing are the processes taking place in the brain and, therefore, it is not possible to define a complete concept of these processes basing solely on the linguistic and psychological knowledge. The stage of research on brain functioning and significant scientific discoveries in this discipline are now an important source of information on the acquisition of a foreign language. The main current research focuses on two aspects: organization of the foreign language in the brain, and structural changes in the brain of multilingual people.

The psycholinguistic aspects of third language acquisition are a young and largely unexplored field of science. In recent years, psycholinguists have shown the increased interest in the organization of linguistic knowledge in the mind of the

person who has acquired at least three (inter) languages, as well as in the process-es that take place in the mind when acquiring further languages than the second language, and in the processes which occur during the production and reception in any of the known languages (Chłopek 2011: 11).

The acquisition of lexical elements in the third language (L3) takes place via the lexical representation of the native language (L1) or the second language (L2). The belief that the knowledge gained within learning the first foreign language should be revived in the learning process of further languages has been exploited for several years:

> In general, discussion of cross-linguistic influence has focused almost exclusively on the role of L1 in L2 production, both in the form of crosslinguistic influence on the learner's interlanguage and in the form of language switches to the L1 during L2 production. As yet, there has been little work done on the influence of a learner's other previously learned L2s in the acquisition of a new language (L3). The few studies that have been earned out on the role of L2 in L3 production however show that L2 does play an important role in L3 acquisition. (Williams and Hammaberg 1997: 295)

The languages in constellations of the user can interact with each other. A larger number of languages present in the mind creates more possibilities for interaction (Chłopek 2011: 13), leading to complex and multi-faceted relations between languages (Cenoz, Hufeisen and Jessner 2001; Gabryś-Barker 2005). Al-though studies on multilinguals using neuroimaging showed that the activation of brain regions is the same when these people use all the three languages (Vinger-hoets et al. 2003), there is no doubt that the interlingual processes taking place in the mind of trilinguals are much more complex and dynamic.

The use of language involves three different cerebral systems: the language system, the conceptual system, and the limbic system.
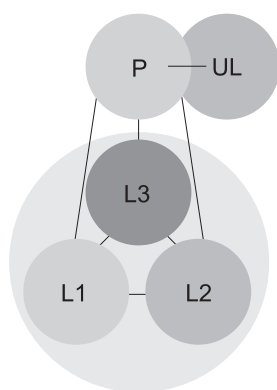

Figure 1. The simplified scheme of interactions be-tween the conceptual system (P), the limbic system (UL), and subsystems of the language system (L1, L2, L3) in the trilingual mind (cf. Paradis 2004; Chłopek 2011).

In the mind of a multilingual, one language system consists of several language subsystems (Paradis 2004). They are distinct structurally but related functionally. Therefore, the multilingual knowledge is described as a complex and dynamic system of language elements and rules present in the mind (Chłopek 2014: 78). What is important, as for many years has been underlined by François Grosjean, the bilingual knowledge is not a mere sum of monolingual competences, i.e. a bilingual does not constitute two monolinguals in one body:

> The bilingual is not the sum of two complete or incomplete monolinguals; rather, he or she has a unique and specific linguistic configuration. The co-existence and constant interaction of two languages in the bilingual has produced a different but complete language system. (Grosjean 1982: 13)

The use of language by the multilingual entails the inhibitory processes in the languages disused (Chłopek 2014: 78). The researchers explain differently the linguistic adjustment carried out by multilingual persons. Grosjean (2010) believes that the language production and reception of multilinguals is regulated by the language mode in which they are located, i.e. the current state of activation of languages present in the mind. In his opinion, the activation of one language automatically triggers a reduction of the activation of other languages. This is consistent with the neuro-linguistic knowledge: the activation of a particular function inhibits automatically the antagonistic function (Paradis 2004; Chłopek 2014). Other researchers (Green 1998; Bialystok 2010) postulate the existence of the cognitive mechanism of control responsible for the inhibition of the competing representations of language.

The research carried out among learners of the third language showed that in the multilingual mind, more than two language systems are activated; trilingual persons, when translating the text in the Polish language (L1) and German language (L2) into English (L3), activated the third language. Interlingual similarities played an important role (Chłopek 2014: 79).

L2 to L3 translation

One of the most important classification parameters of translation is the direction, which is to specify a source and a target language. Translation studies researchers unequivocally advocate the thesis that translation from a foreign language into a native language is always more successful. Today's discussion about the essence of translation is devoted mostly to the process of translation from the native language (L1) into the first foreign language (L2), or vice versa. Actually, translation (both written and oral) from the first foreign language (L2) into the second foreign language (L3) is not a legitimated form of translation. Under the law, certified translators registered in Poland cannot perform translation directly from a foreign language into another foreign language, even when the certified translator is entitled to perform such translation in both languages (L2 and L3).

If a customer wants to commission the certified translation from the foreign language into the foreign language, certified translators will need to make the certified translation from the first foreign language (L2) into Polish (L1) and, then, from Polish (L1) into the second foreign language (L3).

L2 to L3 interpreting

In order to ensure high translation quality, interpreting from one foreign language to another is not practiced in public institutions or offices. Due to care of the high quality of translation in the EU institutions, there is a rule that interpreters, first of all, always interpret into their native language and then into another one. A second foreign language (L3) has indeed been distinguished in the terminology used by the International Association of Conference Interpreters, however:

> A "C" language is one which the interpreter understands perfectly but into which they do not work. They will interpret from this (these) language(s) into their active languages. It is therefore a passive language for the interpreter. (http://aiic.net/node/6/working-languages/lang/1. Date of access: 23 December 2015)

Very often the interpreter has many C languages (Tryuk 2007: 54). It is the language that interpreters understand fully and from which they interpret, however, this is the passive language, i.e. one that the interpreters do not speak sufficiently to be able to translate in this language. Conference interpreting is dominated by interpreting into the native language of interpreters (Kubacki 2012: 157).

Interpreting from the foreign language into another is practiced, for instance, in tourism industry, at business meetings, or in less formal situations, e.g. with multilingual family life, at social meetings among foreigners, or in everyday situations in a multicultural society.

Studies on trilingualism among Poles (L1) learning English as the first foreign language (L2) and German as the second foreign language (L3)

The availability of the skills in terms of multi- and plurilingualism is not only a requirement when taking advantage of education, culture, and social life, but also a basis for business activity. In Poland, the number of people learning simultaneously two foreign languages is constantly growing. There is no doubt that in Poland, like elsewhere, the English language keeps the status of the first foreign language. Statistically, the majority of Poles learn German as the second language (Plęs 2015: 97). Therefore, it is necessary to take into account the fact that the German language is more often the second or subsequent foreign language in the

Polish educational reality, and thus it enhances the transfer of the learning process between different languages.

English and German are related to each other genetically. Although the development of both languages occurred in very different circumstances, many similarities in grammar and vocabulary have survived to modern times, which can be used in the integrated teaching English and German as foreign languages, or teaching based on the language learned earlier. Learning the basics of the German language based on the command of English is increasing in primary education. This trend can also be observed at universities, where numerous research initiatives among Polish students learning both English and German have recently been conducted.

As was stated earlier, languages in constellations of a user may interact with each other. Research indicates that at a certain level of language advancement, bilinguals and, in particular, multilinguals note many similarities between languages. Noticing such similarities, particularly significant in the lexical layer, or the layer of cognates and internationalisms, is an important way for the more efficient acquisition of new vocabulary. At the University of Łódź, the project has been conducted consisting in creating lists of cognates and false cognates for the English and German languages from the perspective of learners of the Polish language. The project can be used in the process of teaching German as a second foreign language after the English language (Szubko-Sitarek 2007: 273). The focus was also put on the psycholinguistic aspects of multilingualism and on the analysis of the structure of multilingual people's mental dictionary. The study involved people with the knowledge of a native language (L1) and two foreign languages (L2 and L3). The results have delivered the teaching implications that indicate the need for instruction associated with metalinguistic awareness, which could strengthen the transfer of the learning process between different languages (Szubko-Sitarek 2009).

Also at the University of Warsaw, with a group of trilinguals attempts have been undertaken to approximate the structure and functions of the mental dictionary, lexical processing, and language interaction at the lexical level. The group of students of English and German Studies undergoing intensive training in consecutive and simultaneous interpreting was examined. The aim of the study was to verify the factors postulated in the specialist literature affecting the relationships between lexicons of multilingual people. The researchers tried to study the relation between words in three languages depending on the direction of lexical processing (L1–L2 vs. L2–L1 vs. L1– L3 vs. L3–L1 vs. L2–L3) The emphasis was also put on the so called "foreign language effect", according to which the first foreign language (L2) has the stronger impact on the lexical processing in the second foreign language (L3) than the native language (L1) (Cieślicka nad Kowynia 2008: 29). For the study, the lexical priming paradigm has been applied which is used commonly in psycholinguistic research devoted to the structure of semantic memory and mental lexicon.

A similar method was used at the University of Poznań, where a group of trilinguals was examined with the combination of language commands as follows: Polish (A/L1), English (B/L2), and German (C/L3). Among the respondents were

professional interpreters, students undergoing training in conference interpreting, and persons without any experience in interpreting. Due to the variety of research participants, it was possible to study one more aspect — the impact of the type and length of practice in conference interpreting on the strength of lexical associations and relationships in the mental dictionary of the interpreter. Finally, the factors that may contribute to the occurrence of the phenomenon of interlingual interactions in the case of trilinguals with a high degree of advancement in the command of foreign languages were studied (Tymczyńska 2011).

The state of the research provided above proves that trilingualism among Polish students is an increasingly common and more and more explored phenomenon. The results of the studies presented have served as a basis for formulating further conclusions and observations which are important from the point of view of the practice of interpreting from one foreign language to another.

How Polish interpreters interpret from English into German — a snapshot of their views

The opinions of professional written translators and interpreters on translating from one foreign language to another are as follows[1]:

> At the beginning of a career it happened to translate this way, because — as it happens — I took what I was commissioned. I must admit that this gives a lot of fun, develops immensely but is very time consuming. Mainly because of low profitability I quit and this, undoubtedly, affected negatively my English. As for the operation of the brain — if you ask me, I translated by the Polish language. That is, instead of the standard procedure: reading — decoding — translating — coding — writing, it was: reading — decoding — translating into Polish — translating into German — coding — writing. By "translation" I mean the choice of vocabulary, and by decoding and encoding — the identification and selection of grammatical forms.

> That's what I did in the beginning, but DE–EN; indeed, a lot of fun and time consuming but it was cost-effective, because the fee was significantly higher than when translating from and into Polish. I used mainly DE–EN dictionaries, so the intermediary of Polish was limited to a minimum; after "deepening" the translated text I didn't have the feeling that I translated through the Polish language. But even if I translated fully via Polish, I see no difference in the brain operations — in my opinion, the brain just works the same way when translating DE–PL, and DE–EN, or DE–PL–EN, however, the very method/organization of work can be different if you use Polish dictionaries or figure out in Polish: "what's going on, what it is the true meaning of particular word/phrase". The brain works the same way, but no longer uses two "drawers" — it uses three. Besides, occasionally, when translating DE–PL or EN–PL, I use a third language as the intermediary.

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[1] The cited viewpoints are taken from an online forum for Polish translators and interpreters: www.proz.com and forum.mlingua.pl.

> If from one language through the second language I move on to the third one, the result may not always be the same as directly from A to B. It does not mean worse, I did not say that. Just in my case, if I already deal with EN–DE, it is simple.
> That does not mean that support in a third language when translating is wrong, it is quite contrary, often with DE–PL translation I look up for German counterparts in English to find then the Polish equivalent. The results are often quite good.

> As for the brain operation, it would be interesting to see by some kind of a computer imaging of the brain which areas are activated while translating from language A to language B, which (perhaps the same?) in the case of translation from A to B by C. And also, whether the brain works in the same way (as I think) when translating from one native language to another native language in comparison to translating from the native language to a foreign one, or vice versa. And also, whether the brain of the interpreter works the same way as the one of the written translator (probably the biggest differences would have been noticed there).

> I oppose to translation between two foreign languages. It doesn't matter how hard we strive, it will not work. I, myself, have performed several times such a translation, and I was unhappy with the results when it comes to the written translation. Besides, as someone mentioned earlier, this is so labour-intensive that we would not be able to make it for the living. The only thing I would have undertaken when it comes to translation between two foreign languages is consecutive interpreting. Tolerance of mistakes in interpreting is slightly higher than in written translation, and consecutive interpreting, however, gives a moment to think, so you can somehow get out of the situation. Though I must admit, this translation is three times more exhausting than from Polish. If someone has lived abroad long, certainly, one can do it better, but, for sure, a study within two foreign languages is not enough.

> In my opinion, it is not a matter of skills, but the issue of linguistic intuition. We will NEVER acquire such ease of using a foreign language as we use our mother tongue. So we will never feel so easily that something [translation equivalent — A.B., M.W.] is ok, or not. According to me, you should not translate from a foreign language into a foreign language in business situations, official situations etc., but translating from English to Spanish among friends during barbecue is not forbidden.

The table above shows that translation (both written and oral) from one foreign language into another foreign language is not a common practice in the environment of professional translators and interpreters. This is due to numerous translation constraints. Practitioners hold the unanimous opinion: translation and/or interpreting from one foreign language into another foreign language is a very difficult challenge for translators. They must know well not only the language but also the culture of both countries and specialist terminology. Reliable translators do not undertake tasks that they are not able to perform professionally. However, occasionally they perform this kind of translation (especially in informal situations) thanks to their advanced language skills.

Among the translators who opted for this type of translation, two dominant strategies can be observed: supporting and enhancing translation through the native language (L1) (in written translation) or direct translation from L2 to L3 (in the process of interpreting due to time constraints).

The procedure for written translation is quite justified because, as already mentioned, even when the translator is authorized to translate in both languages, he/she is not authorized to perform certified translations between two foreign languages. The certified translation has to be "processed" by the Polish language. Thus, it seems equal to the doubled translation: firstly, from one foreign language into Polish and, secondly, from Polish into the second foreign language. Consequently, customers are charged twice for the certified translation between two foreign languages.

As compared to written translation, interpreting from one foreign language into another foreign language is a non-prescriptive phenomenon as this is done primarily in informal situations. The practice of conference interpreting, although presupposing the knowledge of three languages, does not allow for interpreting from language C into language B. Interpreting between two foreign languages happens only occasionally as a result of unforeseen circumstances (e.g. due to failure of one of booths).

These views also focus on the neuro-linguistic aspects of interpreting from L2 to L3 and issues related to the work of the human brain during the translation process bother many translators.

Neurolinguistic aspects of interpreting from L2 into L3 — open research field

Neurobiological studies provide continually relevant information on the linguistic phenomena taking place in the human brain. Psycholinguistic processes taking place in one's mind during the use of languages by multilingual people are complex and dynamic. They provide an interesting and largely unexplored research area. The current knowledge allows us to understand the psycholinguistic processes occurring during the production and reception of languages. However, only the coming years will expand our knowledge of cerebral structures and their functions, perhaps verifying the existing theories (Chłopek 2011: 60). There is a strong need for research focusing on the language processing that occurs in the multilingual mind. It is clear that for the location of brain activation when using a particular language, very important are: the degree of language competence and the age at which the language acquisition began. Neurolinguistic studies do not show, however, huge differences between the second language and the third language (Sopata 2013).

Conclusion

A good command of English, functioning as a *lingua franca*, has become a standard for modern, well-educated persons and, therefore, speakers of the English language do not really stand out from others, and for many professionals it is

not a satisfying prerequisite, especially in the era of increased competition. The command of a third language (the second foreign language, i.e. L3) is, therefore, a natural consequence of this process. Teachers of foreign languages have already faced this phenomenon as it is becoming more common to work with multilingual students. This phenomenon can be observed mainly among students of interpreting, especially conference interpreting, which requires a command of two foreign languages.

Although the issue of multilingualism is not a novelty to Polish researchers, the empirical works focused on the study of interpreting from one foreign language to another are rare and do not provide a clear picture of the processes occurring in the mind of a trilingual. The vast majority of research focuses on the aspects of bilingualism and issues related to the mental lexicon, factors shaping the interlingual influence, and the location of languages in cerebral structures.

Translation practice in the environment of Polish translators shows that translation from English into German (or vice versa) is not an incidental phenomenon. Polish certified translators increasingly speak more than one foreign language, thus it is natural and expected that when being in an international environment they use their linguistic skills. Progressive multilingualism of societies all over the world is the reason why for many professionals (not just professional translators) interpreting from one foreign language to another is common.

Although previous neurolinguistic studies did not provide conclusive evidence that the translation between two foreign languages is more comprehensive and involves different brain regions than in the case of translation from the native language and into one foreign language, it is obvious that for translators the process is incomparably more challenging and time-consuming and it requires extraordinary skills.

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Psychological aspects

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Creativity as a design feature of interpreting

Abstract: The paper shall focus on the concept of creativity in interpreting, which primarily is communication in the interlingual and intercultural dimension. Creativity is a feature absolutely indispensable to convey any message from one language to another on the one hand, and on the other, it enables conveying this message in an endless variety of ways, restricted only by the cognitive capacities of an individual interpreter. Thus we may tentatively postulate that creativity is a design feature of interpreting. Our considerations shall start from a general outline of the concept, and its place within the psycholinguistics-oriented scope of research, followed by the review of the position of interpreting within the field of Translation Studies.

Key words: creativity, interpreting, Translation Studies, problem-solving, creative thinking.

Introduction

In the mid-20th century Charles Hockett in his seminal writings enumerated a set of design features which distinguish human from non-human systems of communication (as well as from non-linguistic systems of communication that are also used by humans). Fundamental design features of language, such as discreteness, arbitrariness, duality of patterning and productivity, are not restricted to a particular language modality; they constitute properties of human language, irrespective of cognitive or linguistic properties underlying human language in general (Meier 2002). One of those features, productivity (also called generativity) denotes human ability to produce a limitless number of linguistic structures and utterances; it is the ability to use language in a creative manner that would be capable of dealing with novel situations. Arbitrariness does limit us in sharing systems of symbols, since we have to conform to these constraints and to particular structures. The number of sounds is finite, yet the combinations of sounds are manifold, endless indeed, providing an infinite number of new words, new phrases,

new utterances (cf. Sternberg 1999). Thus an inherent property of language is its creativity, since there exists no one who would ever have heard all the utterances humans are able to produce.

Despite attempts aimed at discussing creativity within the field of Translation Studies, much has been propounded outside of translation theory as creativity has been one of the foci of numerous empirical and theoretical investigations (e.g. in psychology).

1. A brief outline of the concept

Psychologists and psycholinguists have tried to determine psychological characteristics of creative individuals, and hypothesised solutions have propounded the convergent operation of intelligence and divergent nature of creativity (cf. Torrance 1974). Torrance attempted the identification of abilities facilitating creative production. He determined four broad categories that operate in the creative process:

1. fluidity — the ability to produce any ideas;

2. flexibility — the ability to apply a range of strategies in solving a particular problem;

3. originality — the ability to produce non-standard, unusual, unordinary answers;

4. elaboration — the ability to develop certain ideas with necessary specific details.

Moreover, he also stressed the significance of personal involvement manifested in that

the essence of the creative person is being in love with what one is doing [which] makes possible all the other personality characteristics of the creative person: courage, independence of thought and judgment, honesty, perseverance, curiosity, willingness to take risks. (Torrance 1988: 68)

Creativity can be, and truly has been defined, from various perspectives, as definitions of creativity may be as numerous as those who analyse it. There is, however, a general concord as to the definitions provided by most investigators in the field (e.g. Boden 1992, 1994; Sternberg 1999) that creativity is a process resulting in a product that is both original and valuable. Psychologists approach creativity from the perspective of individual features that seem to be shared and common. For instance, the psychometric approach of Guilford (1950, 1967) focuses and prioritises the performance of tasks that entail such creativity aspects as divergent and convergent thinking which is connected with such psychological phenomena as (effective) decision making and problem solving. These aim at the construction of analytic and synthetic strategies (where particular elements are combined to form an efficient solution). In convergent thinking a host of possibilities are reduced to

converge in one optimal solution, whereas the result of divergent thinking is the generation of a comprehensive range of alternatives used to solve a problem. The optimal solution depends on features of the problem and the creative choice of problem solving methods by (creative) individuals.

As stated above, in psychological terms creativity denotes features of creative individuals (cf. Guilford 1967); these creativity traits reflect a creativity potential. They may be used effectively and tend to be personality-dependent (e.g. self-aware-ness, motivation, self-confidence, etc.). This may lead us to the claim that if crea-tivity (productivity, generativity) is a proposed inherent feature of language, then Guilford's postulate provides for creativity being inherent to all humans. The level of individual creativity is, to an extent, related to intelligence, which results from the conviction that "creative acts are expected from those of high IQ and not ex-pected from those of low IQ" (Guilford 1967: 82). However, correlations operat-ing between intelligence quotient (IQ measured in intelligence tests) and creative capabilities are not direct and depend on the cornucopia of individual features and predispositions. For Guilford, the creative potential of an individual is reflected in personality traits and the ability to plan, invent, explore, etc. Individuals who manifest these behavioural modes are assumed to be creative which is, in this case, equated with them being intelligent.

In classical psychological view (cf. Rogers 1976: 298), creativity occurs upon "the emergence in action of a novel relational product, growing out of the unique-ness of the individual on the one hand, and the materials, events, people, or cir-cumstances of his life on the other". Creative acts, as Rogers postulates, are poten-tially productive; thus creativity arises (or may arise) as a result of the satisfaction of the following conditions:

1. openness to experience which is related with:

the ability to receive much conflicting information without forcing closure upon the situation. It means what the general semanticist calls the "extensional orientation". … The more the individual has available to himself a sensitive awareness of all phases of his experience, the more sure we can be that this creativity will be personally and socially constructive. (Rogers 1976: 300);

2. internal evaluation mechanism providing the individual with the awareness of "potentialities in himself which heretofore have not existed and are now emer-ging into existence, then it is satisfying and creative, and no outside evaluation can change that fundamental fact" (Rogers 1976: 301).

Thus the grounds for evaluation are situated in the person responsible for the performance of a task, not in their environment, which gives food for thought in terms of personality features of translators such as self-confidence and self-aware-ness;

3. conceptual flexibility denoting the ability:

to shape wild hypotheses, to make the given problematic, to express the ridiculous, to translate from one form to another, to transform into improbable equivalents. … It is as though out of the wasteful

spawning of thousands of possibilities there emerges one or two evolutionary forms with the qual-
ities which give them a more permanent value. (Rogers 1976: 301)

2. Approaches to creativity within Translation Studies

The prerequisite for creativity to function in the field — and this view is shared
by a number of scholars (e.g. Kussmaul 1995) — is that a creative work is "novel"
and "acceptable". Since this paper is an attempt at identification and specification
of creativity in interpreting considered as its design and indispensable feature, the
notion of creativity in translation shall be only briefly elucidated.

Creativity has been the subject of discussions within the area of Translation
Studies and has not yet been analysed comprehensively. The research into creativ-
ity in Translation Studies, apart from the pivotal work of Kussmaul, has not been
proliferating, and focused more on specific aspects or types of texts (e.g. Chaume
Varela 1998 and audiovisual translation, Šarčević 2000 and legal texts), or on
teaching-related issues (e.g. Mackenzie 1998). Further, Hubscher-Davidson (2005,
2006) and Hague (2009) concentrated in their research on personality aspects of
translators and their manifested creativity.

In the view of translation scholars dealing with the concept of creativity, one
might observe a general concord as to it being too elusive a term to describe it fully.
This is explicated by a conviction of some scholars (cf. Lörscher 1991; Toury 1995;
Wilss 1996) that the ability to translate is inborn and arises due to mechanical
development resulting from a long period of training based on translating various
types of texts. Wilss (1996), one of the major proponents of this attitude, assumes
a three-tier stand on creativity in translation. To start, translation creativity is not
a universal concept, and the sum of individual and specific definitions, reliant on
theoretical considerations, does not result in a commonly accepted term. What is
truly significant for the operation and emergence of creativity are, again, person-
ality traits. Next, creativity is a stimulus for the extraction and application of pro-
cedural and declarative knowledge (the former pertains to the knowledge stored as
rules, procedures and strategies, whereas the latter refers to the knowledge stored
as patterns; Sternberg 1999). Hence, "free action within the framework of a system
of rules" (Wilss 1996: 50). Finally, texts to be translated enforce the occurrence of
creativity; this stimulating role of a text is observed in the contact with stylistic
variations. Thus, stylistic variation in a (translated) text may be assumed to be a
manifestation of creativity.

The successful performance of translation tasks results from various factors;
Wilss (1996) mentions experience, mental dispositions, the adequacy of the source
text, the correlation (or the lack of it) of the difficulty degree of the text to be trans-
lated and the level of competence of the translator as well as the degree of lexical,
syntactic and sociocultural means. "A detailed investigation of these factors would

probably reveal that there is no generally acceptable, definable, and operational concept of translation creativity" (Wilss 1996: 166). Thus, following this view, translation creativity, seen as a very complicated issue, is rather relying on reproducing a given text in a context-bound manner than creating a text out of nothing. Yet, creativity in translation understood as the representation of translators' behaviour is to be observed, especially in literature, advertisements, etc. Creativity renders an alternative for professional translators who have mastered their domain of work. Translation creativity may be viewed as a feature that may be expected of a translator who possesses a broad spectrum of experience and is able to apply it in a particular translation task.

However, the very concept of creativity is far more complicated, thus it escapes one uniform and detailed definition (which would be restrictive, on the other hand). Creativity has also been addressed as a factor facilitating successful translation performance. Generally, translators need to implement structures of the source language text (for instance, syntactic, lexical) into the target language structures that function on and embrace these levels (Wilss 1996). Therefore, creativity lies in the process of searching for options optimal in a specific social and cultural situation as well as being optimal for a specific translation task. Creativity thus assumes the necessity to possess an inherently creative mind by the translator that would constitute an element of overall translation intelligence. Due to translation operating on a specific text (source language text), creativity is one of typical features displayed and revealed in the (professional) behaviour of all translators because:

> Nevertheless, translation creativity as a manifestation of translator behaviour does exist, and it is, as any type of creativity, a dynamic notion. The dynamic aspect of translation creativity reveals itself not in original text production, but in the skill to develop, in simultaneous confrontation with a source text and a target code, decoding and encoding strategies. (Wilss 1996: 166)

Another view has been propounded by Neubert (1997, 2000) who approaches translation creativity as an activity derived from the source language. Maintaining the balance between creation and derivation necessitates the application of a whole variety of creative translation strategies and procedures:

> In the course of achieving something new, mediators have to resort to novel ways of encoding an old message. They are forced to creativity because the means of the TL are not identical with those of the SL. … To arrive at an adequate TL version, new resources have to be tapped. In these efforts, creativity plays a prominent role. Creative uses of the target language are the result of the various problem-solving strategies applied to any piece of SL text. (Neubert 1997: 19)

Hence creativity is viewed as a cornucopia of translation strategies and procedures (Neubert refers to modulations, transpositions, etc.) which alter or modify (syntactic or lexical) features of the source language text as they are affected by the prospective target language text. It is the interaction between an effectively planned strategy (using declarative knowledge and based on rules and models)

and the use of that strategy based on the creative potential (Gran 1998). The final product — the optimal option — does not frequently result from a direct one-to-one correspondence; it is either selected from a whole array of translation options or is created from the start and functions as a new element.

3. Creativity in interpreting

In contrast to the concept of creativity in translation which — as presented above — has been present in Translation Studies research, the discussion or research on creativity in interpreting has been genuinely scarce.

In the 1990s Kussmaul undertook a series of research studies into creativity. He based this research on observations and empirical data obtained during translation classes. This research (1995, 1997, 2000) explicitly shows the significance of psycholinguistic, psychological and cognitive factors not only for research but, most of all, for practice in translation, interpreting and, further, in translator and interpreter training. Although originally the creativity model was planned to be applied as an explication of processes occurring in translation, mechanisms of problem solving and decision making combined with the underlined significance of cognitive and psycholinguistic factors make it universal in nature and more transposable to the workings of the interpreting process. Thus we can recognise how the underlying cognitive processes affect the final performance of interpreters, and their — emerging or not — creativity.

As for the experimental aspect of the area within Translation Studies, Kussmaul appears to be one of few scholars who attempted to apply the psychological model of creativity empirically (although Mackenzie (1998) uses the very same model for her analysis of translator training; cf. House 1988; Lörscher 1991; Tirkkonen-Condit 1992; mostly in the form of transcribed recordings referred to as Think-Aloud-Protocols). Kussmaul's experiments (1991, 1995) consisted in several translators working together in small groups (or pairs); they were recorded and later on transcribed. This method of Think-Aloud-Protocols provided Kussmaul with a conviction that the four stages of the creative process (e.g. Wallas 1976) are reflected — and *do* operate — in the translation process (embracing jointly translation and interpreting) as well. For Kussmaul (1995), creativity, despite its obvious analysis-attractiveness, seems to be left unattended in Translation Studies, which is reflected in the scarcity of data. General arguments assume, however, that creativity in translation is concerned with unpredictability in the usage of the language or with selecting a variant in translation which is not subject to any rules; thus creativity is viewed in the light of the product of such translation which "must be novel and must contain an element of surprise, it must be singular or at least unusual, but at the same time it must, of course, fulfil certain needs and fit in with reality" (1995: 39). Kussmaul, in line with the aforementioned steps of

the creative process, described in psychological literature (Wallas 1976; Sternberg 1999) divides the creative process into four stages (phases), namely, the preparation phase, incubation phase, illumination phase and evaluation phase. In order to have an insight into the cognition process in translation, a brief summary of those stages shall be given.

Cognition is of prime importance in the preparation phase, in which problems are subject to observation and analysis; at the same time essential information and knowledge are gathered. This stage may be treated on a par with comprehending the source text within the translation process, in which the analysis of the text and its interpretation perform an essential role and the function of the target text is specified. The preparation phase obviously entails conscious mental processes, with an important role played by the awareness of the objective.

Psychological and physical relaxation are characteristic of the incubation phase as observations conducted show that new ideas may even occur whilst dreaming; relaxation is thus vital for creativity in the translation process. Within the process of solution-searching, thinking might be blocked and thus the very stage of "illumination" might be hindered. Therefore the interpreter is not forced into conscious thinking about a possible problem, yet, the activity continues in their mind (in the form of creative comprehension), although subconsciously.

Both the incubation and illumination phases are associated with divergent production (understood as an open problem with several possible answers) which stands in opposition to convergent production (seen as a problem, for which one possible answer exists; cf. Guilford 1967). Text analysis is the realm in which divergent thinking performs a certain role. Quite frequently, divergent thinking is a way to escape from the constraints of semantic categories by means of semantic shifts (cf. the classical theory of lateral thinking of de Bono 1970), which in themselves are a common phenomenon in interpreting, namely, the linguistic form of the source text is being changed and transformed into a different linguistic form in the target text, from the point of view of its meaning or function. Thus semantic shifting tends to be associated, to a large extent, with manifestation of creativity.

The evaluation phase, entailing convergent thinking, is strictly related to illumination, and the lack of evaluation both in illumination and incubation may result in losing good solutions. Thus, various phases in the process should remain in close relation and interaction.

Creative thinking is not only focused on analysis, it also entails emotions and intuitions (Mackenzie 1998). Thus the processes of analytical thinking are vital in the preparation phase and in the evaluation phase, whereas intuitions and emotions emerge upon the incubation and the illumination phases. As Kussmaul observes: "The emotions favourable for creative thought suggest that self-confidence is also one of the prerequisites for creative translation" (1995: 51). The translator with the body of knowledge and experience and equipped with self-confidence will be more prone to using creative procedures and strategies in solving text-re-

lated problems (whether they are of linguistic or semantic nature). Conversely, the translator who does not exhibit self-confidence will most probably "adhere closely to the words of the source text and fight shy of original solutions" (Mackenzie 1998: 205).

The above four-stage model of creative processing has been, as stated before, one of few psychologically and psycholinguistically-oriented experimental models. One can thus observe the postulates of factors inherent in creative processes in general (cf. Rogers' model above) corroborated. Therefore, a creative interpreter appreciates and develops experience which definitely accelerates and facilitates processing capacity and helps to increase self-awareness; a creative interpreter possesses the ability to assess their working potential; a creative interpreter, being time-constrained, is able to produce a variety of possible options that lead to the selection of the best.

Creativity capitalises on accumulated knowledge and experience. It is activated by those two cognitive factors when a (translation) problem emerges. Knowledge (both declarative and procedural) is responsible for the functioning of the individual's evaluation mechanism. The possessed experience provides the interpreter with the possibility of an insight into the whole range of prior tasks and schemes encountered, thus decisions made on the final selection of the best variant out of the whole array of possible options aiming at solving a particular problem are validated.

In creativity research one relationship is particularly essential in the light of empirical findings resulting in deeper insights into the nature and development of competence, within the domain of which creativity is positioned, namely, the relationship between creativity and expertise viewed against a wider background of the expert-novice paradigm. Again, the bulk of research is not sufficient to address significant issues (for the discussion on expert-novice paradigm, cf. Kościałkowska-Okońska 2012, 2013a, 2013b). For instance, Riccardi (1998) enumerates a list of strategies observed in interpreting experiments that were typical of experts and novices. Her observations seem relevant and consistent with the expertise research in general: in her view, experts apply a higher number of effective strategies in comparison to novices and are capable of combining these strategies and be flexible while doing so, thus they manifest creativity to an extent larger than in the case of novices.

In interpreting, the interpreter does not really just repeat the message uttered by the speaker in a different language, but their performance is the result of cognitive processes, with understanding the message and producing another message. Thus the entire process is a problem-solving activity as the interpreter must make correct and adequate inferences referring to the source text, the linguistic and extra-linguistic context, and to reach a correct and relevant target-text solution, relying on the knowledge of the language and of the world, and on their experience. The interpreter is therefore involved in the productive and creative process

and is to develop the ability of generating creative associations or solutions. In creative problem-solving applied in interpreting the interpreter uses a variety of strategies depending on problems and difficulties they are faced with, with two being predominant, namely, the skill-based and the knowledge-based (Riccardi 1998; Reason 1990). The former relies on stored patterns operating as automatic routines and is subject to automatic strategies (resulting in less intensive cognitive effort), whereas the latter occurs in novel and unexpected situations when the cognitive processes and the body of knowledge accrued are used, and the information processing is conscious and controlled, thus resulting in a bigger cognitive effort. Riccardi (1998) observes that with the development of expertise, the focus of control is shifted from the knowledge-based strategies to the skill-based ones, thus enabling more even distribution of cognitive resources, which may lead to generating creative solutions. Thus the expert, in contrast to novices, develops routines out of strategies (and their assortment of potentially applicable strategies is much larger than in the case of novices). This strategy of least commitment perfectly reflects practical workings of divergent thinking in interpreting as it provides for the operation of anticipation as to what may be said, which linguistic structures and solutions may follow. As Riccardi says, "[a] creative interpreting performance may be defined as one which is not influenced by the source-language structure" (1998: 176), and the less the structure of the target text is similar to the structure of the source text, the more creative it is. Therefore, creativity in interpreting is a novel and original combination of elements of the source language message by means of activating mental schemata that are subject to restructuring and reorganisation by incorporating and acquiring new units of information. Riccardi thus shares Torrance's view of the creative thinking process which is

the process of sensing difficulties, problems, gaps in information, missing elements, something askew; making guesses and formulating hypotheses about these deficiencies; evaluating and testing these guesses and hypotheses; possibly revising and retesting them; and finally communicating the results. (Torrance 1988: 47)

Creativity research *does* embrace a variety of individual aspects, and certain issues inherent in creativity have received more extensive consideration; but an emerging and challenging problem is the absence of a relevant operational procedure for assessing creativity. Obviously, creativity is hardly measurable in objective quantitative terms, yet attempts at analysing its development and progress are worth pursuing (e.g. creativity assessment procedure propounded within Trans-Comp, cf. Göpferich et al. 2009, 2011). Creativity assessment procedure is feasible with regard to translation as we can observe the final product of the translation process in reality as readers of the translation. In interpreting, on the contrary, due to its auditory thus elusive nature we are not able to see anything, just listen to the utterances produced by the interpreter, and it is our subjective assessment based on impressions evoked by and in the auditory channel that allows us to judge the interpreter's solutions as creative or not.

Interpreting, being an activity performed "live", is creative per se. Investigating the "workings" of creativity is a challenge, yet with a more inter- or even multi-disciplinary research approach, it may be feasible. Creativity can be analysed in view of three levels, namely the product level (the actual interpreting performance), the level of mental processes (cognitive factors involved) and the interpreter's personality. Creativity in interpreting is manifested through generating or, in other words, creating a target language text, and using a variety of methods or techniques, such as e.g. note-taking (and applying individual or original symbols developed by interpreters themselves), memorisation techniques or mental shortcuts. Creativity may thus be manifested not only through interpreting into the target language but specifically when the interpreter faces difficult, non-standard, strangely formulated or illogical source texts (or their fragments) that may originally appear absolutely impossible to interpret.

Creativity is a problem-solving activity and it is closely related to the process of decision making (cf. Horvath 2010). The Wallas's creative thinking model that was discussed above can be applied to the mechanism of interpreting as two types of processes interact there: preparation, performance and evaluation of an interpreting assignment, which are followed by the interpreting process proper; it is very difficult, bordering on impossible, to divide it into sub-stages or sub-substages as the process of interpreting entails a plethora of linguistic, extralinguistic, psychological, cognitive and affective factors that concurrently interact in an integrated manner.

The interpreter's personality is vital as — due to the very dynamic nature of the profession — changing working conditions, topics discussed and situational features are different every time the interpreter performs their assignments, even though cognitive processes, routines and schemata tend to develop and progress towards automatisms. These changing situations require from the interpreter to be flexible and open to experience, resourceful and quick in their reactions to novel situations.

Conclusions

The creative process is responsible for the reception and production of translation in the most competent manner possible. The development of intellectual abilities and their transformation into professional behaviour that would operate in a range of various (and novel) situations should be the aim of constant and sustained (internal cognitive) development of interpreters.

Creativity is an individual's capacity to produce new and/or original ideas, or it might also be a novel combination of old and already familiar ideas. An idea that is creative or novel results from "the same set of generative rules as other, familiar, ideas" (Boden 1994: 78). Traits of creativity are carried by new and unexpected

(novel, original) combinations. In interpreting the source text is subject to transformation into the target text. This process results in the production of an entirely new text that will be similar to the original as regards the content, but otherwise it will be a new and novel product; hence the target text will be a creative product. This is the overall and priority objective of interpreting tasks and of the interpreter. Thus creativity is an inherent, therefore a design, feature of interpreting.

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Stress and interpreter

Abstract: This paper aims to discuss stress in the context of interpreting profession. Stress is shown as a psychological phenomenon which is omnipresent in the contemporary world. The paper demonstrates ways of coping with negative consequences of stress. It analyses the stages of experiencing stress and provides advice on how to relieve unwelcome effects of stress. While emphasising the role of an individual in finding an optimal level of emotional stimulation, the paper highlights strategies of preventing stress-related problems, which interpreters can undertake prior to and during the actual translation process. The role of positive thinking, which is invaluable to successful interpretation, is underlined.

Key words: stress, interpreter, stimulus, interpersonal skills.

Introduction

The problem of stress and the ways of dealing with it is a recurring topic in the contemporary world. It is also considered to be a major cause of numerous illnesses and disorders. It has now become an inherent feature of our contemporary life. Stress arises in difficult situations when we experience danger. On the one hand, it is likely to cause depression and frustration, but on the other, it can be turned into an ally in achieving success. This paper aims to address the problem of stress, its consequences, and the ways it can be challenged by interpreters. By interpreters we mean the professionals who produce oral presentations and have no time to improve their performance, in contrast to translators whose final version of the output is subject to change, as they deal with written texts (cf. Gile 1998: 41–42).

1. The concept of stress from a psychological perspective

The development of psychological theories of stress was preceded by physical and physiological explanations. The concept of stress can be understood in a

physical way, just as the term is used with reference to various types of physical forces affecting a human being. The concept was first applied to medical science in 1936 by Hans Hugo Selye, a physiopathologist. According to Selye, stress is a reaction of the human body to any challenges and demands imposed on the body (Kocowski 1997). This reaction can be called a general adaptation syndrome, or a biological stress syndrome. There are three stages of stress development:

— alarm reaction stage, in which the organism mobilizes its energy, for example by increasing blood pressure or body temperature,

— defence or adaptation stage: the body tolerates stress relatively well, but is less resistant to extra stimuli which have been harmless earlier,

— exhaustion stage, which appears when stress affects the body severely or long enough to hamper the defence system. This causes physiological malfunctions. If not treated, it may lead to chronic pathological changes or even death.

Selye distinguishes between good and bad stress. The latter, which is called distress, occurs when stress acts so long or severely that it disorganizes the functioning of the body. Good stress, which is called *eustress*, acts as a stimulator of human personality in spite of temporary discomfort. Selye's conception has led to a development of several theories of psychological stress. From a psychological point of view, one can distinguish three trends in stress description:

1. stress as a stimulus (stressor), or a specific event;

2. stress considered to be the relation between external stimuli and their reception by an object;

3. stress as a reaction, especially an emotional one.

Kocowski (ibid.) defines stress as a "syndrome of related processes in the organism and the neural system, consisting of a general reaction to stimuli or situations which are unusual, difficult, disturbing, harmful, threatening or annoying" [translated by M.K.]. The situations or stimuli are also known as stressors.

Heszen-Niejodek (1999: 467) points to three trends in psychological stress:

1. a stimulus to a situation or external specific event;

2. an internal reaction of the body, especially emotional reactions to a specific situation, which is experienced internally;

3. a relation between external stimuli and the features of the body.

Terelak (1999: 200) considers philosophical theory of stress, the core of which is the concept of general adaption syndrome. This is a syndrome of any unspecific physiological changes in response to stress (ibid.). Terelak maintains that stress develops through three stages:

1. Alarm reaction, which includes shock phase and shock prevention. It is triggered by a harmful stimulus and is aimed at mobilising defence forces of the organism. In the shock phase, the body reacts violently to the harmful stimulus by stimulating the defence system. In the following stage, the body acts against the shock by initiating defence reactions. This stage is accompanied by the intensification of physiological functions, for example, by blood pressure increase.

2. The second stage is an immunity stage, in which the body mobilises its energy resources and adapts to the harmful stimulus.

3. The third stage is an exhaustion one, which is characterised by a reduction of the energy resources and capabilities, the symptoms of which may be the disturbance of physiological functions.

The theory of psychological stress was introduced by Lazarus and Folkman. It has received wide acceptance and has been often cited in the literature of the subject. According to the authors (Lazarus 1986: 2–9), stress is a specific relation between the person and the environment, and is perceived by the person as a burden exceeding their resources and threatening their health. Lazarus and Folkman maintain that psychological stress is placed neither in the same situation nor in itself, in spite of being determined by the features of the environment and by the features of the person being in a specific situation. In a stressful situation there is a confrontation of man's beliefs, values and skills with challenges, limitations, and resources exposed by the situation. This relation is referred to as transaction, as it is not only the environment that influences the person but also the person who influences the environment. The relation holds in both directions. Here it should be noted that stress causes changes in the physiological functions in the following three areas:

— physiological determinants, which are characterised by a high heart rate, dilated pupils, sweating, heart palpitations, increased muscle tension, stiff neck, dry mouth, throat tightness, psychomotor agitation, alternate periods of warmth and cold;

— psychological determinants such as irritation, suspicion, hostility, a feeling of unspecific anxiety, attack of anger, lethargy, discomfort, depression, loneliness, difficulty in decision-making, low self-esteem;

— behavioural determinants such as increased sweating, nervous twitches, impulsiveness, loss of appetite or a feeling of constant hunger, sudden outburst of anger or a flood of tears, alcohol abuse, lack of job satisfaction, low efficiency.

2. Dealing with stressful situations

It can be assumed that the ability to cope with stress may reduce its bad consequences. This positive effect can also be expected in professionals, such as interpreters, for whom stress is an inseparable part of their job. In the discussion of stress, Ratajczak (2000: 14) specifies the process of stress prevention as a conscious and unconscious effort related to the prevention, elimination or reduction of sensors or to tolerating stressors in the way which is the least harmful. Lazarus and Folkman (1986) claim that dealing with stress implies ongoing cognitive and behavioural efforts taken in order to control expectations externally or internally, which are perceived by the person as an excessive burden. In this regard, stress can

be dealt with successfully only after an evaluation of the stressful situation. In his discussion, Lazarus takes into consideration two basic functions of dealing with stress:

1. A problem-oriented instrumental function which most often consists in a change of the situation for the better, either by a change of self-destructive activities (to become more self-centred) or by a change of harmful environment.

2. A function referring to the regulation of negative emotions by lowering unfavourable tension and other negative emotional states. Although both functions may collide at times, they often complement each other. When studying stress, Lazarus (1986) distinguishes the following ways of coping with stress:

— confrontation: the defence of one's opinions, struggle with difficulties in order to meet one's own needs;

— planning of problem solution, or planning of actions to be taken in the event stress comes up;

— distancing oneself from problems: taking effort to avoid the problem, drawing attention away from the problem;

— avoidance/escape: fantasising, wishful thinking;

— self-criticism: aggression against oneself;

— looking for support from other people or institutions;

— positive overvaluing: looking for positive aspects of a stressful situation in order to mitigate the feeling of loss.

Each of the above mentioned ways of coping with stress fulfils both the problem-solving function as well as the function of emotion regulation. Everyday life provides evidence that we can hardly avoid stressful situations, as they seem to be omnipresent. However, we should bear in mind that stress is our reaction to a stimulus. Therefore, how much we react depends to a large extent on ourselves. The stimulus is not dependent on us, unlike the reaction to it, which can be under our control. The way we handle stress depends on ourselves. As a matter of fact, one of the easiest ways of avoiding stress is by eliminating stressful situations, but this option is of little use to professionals who face it every day. Thus, whenever it is impossible to avoid harmful stimuli, one can accept them as they are. Although the acceptation process may be difficult, it is worth the trouble, as it is essential to successful dealing with stress.

Stress can severely put to test the interpreter's creativity and independence. It can reduce the interpreter's potential to act efficiently, as it initiates an unwelcome sequence of psychological and physiological events. The interpreter's ability to create is at risk when there is anxiety involved.

In a certain gentle form, stress may be welcome, as it is capable of motivating people to actions and thinking. Here we are not considering excessive stress, which paralyses and discourages experiencers from further actions, but the stimuli which encourage the brain to act. In this way, the brain is kept awake. Lack of mental activity may be more exhausting for the brain than the activity itself. It should

also be highlighted that it is not stress in itself that is harmful but our reaction to it. It is not only an interpreter but every human being who should become aware that stress needs to be solved before the undesirable reaction begins. In order to avoid excessive stressful reaction, one should find an optimal level of emotional situation. Therefore, an optimal level of stress is necessary for human development. Optimal stress triggers the human potential and strengthens their power to act, which is important in the professional work of interpreters. Thus, it is advisable that interpreters learn themselves, their needs, and potential for experiencing strong emotions. Thanks to it, interpreters can, as it were, adjust an adequate level of agitation at which their bodies function efficiently, and good physical and mental state is ensured.

As can be noted above, it is important for people to solve their problems which can be a potential source of stress. Stress can also be exacerbated by bad decisions, lack of actions, unfortunate chaotic actions, lack of knowledge or skills. In order to deal with some of the above problems efficiently, interpreters should work upon themselves every day, taking effort to improve their skills and knowledge. In the following section we will have a closer look at interpreters.

3. The ideal of an interpreter

What skills should an interpreter possess? In order to avoid the problems mentioned in the previous section, interpreters should be prepared to achieve the goals of interpretation. Mastering certain skills is indispensable in this profession. Grucza (2010: 45) mentions the following main competences that interpreters should master: linguistic competence of the source and the target languages, intercultural competence, and communicative competence, which should be understood as a set of skills required in active participation in speech acts. Linguistic competence implies the internalisation in the interpreter's mind of operational rules, the knowledge of morphological, lexical, sentential and textual forms of expression, and the ability to use their semantic and cultural functions in the process of the creation of translational communication (ibid.). Lipiński (2006) states that apart from competence, interpreters should demonstrate certain values and features. He explains that among these values are the ability to concentrate and stay on task during long exhausting hours of interpretation as well as the divisibility of attention while listening to more than one person simultaneously. This extreme attention is necessary to successfully interpret a text that has already been heard. Of paramount importance is memory, which should be practiced by interpreting students among other things by developing creative thinking and visualisation of thoughts. Other character traits such as directness, frankness, and inquisitiveness are useful in this profession too. The last mentioned feature is related to the readiness for broadening of one's own knowledge and areas of life.

Interpersonal skills are a great advantage of interpreters. Interpreters are expected to show proficiency in both source and target languages. Such high-level skills are put to the test, in which there is not much time for making corrections to interpretations. This task is more challenging than the translation of written texts, in which one can introduce as many changes to the translation as one wishes before submitting the final version to the client. While written translators can become confident about the quality of their translation thanks to a corpus or dictionary evidence (Kamiński 2015a: 68), oral translators cannot enjoy such a privilege, as there is simply no time for such reference. Nevertheless, what oral translators can do is to prepare for the translation in advance through a careful revision of the terminology of the translation. This is possible only if the interpreter knows the topic of the text to be translated.

Interpreters are expected to be not only communicative but also responsive, meaning that they should follow a changing topic of the text and react to it accordingly. In this way they can anticipate the changing discourse and be ready to use words belonging to a given lexical field. The ability to anticipate a new topic of the discourse can help them avoid lexical mistakes, which are likely to occur when the interpreter has lost the context. Once the context is set, interpreters are more likely to translate unfamiliar or ad hoc terms appropriately by using, for example, a more explanatory equivalent in the target language rather than a ready insertable one (cf. Kamiński 2015b: 125). It should also be remembered that communicative skills cover an ability to initiate a conversation, keep it going, or express ideas clearly and succinctly. Furthermore, they mean an ability to maintain an appropriate body language in face-to-face communication. Because many of these skills are not easy to learn, they require a good deal of time and effort on the part of interpreting students. They are essential to communication and thus should be a core element of interpreting courses (cf. Kurz 2003: 64).

Interpersonal skills can help reduce tension between interlocutors, so that they can effectively enhance communication. This is especially important in the job of interpreters who are exposed to stressful situations. Although this profession is regarded as a relatively light job, it requires a good deal of physical and intellectual strength. In what follows I will discuss ways of coping with stress before and during the presentation.

4. How to deal with stress and anxiety

As mentioned earlier, stress arises as a result of the fear that the interpreter may lose control of the situation or may not meet the professional expectations. This fear may be a consequence of the bodily reaction to stimuli disturbing the balance. At the same time, they put the interpreter to the test. In response to a stimulus, emotions arise involuntarily. In essence, stimuli, facts, situations are nat-

ural, but it is the human who adds value to them through their interpretation and evaluation. According to Friebel (2004: 16), a stressor, or a stimulus triggering a series of bodily reactions, is evaluated against the human's earlier experience. The evaluation may lead to either positive or negative emotions. The former implies undertaking actions leading to the successful solutions of the stress problem, while the latter implies a failure. The latter, however, may also be constructive, as it often results in the interpreter being aware of the shortcomings and possible ways of improving of the situation. Stress can be considered our ally only if it acts for a short time, its intensity does not exceed the average person-specific level (Friebel 2004: 51). Stress induced problems can be sought through an evaluation of a stressful situation and taking appropriate actions. In this process, it is also important for interpreters to be aware of their weaknesses and strengths. Their analysis can ensure taking appropriate strategies. In what follows, I will concentrate on the practical ways of coping with stress in the context of interpreters.

Just prior to the commencement of interpretation, the interpreter should assume a comfortable position and be ready to talk only after a short period of time, after re-thinking of what has been heard. While interpreting, they should concentrate on the audience rather than themselves. A good option is to select a person in the audience, and talk to him/her, and then select another one to maintain an eye contact. Listening intently to one's own translation is not advisable, as it may disturb smooth communication. Positive thinking is indispensable. One should turn stress into a positive excitement, which should add extra energy to the performance. Rather than saying to oneself "I'm scared", it is better to say "I'm excited". By saying "I will do it", one can gain advantage of feeling relaxed and thus is likely to make one's dream come true. It is rather pointless to talk about the interpreter's stress while interpreting, as it may give unwelcome results. It is important to anticipate stressful situations, and be ready to use one's own strategies of solving the problem. By predicting what may happen, interpreters are able to initiate appropriate actions and control the situation. One of the easiest and effective ways of coping with stress is smiling. Smiling causes positive physiological reactions in the body, reducing muscle tension in the whole body and removing other negative effects of stress. Smiling reduces the level of certain hormones, such as cortisone and adrenaline, which are normally released in stress. It is also regarded as a factor improving the immune system. Prior to performance, one can benefit greatly from relaxation exercises, which consist in the visualisation of various positive values, such as kindness, firmness, bravery, diligence, and resistance to negative psychological emotions. One can relax through imagining nice places, situations, events that trigger positive reactions in the body. By way of meditation, it is possible to reach a deeper side of ourselves, so as to help solve hidden problems. Effective meditation can sometimes be difficult to achieve, especially by inexperienced people who find it difficult to relax. However, advantages of meditation should be noticeable in the long run through practice.

Worth considering is also taking up physical exercises, especially the ones that the person likes doing. It is rather no use convincing ourselves to take up sports that we are reluctant to do, though we should bear in mind that any physical activity is better than none. We should not forget that generally exercises remove bodily effects of stress by improving blood circulation, removing waste products, and reducing muscle tension. Exercises are only a part of a series of actions that can be taken to keep a healthy lifestyle. A healthy diet and sufficient rest are important factors ensuring that the body functions properly. Humans are not able to perform mental work for a long time unless their basic physical needs are met.

In pursuing positive lifestyle, worth considering are the following rules:

— Do not think of failures, but be ready to act. Do what you have to do and let the life go on (Pietraszek 2015).

— Concentrate on what you have to do. Do not waste your energy on other ideas or redundant activities.

— Try to live every day as best as you can. Enjoy every moment of your life.

— Look at the future. Do not fight with fears or ghosts from the past. Leave the past behind you.

— Do one thing at a time.

— Feel the life going. Slow down or stop, and listen to the surrounding. Watch the surrounding carefully.

— If you have a problem that is difficult to solve now, deal with it later. Let your subconsciousness work on it and provide you with a solution.

— Learn how to relax at work or what to do to make your work easier.

— Success can be achieved through short steps. You will not achieve everything at once [translated by M.K.].

Leaving the above physiological and psychological considerations aside, one should reiterate that stress can be significantly reduced through improving language skills and gaining translation experience. Developing one's interpretation skills can greatly reduce anxiety which frequently disturbs the interpreter's performance.

Conclusions

Professional interpreters, who are exposed to stress, should find their own optimal level of emotional stimulation. This level varies depending on individuals. Optimal stress triggers an interpreter's internal potential and strengthens the force of actions, making it easier to achieve smooth translation. It is of paramount importance for interpreters to get to know themselves, their needs and susceptibility to experiencing strong emotions. Such knowledge can ensure an optimal level of agitation at which the body and the mind function effectively. Positive thinking is another psychological factor which is invaluable in successful interpretation.

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Interpreting training

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Language proficiency or attentional training? A multi-modal, dual-task performed by early students of English, late, learnt bilinguals and simultaneous interpreters

Abstract: The paper presents a dual-task study aimed at investigating multitasking in three groups differing in their command of English and the type of language training. 55 subjects were tested in the experiment, including conference interpreting graduates, late, learnt, dominant bilinguals and early participants of English studies. The experimental task consisted in giving a speeded response to one of two multimodal stimuli delivered in Polish, i.e. the participants' mother tongue. The stimuli were delivered nearly simultaneously, within four time intervals equal to 100, 250, 500 and 1000 ms. The reaction time to the second of the two stimuli was measured, while at the same time the correctness of understanding the first one was verified. The results revealed a strong, statistically significant, negative correlation between a shorter interval between the stimuli and longer reaction times to the second stimulus. In addition to that, there were statistically significant inter-group differences observed, especially when the inter-stimuli interval was less than 1000 ms. The study results shed new light on multitasking and working memory in interpreters, bilinguals and occasional second language users, as well as on multimodal processing and cross-linguistic influence of training on executive skills. Both interpreting studies and second language acquisition constitute possible areas of application of the study outcome.

Keywords: simultaneous interpreters, bilinguals, English learners, multitasking, attention management.

Introduction: from working memory to multitasking

Working memory, introduced as a term in the 1960s, was in 1968 defined to be a "short term store" of a human mind that operates for ongoing processes and

stores the data used at a given moment, within a relatively short period of time (Atkinson and Schriffin 1968). Its nature has been a hotly debated issue for many years. It has been generally accepted that there is a mechanism or a store clearly distinguishable from long-term memory, responsible for dealing with new data, more complex than a temporary store and possessing the capability of performing cognitive operations. Starting with the observation that the prefrontal cortex is responsible for cognitive, rather than sensory operations, working memory has been gradually discovered to be a mental operator rather than a storage or a perception mechanism, and, subsequently, to function as a system of slave and control sub-mechanisms, rather than as a single body (Atkinson and Schriffin 1968).

One of the most popular working memory models, massively developed and changed over the years, is the model by Alan Baddeley (2010), presenting a system of inter-dependent processors. Baddeley (2010) maps out two main slave systems operating within working memory: the visuo-spatial sketchpad (VSSP), processing graphic and spatial input, and the phonological loop, responsible for language and sound processing. Next, the episodic buffer plays the role of a transition system between the two slave ones, and the central executive (CE) functions as a supervisory processor, monitoring the performance of all the remaining sub-systems and managing attention focus and division. It is the CE that is responsible for attention management. The role of the central executive is postulated by Baddeley (1996, 2000) to be best observed in a dual-task performance. He pointed out that, in order to observe any deficit in the CE performance, it is enough to make the subject of a study perform a distractor task while being asked to respond to a series of stimuli. For instance, a person asked to repeat a simple "blah, blah, blah" throughout performing another cognitive task would score much lower than in a single-task experiment. Similarly, the so-called "in-bag" task, consisting in reading a letter or a number out loud while memorising another causes much trouble. All this led Baddeley to assume that the central executive may act not only as a store and control system, but also as a general cognitive processor and a memory on its own, that performs complex operations related to attention division and management (Baddeley 2000). In consequence, proper attention division and management is indispensable for successful multitasking.

It has never been clearly stated whether multitasking is based on parallel processing of concurrent stimuli, or very fast attention switches that enable alternate monitoring of the activities performed. A number of researchers postulate the capacity to process concurrently to be limited (Kahneman and Tversky 1973, 1979; Tombu and Jolicoeur 2003), allowing to process a certain number of tasks simultaneously, depending on their difficulty. Contrary to that, a paucity of studies proves that simultaneous processing is not, or rather: is not always, possible (Pashler 1994; Arnell 2002, 2006). Consequently, if two (or more) stimuli require processing at the same time, they have to be in fact processed one after another, and one needs to wait until the other is identified. This temporary processing inhib-

ition is referred to as bottleneck effect (Broadbent 1957; Pashler 1994; Arnell 2002; Pashler et al. 2008). According to some researchers, a bottleneck in processing may occur if the stimuli to be processed are of similar kind or if the ongoing processes require the same type of mental operator (Pashler 1994; Pashler, Harris and Nuechterlein 2008). In addition, Tombu et al. (2011) pointed out that a more general, attentional bottleneck may occur whenever two or more cognitive processes are carried out, which is related to the limited capacity of executive control.

Numerous studies confirm that executive functions can be trained. Salminen et al. (2012) proved that working memory training enhances executive control. The tasks used by Salminen et al. (2012) involved their participants into simultaneous visual and auditory processing, like the experiment presented in this paper. Dahlin et al. (2008) postulated that sophisticated executive skills may be transferred from performing different tasks, at first glance unrelated to executive functions.

The effects of cognitive training on executive functions are usually more visible in young adults than the elderly ones (Hoyer and Verhaeghen 2006; Jones et al. 2006; Kray and Epplinger 2006; Nyberg et al. 2003), while some studies report older individuals to generate better (Bherer et al. 2005) or similar (Kramer, Hahn and Gopher 1999) results. In addition, the level of executive skills (and the ability to multitask) differs depending on the number of languages mastered, or, more specifically: varies between mono- and bilinguals.

1. Multitasking and executive functions in monolinguals and bilinguals and simultaneous interpreters

There is a number of studies indicating that bilinguals are characterised by very good inhibitory control skills (e.g. Bialystok 1999; Carlson and Meltzoff 2008) and advanced executive functions. Importantly, this proficiency in good inhibitory skills was observed in both early and late bilinguals. The term "early bilingual" refers to an individual who acquired more than one language in the pre-adolescent period, as opposed to a late one (Baetens and Beardsmore 1986: 28). Late bilingualism, in turn, usually refers to the acquisition of a second language after the critical period, especially when that happens in adolescence or adulthood. Bilinguals can be furthermore divided into acquired and learnt, as well as balanced and dominant (Moradi 2014: 108) while the group of subjects taking part in the study presented in this paper were composed of the late, learnt bilinguals in whom Polish was the dominant language and English was their L2.

The advantages of being native or near-native in more than one language are not limited to executive control, as both early and late bilinguals perform better that monolinguals also in creativity (Kessler and Quinn 1987), problem solving (Bain 1975), logical thinking, general cognitive processing (Bialystok et al. 2004; Bialystok 2001, 2011) and many other. Colzato et al. (2008) proved bilinguals to

outperform monolinguals in executive functions, while at the same time produce a more pronounced attentional blink.

In addition, the relationship between language and executive functions is not limited to bi- or multilinguals. In fact, any language learning was stated to boost executive control and multitasking. Gooch et al. (2015) observed a relationship between some language learning measures and executive functions in young children. Alloway (2006) found a great role of working memory in learning and classroom performance, including reading. Vega-Mendoza (2015) found late bilinguals to outperform monolinguals in selective attention and attentional switching, while no superiority of bilinguals over monolinguals was observed in sustained attention and verbal fluency.

The fact that early and late bilinguals show advanced cognitive skills is frequently related to their constant switching from one language to another. Activating one language consequently needs suppressing the other or another one(s) (Green 1998), which results in great attention management and executive control. On the other hand, bilinguals rarely use two languages at exactly the same time, which is the daily routine of simultaneous interpreters.

Simultaneous interpreters listen to the texts produced by a speaker in one language, while at the same time producing the equivalent text in another language. An interpreter starts to speak almost immediately following the speaker, with a short lag referred to as the ear-voice-span (Lee 2002: 596). This simultaneity of actions makes an interpreter continuously decode a message in the source language and encode it in the target one, additionally monitoring themselves, correcting mistakes produced, reading (the speaker's) slides, communicating with their boothmate, and, most importantly, coordinating all the activities (after: Lederer 1981; Gile 1995; Seeber 2011). Importantly, both source and target languages need to be simultaneously activated in interpreters' minds (Christoffels, De Groot and Kroll 2006) which calls for a very strong coordination of all the cognitive processes carried out itself. This concurrent cognitive processing makes interpreters extremely skilled in executive control and attention division (Gile 1995; Seeber 2011). The daily practice of simultaneous interpreters differs from the one of bilinguals, as the former ones do not fully suppress one language while using another at a particular moment (Green 1988). Instead, interpreters need to constantly balance the use of two languages at exactly the same time. When compared to interpreters, bilinguals showed much greater language-switching cost (Meuter and Allport 1999). Interpreters were also proved to outperform bilinguals and monolinguals in non-verbal executive tasks (Yudes, Macizo and Bajo 2011) and to have longer memory span than bilinguals (Christoffels, De Groot and Kroll 2006).

The differences in cognitive processing between bilinguals and monolinguals, as well as bilinguals as simultaneous interpreters, served as the basis for designing the study presented in the next section. The main aim of the study was to verify whether similar differences will be observed between late, learnt, dominant bi-

linguals who have graduated from English studies, students who are beginning their English studies and young interpreting graduates (who at some point had become late, learnt bilinguals as well). Importantly, the author's intention was to verify whether the differences in the level of L2 command and the type of training participants receive in their second language will have an effect on their executive skills while performing in their L1. The next section describes the experimental study in detail.

2. Experimental study

The aim of the experiment described in this paper was to investigate multi-tasking and executive control in three groups having a different language learning background, namely: conference interpreting graduates (IG) vs. late, learnt bilinguals (LB) whose dominant language is Polish and the second language is English, and early students of English (ESE), in whom Polish was the L1 and English was the L2. In other words, the goal was to analyse the dual-task performance in these particular groups.

2.1. Participants

The experiment included three groups of participants, all composed of native Poles. One of them (IG) contained 17 interpreting trainees, aged 24 to 26 just before graduating from a 2-year M.A. interpreter training programme at Adam Mickiewicz University in Poznań, Poland. The IG group included 7 males and 10 females. In the second group (LB), there were 18 late, learnt bilinguals, with Polish as their dominant language and English as their second language (5 males and 13 females). These were 2 M.A. students just before graduation, aged 24 to 27, who specialised neither in interpreting nor in translation. The third group (ESE) was composed of 20 young adults aged 19–20, including 6 males and 14 females. The ESEs were tested just after their admission to the Faculty of English and having become the students of English studies at the B.A. level. English was the second language of all the subjects, including interpreters, while Polish was their mother tongue.

The three experimental groups were asked to assess their weekly language use during the preceding academic (or school) year. The mean weekly English use was 19.74 hours in the case of IGs, 20.8 in the LB group and 1.56 among ESEs. There was no language level assessment conducted, however, all the participants were recruited from the same university, and the subjects in particular groups were at the same level of their academic experience. The participants in the LB and IG groups followed the same English or interpreting training programme, respectively.

2.2. Materials

A sample of 225 abstract and non-abstract Polish nouns was used to ensure that the level of language proficiency would not act as a confounding variable (as it would be the case if English stimuli were chosen). The words had one or two syllables and their rounded frequency per million word tokens ranged from 24.55 to 47.8 according to the Polish word frequencies calculated based on the PELCRA search engine and calculator of the Polish National Corpus. The list was randomly divided into two parts: P1 and P2. Part one (P1), consisting of 100 words was used as auditory stimuli which were recorded by a female Polish native speaker. P2 included 125 nouns and was randomly divided into five groups, each composed of 25 items. Importantly, the nouns that were semantically similar were not presented one after another, as this would have produced a priming effect. The visual stimuli were composed either of Polish words, such as "piłka" (Polish: "ball", frequency: 33.45 per million word tokens) or Polish non-words, such as "kapla", written in Arial font ±26. The non-words were judged by the author and one rater to match the Polish orthography. The words and non-words were displayed in the centre of the screen, while their graphic representations were within 10° from the centre of the screen to ensure their foveal perception.

2.3. Apparatus

The auditory and visual stimuli were prepared by means of the Audacity and Corel Draw X3 programmes, respectively. The experiment itself was carried out with the use of E-Prime 2.2, while the participants were listening to the auditory stimuli through Panasonic circumaural, open-back headphones. The final statistical analysis was performed in SPSS 2.2.

2.4. Procedure

The study consisted in a dual task; the experimental procedure would guide the participants through instructions, a test exercise and the experiment proper, while 85% was the correctness threshold needed to score in the test exercise in order to proceed to the main task. While carrying out the dual tasks (test exercise and main task), the participants were delivered two stimuli (Stimulus 1: S1 and Stimulus 2: S2) separated with an interval (the so-called Stimulus Onset Asynchrony: SOA), which was equal to 100 ms, 250 ms, 500 ms or 1000 ms. The stimuli appeared in five experimental blocks, with four different SOAs. In the fifth block, a single stimulus was delivered, with the intention to define a standard reaction time (RT) of a given subject to S2.

Each dual-task experimental block started with a "+" appearing in the middle of the screen placed in front of a participant, which disappeared as soon as the sub-

ject pressed the Space bar on the keyboard, indicating their readiness to perform the task. Immediately after that, the auditory stimulus was delivered in the form of a Polish word. The participants were instructed to come up with and remember one possible synonym of the word heard, which was to ensure their processing of the auditory stimuli. The second stimulus was delivered within a given SOA subsequently to the onset of the first one. The stimulus was composed of a Polish word or a string of letters and the subjects were asked to decide, as quickly as they can, whether the strings given were Polish words. The subjects responded to the second stimulus by pressing "0" or "1" (which stood for "correct" or "incorrect" and was counterbalanced across the participants) on the keyboard. Finally, having accomplished that, the participants were to write down the synonym of the auditory stimulus into a box that appeared on the screen. The task ended with a new "+" appearing on the screen. The order of the experimental blocks and stimuli within the blocks were also counterbalanced across all the subjects.

2.5. Hypotheses

There were two hypotheses in the study, which were formulated as follows:

1: Shorter SOA would result in longer cognitive processing. The relationship between SOA and the time needed for cognitive processing will be manifested in a correlation between the shorter SOAs and longer reaction times to the second stimulus;

2: The IGs will outperform two other groups (LB and ESE) in terms of multitasking, which will be manifested in their shorter reaction times to S2. The LB group will outperform ESEs, while the inter-group differences in RTs will be statistically significant.

2.6. Statistical analysis

There were two types of statistical tests used in the analysis. The inter- and intra-group differences were calculated by means of repeated measures ANOVA, while the V-Cramer and Pearson's correlations were used to measure the inter-relations between a particular group and their reaction times, as well as between SOA and RT, respectively.

2.7. Results

The results revealed a negative, moderate, statistically significant correlation between SOA and RT ($R = -528$, $p < 0.001$), irrespective of the group. In addition, the correlations between SOAs and RTs were stronger when the SOA = 100 was

excluded from the analysis, as R reached -827 and $p < 0.001$ in that case. Moreover, there were inter-group differences observed, as presented in Table 1.

Table 1. The inter-group differences in reaction times, in the dual-task in general

	IG	BL	ESE
IG	—	$F = 29.135; p < 0.001$	$F = 32.462; p < 0.001$
BL	$F = 29.135; p < 0.001$	—	$F = 23.148; p = 0.031$
ESE	$F = 32.462; p < 0.001$	$F = 23.148; p = 0.031$	—

Finally, these inter-group differences in reaction times differed depending on the SOA the participants were subject to. Figure 1 shows the mean reaction times in particular groups, as well as the level of statistical significance of a particular inter- and intra-group difference in the means.

No pattern related to the handedness, nor to the sex of the participants was noticed throughout the analysis.
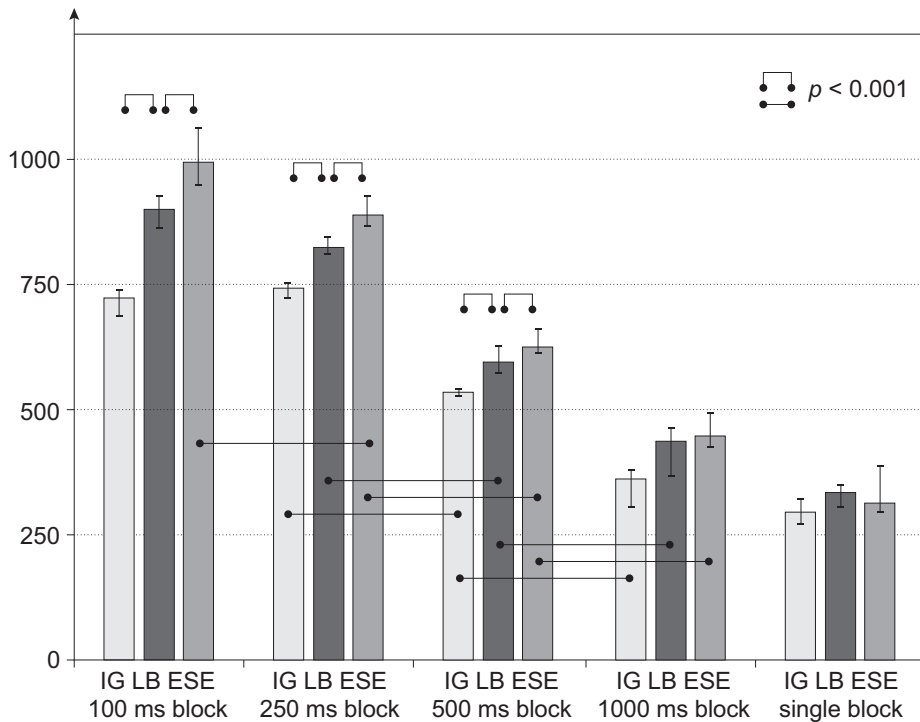
Figure 1. Mean reaction times in five experimental blocks — * indicates the 0.05 level of statistical significance reached, while ** states the p value of a given difference fall below 0.001

3. Discussion

Hypothesis 1 was corroborated in the study; the correlation between shorter SOAs and longer RTs illustrates the increasing cognitive load imposed by the performance of the dual-task. The same difficulty in concurrent processing was observed by a number of researchers (e.g. Pashler and Johnston 1989; Pashler and Christian 1994; Pashler and O'Brien 1994; Arnell et al. 2004; Arnell 2006; Seeber 2011). Tombu et al. (2011) investigated speeded dual-task performance by means of fMRI and found speed limitations when the subjects were concurrently encoding and decoding a message. Vetter, in turn, found an attentional bottleneck in subjects performing an enumeration dual-task (Vetter, Butterworth and Bahrami 2008). As the intervals between the stimuli decreased in the study presented in this paper, the time for processing S1 became limited and insufficient to carry out the task, which resulted in a delayed response to the second of the two stimuli. This does not, in the author's opinion, directly translate into the human inability to process in parallel. The delay in the subjects' speeded responses might indicate that when two stimuli are processed concurrently these two processes are carried out more slowly, due to a greater attentional effort. On the other hand, the delay in the reaction to the second stimulus may account for the fact that one of the stimuli had to wait to be processed only after the first one, not simultaneously. The author simply claims the results of this study are not sufficient to clearly speak in favour of either concurrent processing or fast attentional switching. On the other hand, the delay in reaction times to S2 shows that multimodal processing of language *does* constitute a cognitive load, and that this cognitive load is dependent on the degree of the simultaneity of actions carried out. On the other hand, despite the general tendency among the participants to react later when SOA decreased, the intragroup differences between the reaction times at particular SOAs were dissimilar in particular groups. As illustrated in Figure 1, there is a large, statistically significant difference between the RTs obtained in the 100-to-250-ms-SOA blocks and the ones with SOA = 500 and 1000 ms. At the same time, the differences in the RTs between the 100 vs 250 ms blocks are repeatedly small and statistically non-significant across the groups. An SOA equal to 500 or 1000 ms probably made it possible to decode the first of the two stimuli prior to receiving the next one, as the standard time of processing a meaningful lexical unit in isolation is stated to be circa 250 ms (Massaro 1993). Hence, the main difficulty of the 500-ms- and 1000-ms-SOA dual-task was storing S1 (or its synonym) in the working memory while processing S2. SOAs equalling 100 and 250 ms forced the participants to process S1 while having already heard S2 and subsequently respond to S2 while storing S1 in their memory.

Moreover, the outcome of the experiment revealed strong inter-group differences which reached statistical significance in the case of all SOAs if 0.05 is treated as the level of statistical significance. On the other hand, if this level is

defined to be 0.001, statistical significance was reached only in two cases, namely: when comparing IGs to LBs and IGs to ESEs. Such results may either reflect an uneven pattern of inter-group differences across the experimental blocks or simply speak in favour of greater cognitive discrepancies between the IGs and the remaining two groups than between the LBs and ESEs. A similar conclusion was drawn by e.g. Sintnorelli (2008), who claimed interpreters to excel in phonological loop functioning, in comparison to other users of language. Importantly, the ESEs' mean RT in the single block was shorter than the one of LBs (and comparable to the one of interpreters). As shown in Figure 1, the differences in the means of single block results did not reach statistical significance, like the difference between LBs and ESEs, as well as LBs and IGs when SOA was equal to 1000 ms. On the other hand, the 100, 250 and 500 ms blocks produced statistically significant inter-group differences, which translates into greater inter-group discrepancies when the tasks required stronger multitasking and attention management. Therefore, it may be argued that it is the ability to effectively multitask that distinguishes interpreters from the other subjects examined in this study, as well as LBs from ESEs. In addition, it can be stated that the statistically significant differences between the IGs', LBs' and ESEs' performance indicate an influence of both language and interpreting training on multitasking skills. Nevertheless, as the university routine of interpreting trainees involves extensive concurrent processing and simultaneous activation of two languages, it can be argued that it is the multitasking practice and concurrent language activation that boosts the executive skills the most. This double language activation is also present in the bilingual participants of this study, as they function in two language realms on a daily basis. The constant use of two languages accounts for their outscoring the ESE group.

Importantly, the dual processing of aural and visual linguistic stimuli resulted in this study in an amodal bottleneck (Pashler 1994; Arnell 2002). The phenomenon of the amodal processing bottleneck, or, in general, the delay resulting from cross-modal processing was observed by Jolicoeur and Dell'Acqua (1998, 1999) and Arnell (2006) who claimed the cognitive overload present in concurrent processing is not modality-specific. Furthermore, while the study participants differed in their command of English, i.e. their second language, and the training obtained, the differences in their dual-task performance were observed in an experiment that involved stimuli in Polish, i.e. the subjects' mother tongue. This outcome indicates a cross-linguistic, not: language-specific, influence of learning and the daily use of a second language on multitasking experience and executive skills.

The results of this study may find their application in two domains: interpreting training and work, as well as in second language teaching. Firstly, despite the fact that interpreting trainees learn their way into mastering multitasking, the concurrent processing *does* constitute a major difficulty in their professional performance. Observing their functioning and scores in dual- or multi-tasks may lead to designing enhanced interpreting aids and training materials, which

will provide students with better executive skills. On the other hand, as the results obtained in the 100 and 250 ms blocks have shown, while concurrent processing might be pushed to extreme, it cannot make up for the limitations of time needed for linguistic processing. These observations reflect another difficulty interpreters are forced to deal with in their daily practice: fast speakers, who quite often force interpreters to cope with a pace that does not allow for the processing of all the stimuli in time. Translating the results described above into conference speakers' and clients' education may lead to creating less stressful working conditions for simultaneous interpreters and result in a higher quality of interpretation. Finally, investigating executive skills in second language users and learnt bilinguals can translate into enhanced second language learning strategies, materials and plans. Understanding the relationship between linguistic and executive functioning may result in creating individually oriented educational materials for those students whose either language or executive skills call for additional training.

Limitations of the study

One of the most serious limitations of the study presented in this article is the size of its sample. The main challenge of studies involving interpreters or inter-preting trainees is the number of potential participants, partially due to the fact that interpreting students' groups are hardly ever numerous. Nevertheless, the ex-periment described in the paper calls for being reproduced on a larger sample. In addition, a fourth experimental group, namely: professional interpreters, would constitute an indispensable addition to the three investigated in this study, as executive functions are likely to develop in interpreters with professional experi-ence. Finally, a more complex experimental design involving a thorough analysis of multitasking vs linguistic skills would allow for a deeper understanding of the differences present in the three experimental groups.

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Visual presentation in simultaneous interpretation training

Abstract: In the practical reality of conference interpreting, we very often come across meetings with various visual presentations such as PowerPoint, Prezi and others. Such presentations seem to be ubiquitous, especially in the setting of training sessions or product presentations; if used properly by respecting certain basic rules, they can be of great help for interpreters. In this paper we have tried to verify to what extent accompanying visual presentations assist and help students of simultaneous interpretation, and how they influence their ear-voice span, anticipation and ability to cope with more condensed informational units. Our main aim was to determine whether such visual presentations should be used, and if so, how and when in the process of training. Based on the results of this experiment, we can see a certain improvement in the quality of interpretation linked with the ability to predict and anticipate the argumentation of the discourse as well as with having the more demanding units of information, such as names and numbers, visible on the presentation slides. This improvement in performance was apparent when comparing students who had visual contact with the interpretation with those who did not, also when comparing the overall performance of the whole group in two scenarios: one with a visual presentation and one without.

Key words: simultaneous interpreting, interpreter training, visual presentation, visual contact, training techniques.

Introduction and description of the problem

What sets simultaneous interpretation apart from other intellectual activities is the high number of parallel processes performed at the same time. It is more than just active listening, analysis, comprehension and delivery; there are many additional and less obvious activities. Important theoretical works (e.g. Seleskovitch and Lederer 1995; Gile 2009) have already explored and outlined these processes and offered various theories. All these theories have been trying to itemize the list of the mutually dependent activities which enable the interpreters "to walk on the tightrope between travestying a speaker's message by over-literal translation and betraying it by inaccuracy…" (Jones 2011: 6).

When looking deeper into the complexity of simultaneous tasks, we will look more closely at what Lederer called "conceptualizing" (Seleskovitch and Lederer 1995: 109) and what Gile labelled as "extralinguistic anticipation" (Gile 2009: 174). This is the process of connecting the dots between the already existing knowledge of the interpreter, the context of the speech, intertextual links and connections, the intonation, gestures and facial expressions of the speaker and information from other sources such as meeting documents and/or visual presentations. This is where situational awareness comes in as one of the components which Lederer listed as an intermittent task (Seleskovitch and Lederer 1995: 109).

Interpreting with additional visual presentation is a challenging and demanding task even for an experienced interpreter. It requires further splitting of attention and adds the visual input of information to the primary aural input. Whereas in the past the primary channel for the reception of information was aural, nowadays we see that the visual component is becoming ever more important. In this respect it is somewhat similar to simultaneous interpretation with text, but in this case the primary source of information is aural, complemented with additional visual information. The very nature of simultaneous interpretation will continue to give priority to aural information, but linking it with visual input will be an ever more important part of an interpreter's work.

The ubiquity of PowerPoint presentations at meetings of all types presents both a threat and an opportunity for interpreters. If used properly, a well-prepared and decently visible visual presentation can become an important source of additional information. It can help interpreters in multiple ways, which we will try to outline. We also believe that accompanying PowerPoint presentations, when appropriately used, delivered and designed according to certain basic rules, can be interesting teaching aids in the process of interpreter training. Very much depends, however, on how and when the accompanying visual presentations will be used in the training curriculum.

In order to determine this we designed an experiment with students of the master's programme in interpretation which was supposed to test how students perform and respond to test speeches realized with and without an accompanying visual presentation. Our main objective was to determine the appropriate phase of interpreter training in which such a teaching aid should be used and to look deeper into how, if at all, such a presentation can positively influence and stimulate the performance of interpretation students.

1. Premises of the experiment

Including speeches with visual presentations into the practical teaching of simultaneous interpreting was carried out on the basis of practical experience. These days the events that most often require simultaneous interpreting are various con-

ferences, presentational meetings and training sessions. An accompanying visual presentation, often in the PowerPoint format, is ubiquitous at these events. We have noticed that when a speaker communicates in a comprehensible and predictable manner, and uses a presentation which is easily intelligible and contains all the relevant pieces of information such as names, numbers and schemes, the presentation can become an important aid for the interpreter. A good presentation which is available to the interpreters sufficiently in advance and clearly visible during the meeting enables better anticipation and higher precision on the side of the interpreter. While it requires more coordination due to the additional channel of input information, it frees up a part of the interpreter's processing capacity.

On the other hand, a poorly used and designed visual presentation can become a nightmare for any interpreter. Slides loaded with minuscule letters, jumping back and forth, quoting endless passages and deviating from the logical line of the presentation are only some of the possible worst case scenarios. Let us therefore summarize the positive and negative aspects of visual presentations.

1.1. Positive aspects of using visual presentations

As far as the terminology is concerned, a well-used accompanying presentation is an "aid". However, it can also be useful in the case of long enumerations, names of people or organizations, numbers and definitions. If the presentations are made available to the interpreters in advance, they can become a handy source of information that can be used for extending glossaries and a study of specific terms prior to the meeting. If the presentation includes schemes and graphs, the interpreter has a chance to familiarize himself with the vocabulary as well as the logical structure of the arguments.

Another advantage of having a visual presentation is its help in analysing and anticipating the information given in the speech. In the case of uncertainties whilst analysing the oral presentation caused by various factors which may be objective (e.g. incorrect pronunciation or a confusing way of expression by the speaker, ambient noise or noise caused by technical difficulties) or subjective (e.g. a misunderstanding of the idea, wrong analysis or inadequate interpreting strategy), the visual presentation may certainly help the interpreter. It helps to better analyse the ideas of the speech, understand the basic argumentation line of the speaker, and anticipate the further direction of the speech and argumentation. According to Makarová, having the speaker and the projection area in direct view is crucial for avoiding misunderstandings or preventing the incorrect intentional division of the units (Makarová 2004: 40).

Anticipation is the third positive aspect of visual presentations. Names, numbers, definitions, schemes and formulas serve as a good example. If the information is available in a visual presentation, the interpreter can even process passages

with very dense informational content which would lead to a significant overload of his processing capacities should the visual source of information be absent. He would have to opt for one of the coping tactics, the result of which would be higher stress and possible informational loss in the target text.

The above-mentioned advantages are relevant, especially in the process of interpreter training. In many cases, students in the initial phases of simultaneous interpretation are excessively focused on the coordination of their listening and speech production efforts. Their untrained processing capacity can be very easily overloaded with units of text bearing a large volume of information such as numbers, names or definitions. Gerver has described what the interpreters have to deal with in the case of informational overload, which can be caused by the fast speed of the source speech or be due to its higher informational content:

> The interpreter, having to cope with larger units before being able to translate, finds that as the intervals between items become shorter than the time taken to process them, … he appears to opt for a strategy of working in bursts and must lengthen pause times in order to do so. The extra time thus made available should enable him to cope with the increasing backlog of material in short-term store, but items in store accumulate and deteriorate faster than the interpreter can cope and, in fact, his performance falls off. (Gerver 2002: 182)

Such fragmentation of target speech is very common among interpreting students, often provoked by a more demanding single unit of information such as a name or a number. Relieving the students of such additional stress by giving them a visual aid in the form of a presentation can lead to better coordination of analytical and production efforts and thus to a more balanced performance in the initial phases of the training process.

1.2. Negative aspects of using visual presentations

Perhaps the most negative aspect of visual presentations is the tendency of speakers not to talk spontaneously but to read or quote blocks of text directly from the visual presentation. An oralization of a written text is always much more demanding than a spontaneous utterance (Gile 2009: 193). However, in the situation when the text can be seen on a visual presentation the interpreter is more at ease, although still in a difficult position. It is perhaps natural that some less skilled speakers often tend to follow their presentations very closely, and their public appearances then turn into public readings of the presentation text.

This brings us to an area highlighted earlier: the similarity between simultaneous interpretation with text. The level to which interpretation with visual presentation resembles one with text very much depends on the speaker. As explained earlier, if used properly, the presentation may contribute to a higher quality of interpretation. If used poorly, it can be a distraction for the interpreters and perhaps

even a trap. Quoting or reading longer passages of text (longer than a few words) by the speaker presents a cognitive constraint for the interpreter and special strategies need to be applied (Rawdha et al. 2009: 10). The very fact that apart from the aural channel of information, interpreters have to coordinate and analyse the visual input as well means that their cognitive capacity is used to a higher extent. If the speaker departs from the visual presentation, the cognitive workload becomes critical, as the interpreter has to keep contrasting the information in the visual source with the information contained in the aural source.

Another aspect of working with visual presentations is the common practical problem of the good visibility of the projection screen. The interpreting booths are very often located in the backmost parts of conference rooms, and it is not uncommon for them to be located a floor above the room, which results in poor visibility. Good visibility, however, is crucial: according to Taylor-Boulandon, the complete process of communication has the following ratios of importance: 7% for word meanings, 38% for intonation and, surprisingly, 55% for visual perception (Taylor-Bouladon 2011: 182).

There are even situations when the interpreting booth is located in a completely different room, thus providing no optical contact. Even though such situations should not happen, the reality on the ground is different, and as the interpreter cannot follow visually what is currently happening in the conference room, especially the presentation, it may happen that a text which is being read or quoted and is visible to all the participants with the sole exception of the interpreter becomes uninterpretable.

1.3. Conclusions and hypothesis

In order to focus only on the positive and beneficial aspects of an accompanying visual presentation, we have tried to create four basic criteria which should limit the negative aspects of visual presentations and maximize their positive potential to the maximum level. Based on the above-mentioned theoretical considerations, we have proposed four main principles for the application of visual presentations in our experiment and perhaps also in general: for any use of visual presentations in a setting with simultaneous interpretation. These four principles are as follows:

1. Visibility — if the interpreters are to work properly, they need to have perfect visual contact with the presentation and the presenter. If direct visual contact is impossible, other arrangements need to be found in order to guarantee visibility.

2. Brevity — if the slides are to be comprehensible and clear, they need to contain only basic information, refrain from long quotations and passages of text, and should include all important and relevant pieces of information (especially names and numbers).

3. Predictability — the speaker should use the presentation in a predictable way, referring to and quoting only the visible pieces of information. The interpreters should always have the latest version of the presentation[1].

4. Accessibility — if the interpreters are to use the full potential of the presentation and provide their services to the best quality, they need to have access to them sufficiently in advance.

We believe that when respecting these principles visual presentations may be a beneficial contribution to the teaching process. Specifically, the positive influences of an accompanying visual presentation can be the following:

— with regard to terminology: fewer inaccuracies, meaning changes, generalization and summarizing;

— with regard to the content: more accuracy in enumerations, less confusion and fewer departures from what the speaker says, better handling of the more difficult passages;

— with regard to psychology: less nervousness and inner stress, maintaining a more stable ear-voice span.

Without any aid, the points mentioned above can be problematic for interpreters in training, i.e. the students. In the early stages of teaching simultaneous interpreting, the student does not yet automatically handle the processes and strategies with which he or she could overcome the problematic passages, the incomprehension of the text, and his or her own stress or tension. Gile assumes that although there is not enough broad empirical research in the field of basic processing capacities of students of interpreting, it is probable that the students improve their coordination capacity based on the fact that they need to spend less energy than before on active listening and analysis (Gile 2009: 185).

Therefore, if a visual presentation can help experienced interpreters, it should also come as a highly useful aid to the students precisely because it allows them to spend more energy on the analysis and formulation of their final output, and because it lowers their stress levels and terminological uncertainty. More specifically, an appropriately used visual presentation could contribute to a more balanced ear-voice span and fewer omissions, terminological errors and inaccuracies among the students. It was this thesis that we tried to evaluate in practical teaching.

2. Description of the experiment

Over a period of two months we studied a group of students who had just started with simultaneous interpretation. They were a mixed group, with a ma-

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[1] As explained earlier, the additional splitting of attention between aural and visual sources of information makes it much more demanding for the interpreter to follow the logical and informational structure of the source speech. If the interpreter has to contrast the visual presentation with the aural information, his cognitive capacity will be quickly depleted.

jority being females aged between 21 and 24, with one exception (27 years of age). During the second half of the semester, after the shadowing exercises and introductory steps in simultaneous interpretation, we observed the influence of the presence or absence of an accompanying visual presentation on the quality of simultaneous interpreting. During this part of the semester, it was the task of the students to prepare speeches on given topics (Slovak regions and their economic, social and geographical differences). The majority of students had accompanying PowerPoint presentations while a minority opted for an oral presentation only. In this phase we started to observe deviations in the quality of student interpretation (e.g. ear-voice span, anticipation and terminological coherence). We therefore continued the following research with two different groups of students to look into this matter deeper.

The students in our sample were all studying translation and interpreting with English combined with various other languages. These students have only one compulsory seminar of simultaneous interpreting per week, thus their contact with this type of interpreting is rather limited. None of the students in the sample group had any experience of simultaneous interpreting outside the university.

The language laboratory in which the course takes place is equipped with seven two-person interpreting booths; therefore, the maximum number of students is 14. However, it is only possible to create recordings of six of the seven booth outputs and analyse them later on. Booth 7 was thus not recorded and will not appear in further comparisons. Other peculiarities of the booth placement in the room include the fact that it is virtually impossible to see the projection area from one of the booths (Booth 1). We decided to use this fact to our advantage and make Booth 1 our control sample without the support of a visual presentation.

The teacher can use a control panel which allows him or her to cycle through the outputs of the booth and listen to the students' work. Only one student in each booth was interpreting at a time. In the case of interpreting longer speeches (10 to 20 minutes), the students would change their roles. If the speeches were more difficult, the students took turns more frequently. In our experiment the booth number always signified only one specific student, as we only analysed the work of one of the two students in the booths in order to save time. There was no special key to selecting the given students. We asked those students who interpreted the first speech to continue interpreting the following speeches as well.

As a special and additional source of information, a questionnaire was distributed to the students in both groups in order to collect their feedback on working with the accompanying visual presentations. We focused on the ease of working with a presentation and the way a previously available presentation could influence the subsequent interpretation of it.

2.1. Speech characteristics

The speeches interpreted by the students may be divided into two types. At the beginning of the lesson, two speeches were given by students and were always accompanied by a visual PowerPoint presentation. These students' speeches were given in English and interpreted into Slovak. We made a thorough effort to ensure that the students spoke spontaneously and would refrain from reading a written text. The students were familiar with the four main principles of what the presentation should look like and how it should be used. The pairs of student speeches were different at every lesson. The third speech was always the same and was prepared and pre-recorded by the teacher. Whilst the students' speeches were shorter and had a duration of 7 to 11 minutes, the teacher's speech was longer and had a duration of 19 minutes.

We chose two student groups for the experiment. Of the two speeches observed, one was the same for both groups (the teacher's speech) and the second speech given differed in each of the groups. All speeches dealt with educational systems and reforms based on the pre-defined scope and vocabulary. In this case, the students prepared their speeches about the higher education systems in the EU countries and the USA, and the teacher prepared a speech focusing on the results of the university rating process in Slovakia.

The students' speeches were terminologically undemanding and the vocabulary was available in advance. The occurrence of enumerations was minimal, with only sporadic references to numbers or names (of universities or cities) which in the vast majority of cases were available in the visual presentations. The difficulty of the speeches could be evaluated as low to medium in terms of the words-per-minute rate and terminological and idiomatical complexity.

However, the teacher's speech was rather demanding. In the text there were frequent enumerations, comparisons, causal connections and numbers. The ranking of the faculties and universities appeared multiple times in the speech and there were direct references made to the presentation (names of universities and their score in different categories). In this speech the teacher was aiming to create a situation in which the good visibility of a presentation was an important advantage for the good processing of the source text.

Let us therefore look at some selected indicators to assess the influence of a visual presentation on the quality of resulting interpreting.

2.2. Ear-voice span

Time lag is individual and closely connected to the character of the speech given: its difficulty, the speaker's speed and the inner stress of the interpreter. If some noticeable changes occur in the ear-voice span, it is a sign that the interpreter is dealing with complicated sentence constructions, trying to catch up with the speaker, or has to analyse the source text for a prolonged period of time.

Seleskovitch and Lederer emphasize that interpreting involves two types of content — ideas that need to be understood and translatable terms which have to be known. If the ideas are correctly understood, we can hold them for a short time; however, numbers and names must be interpreted immediately (Seleskovitch and Lederer 1995: 131). We thus studied the influence of the visual contact with the presentation on the ear-voice span of the students during interpretation. We compared the recordings of the students' interpreting with the recording of the original speech in both groups. We aligned the recordings, always comparing the source recording with the recording of the interpreter in real time. When analysing the recordings, we looked for the range between the minimum and maximum time lag of the interpreter. We excluded those parts of the recordings when the students stopped interpreting and measured the ear-voice span only during the productive and fluent passages. These ear-voice-span ranges were then projected onto a graph.

2.2.1. Group 1

In the first group, we compared the first (light grey columns) and the third (dark grey columns) speech of the given day. The first speech (A) was a student's speech given at a pace of 170 words/minute, moderately difficult as far as the ideas and terms were concerned. The third speech (C) was the teacher's speech and, as was previously mentioned, it was difficult in terms of content and relied greatly on the visual presentation. The speed of this speech was average (130 words/minute).

Booth 1, which had no visual contact with the projection area, was operated by the students with no significant prior experience of simultaneous interpreting who were of average ability based on long-term observations.
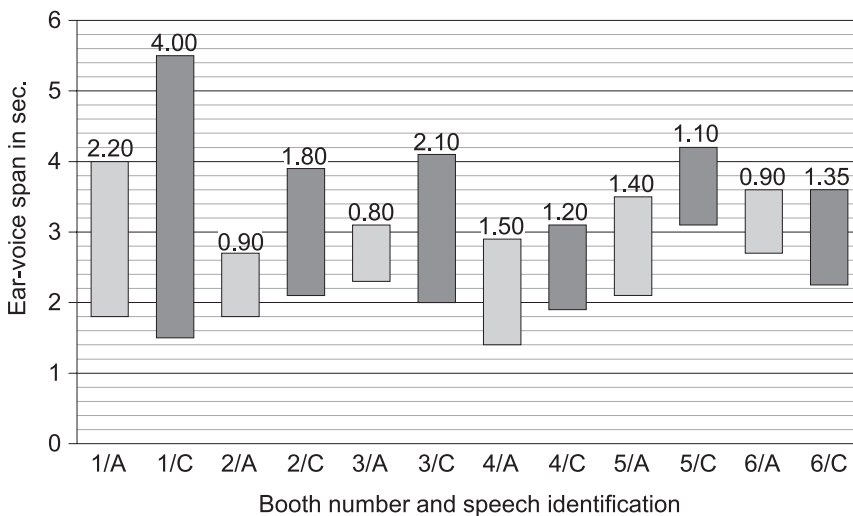

Figure 1. Ear-voice-span range in Group 1

We can see on the graph results that in Booth 1, which did not have direct visual contact with the projection area, the situation in Speech A, which was less demanding, was slightly worse than in the other booths. It can be seen that whilst in the other booths the ear-voice-span range (the range between the minimal and maximal décalage) was between 0.8 and 1.5 seconds, this booth's ear-voice-span range was 2.2 seconds. For Speech C the time lag range rose dramatically, and at the extreme points the ear-voice span reached values from 1.5 to 5.5 seconds (the generally accepted norm is between 2 to 4 seconds). This high volatility of the ear-voice span was caused by significant fluctuation at the points of enumeration and the points when names and numbers were mentioned. The students were under a higher stress load as they already anticipated various enumerations and numeric data and tried in advance to stay as close behind the speaker as possible. In such situations, however, they faced problems when they could not adequately analyse the sentences on either the syntactical or the content layer. Self-corrections then robbed them of time, which was then reflected in a higher time lag. This, again, led to inner stress as they were afraid of enumerations, and thus these phases of short and long lag rotated throughout the whole length of the speech with growing amplitude.

2.2.2. Group 2

In the second group, the pace of the student's speech (A) was slower (110 words/minute), which allowed the students to have a more relaxed time lag. When compared to the first group (compare the light grey columns in Figure 1 and 2), the time lag was longer. The third speech was identical to Speech C in Group 1. This time the student who sat in Booth 1 showed a great talent for simultaneous interpreting and took elective simultaneous interpreting courses.
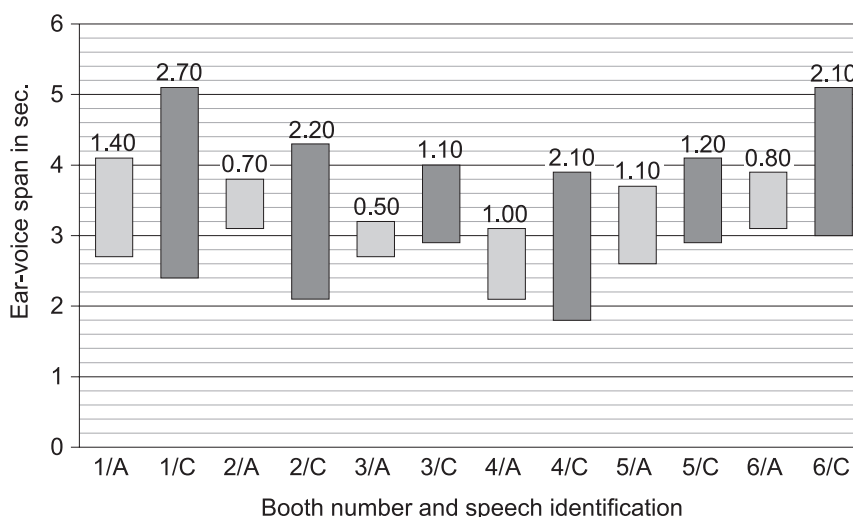

Figure 2. Ear-voice span in Group 2

Looking at the graph, we can see that the student in Booth 1 had slightly worse results than the rest of the group. Even though the ear-voice span range was not very large, it was the highest in the case of the first speech. It is clear that the average time lag in all students moved higher in the first speech, up to a range of 2.1 seconds and higher. This was caused by the different character of the speech; it was delivered at a rather slow pace but contained syntactically complicated multiple sentences. This meant that the second group was forced to have a higher ear-voice span compared to the first group.

Let us, however, look at the third speech, which was the same for both groups and is the most relevant source of information and comparison. We can see here that even though the student in Booth 1 had a much lower total time lag range (2.7 seconds) than the student in Group 1 in the same situation (4 seconds), he still had the highest time lag range in his group. For both students in Booth 1, we can observe a remarkable growth in the upper boundary of the ear-voice span (over 5 seconds).

Looking at both of the graphs, it is clear that almost all of the students' time lags in the third speech (the dark grey columns) were in the range of 2 to 4 seconds. The only exception is Booth 6 in the second group. Its time lag ranged from 3 to 5.1 seconds. However, the student in this booth had serious problems with interpreting caused by an incorrect analysis and a low level of concentration. We can then observe the fact that whilst the majority of the booths had their time lag ranges in a similar time range, the student in Booth 1, who did not see the visual presentation, had to adapt and change his time lag more significantly. Due to this, he was under more pressure and stress.

2.3. Self-corrections

The second area of our focus was self-corrections. These involve situations when the interpreter makes a mistake, either due to his or her incorrect anticipation, wrong analysis or an omission. The mistake makes the interpreter depart from the speaker, and a need to correct the output arises. A common source of mistakes that must be later corrected is the aforementioned incorrect anticipation (Jones 2011). As has already been mentioned, it is specifically the visibility of the visual presentation that can simplify the interpreter's anticipation in a significant way. If the speaker chronologically follows the data available in the presentation, the interpreter's situation becomes easier as many names, numbers and key points are visible in advance. The interpreter can thus assume the direction of the speaker's speech and adjust the output appropriately. This fact is valid especially in the case of enumerations which are then more accurate and do not lack information. Should it be otherwise, i.e. the interpreter does not see the data and the presentation contains a larger number of enumerations, he or she

has to either reduce the enumerations and generalize or correct the inaccuracies in retrospect.

The following two graphs show the number of self-corrections of particular booths. We have counted the total number of self-corrections during each speech (A and C).
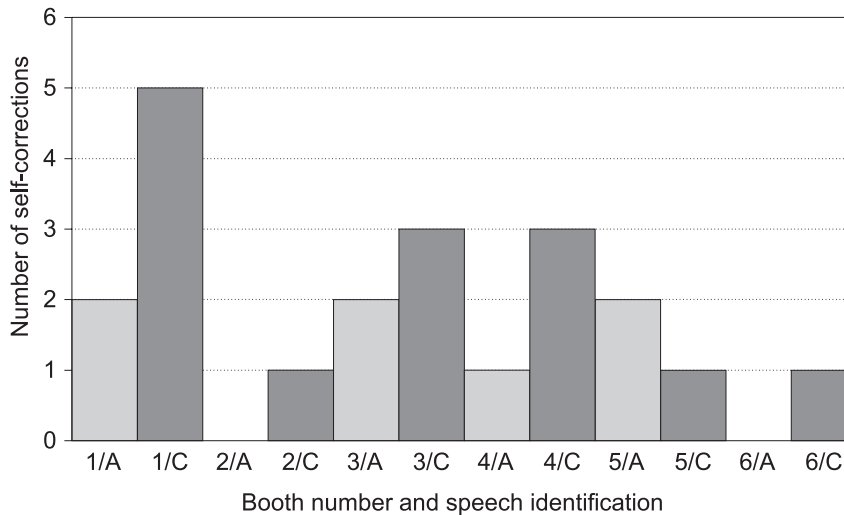

Figure 3. Self-corrections in Group 1

It is very well demonstrated with the first group that the student in Booth 1, lacking visual contact with the presentation and having the highest time lag range, has the highest number of self-corrections. The majority of other students also have a higher number of self-corrections in the case of the second speech, but the growth compared to the first speech is not that dramatic and is probably caused by the higher complexity of the speech. Whilst in the first speech the results of the student who sat in Booth 1 were still comparable with the other (weaker) booths, his handicap demonstrated itself much more significantly in the second and more complex speech.

In the second group, the results of Student 1 in the first speech were very good and there was no self-correction; the second speech saw this number increase to three. This was certainly not the highest number in the group, but it brought the student closer to the weakest student, who had problems processing and analysing the text. What may seem interesting is the fact that Student 6's time-lag range and number of self-corrections were rather high, even though these results were not influenced by the degree of the visibility of the projection area; his results emphasize the relationship between the right choice of time lag and good speech analysis.
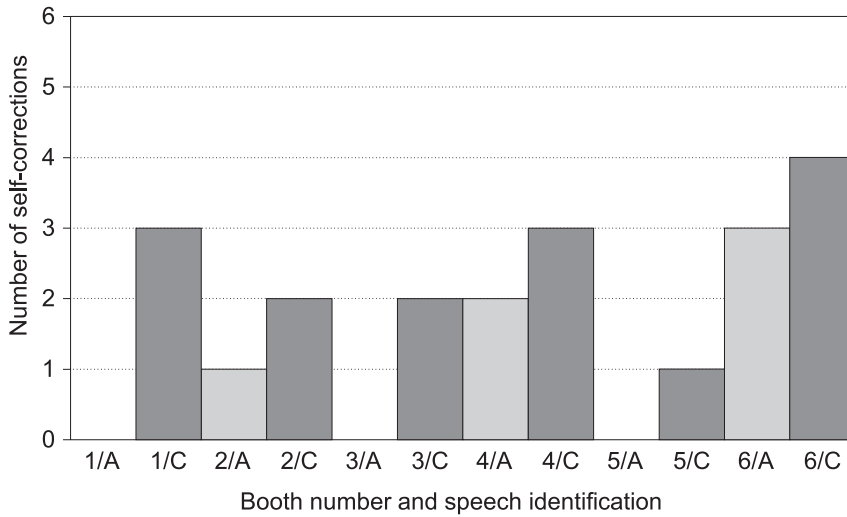
Figure 4. Self-corrections in Group 2

2.4. Ear-voice span without a visual presentation

In order to be able to consider the educational contribution of the speeches with an accompanying visual presentation, we repeated the above mentioned experiment in a setting without a visual presentation. The control speech was in the same terminological area, of a shorter character (7 minutes) and of an average speed (125 words/minute), and it discussed the transition between secondary and
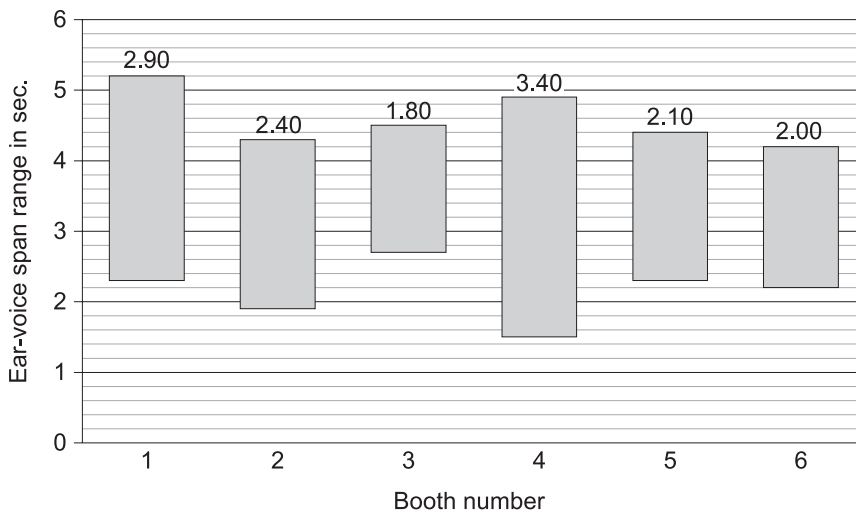

Figure 5. Ear-voice-span range without a visual presentation in Group 1
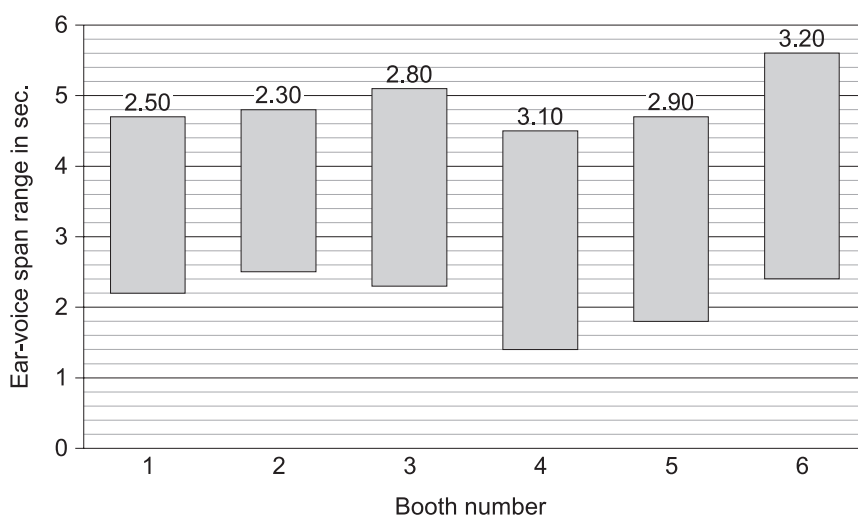
Figure 6. Ear-voice-span range without a visual presentation in Group 2

tertiary education. No long enumerations were used and we refrained from using any quotations. It was recorded by the teacher and served as a control sample for both of the groups.

As demonstrated in the graphs, when interpreting the speech without the visual presentation, the general fluctuation in ear-voice span increased in both groups and practically in all booths. Of course, fluctuation in the ear-voice span is a natural phenomenon during the process of simultaneous interpretation, as demonstrated in our experiment. However, we have noticed a remarkable increase of the range between the minimum and maximum ear-voice span compared with the range during the first speeches (i.e. with the visual presentation).

Natural tendencies among students were more pronounced, e.g. those who maintained a shorter ear-voice span still behaved similarly; only the range between the maximum and minimum time lag increased.

In a brief questionnaire distributed to the students at the end of the experiment, students had a chance to comment on the usefulness of a visual presentation in the classroom. Responding to the question of whether they felt more at ease interpreting with the visual presentation, 67% responded that the visual presentation was a major aid and 33% responded that it was of some help in delivering a better interpretation. No one reported a worse interpretation experience with the visual presentation.

When indicating the main benefits of the visual presentation, students underlined the availability of names and numbers on the screen (42%), the availability of the presentation in advance (37%) and the ability to anticipate the development of the speech (21%).

2.5. Summary of the findings

Based on our comparison of the two student groups' work and of the two different interpreting environments — with and without the ability to see the projection area — we can see the problems faced by the students working in Booth 1. Be they average or gifted students, their situation handicapped them in relation to the rest of the group, which could be seen in both of the speeches with regard to, among other issues, higher fluctuation in the ear-voice span range. In the case of the more difficult speech, this fluctuation was even more obvious, and there was also an increase in the number of self-corrections. Whilst in the case of the less demanding speech or, better said, the speech with fewer enumerations, names and numeric data, the control booth students' interpreting was only slightly worse or similar to the rest of the group, their handicap showed itself clearly with the increase in the complexity and informational difficulty of the speech.

When comparing the two parts of the experiment, with and without a visual presentation for the whole group, we can see that the presence of a visual presentation enables students to achieve a more balanced performance in terms of their ear-voice span. As the students themselves reported in a short questionnaire, an appropriately used visual presentation eases their performance, especially in terms of the accessibility of exact data before and during the interpretation and in terms of a more legible logical structure of the speech.

Conclusion

Although our experiment was limited to just two groups and one set of speeches, we assume that it points to a noteworthy element in the practical teaching of simultaneous interpreting. In the process of teaching interpreting techniques, it is crucial to gradually develop the students' skills in dividing their attention, thoroughly analysing the original speech, conceptualizing the information acquired, and verbalizing it in the target language. As the students face difficulties in the early stages of learning with regard to the practical handling of multiple skills at once, it is important to look for the ways and methods which make this process easier.

Our experiment has shown that an accompanying visual presentation helps the students cope with even more complex and information-rich speeches. The students who were in visual contact with the presentation — with only rare exceptions — performed better. They handled complex passages more easily, could maintain higher accuracy and similarity to the original text, and, importantly for the teaching process, they were under less stress and tension when compared to the students in Booth 1 (the control booth) who had no visual contact with the presentation. In combination with the increased difficulty and faster pace of the speech, the fact that these students could not anticipate well would leave its mark

on stress levels, which is related to an increase in the ear-voice span range, and leads to incorrect anticipation and a higher number of self-corrections.

We therefore assume that visual presentations accompanying speeches constitute a suitable addition to the teaching process of simultaneous interpreting, especially in the early stages of developing the elementary skills. In the long-term outlook, it is certainly appropriate to combine speeches with and without presentations for students to be prepared for various kinds of speeches and speakers. Generally, the presence of visual presentations is common practice at a wide range of events. When adequately introduced into the teaching process, they may not only create an environment closer to reality but also give students a chance to practice preparing such presentations and give speeches that utilize them in front of an audience.

Our experiment also underlined the importance of the visual presentation's appearance and how it is used by the speaker. We believe that mainly thanks to the four specific rules we established before using and designing the presentations it was possible to use these presentations to the benefit of the interpreters/students. If the visual presentations are designed according to our four rules and used during the initial phases of the simultaneous interpretation teaching process, they can help the students in building up their stamina, acquiring necessary skills and techniques, and finding an appropriate ear-voice-span. They also enable them to concentrate more on the coordination of the individual parallel processes and distribution of efforts, which is crucial to the initial phase of training. Quite clearly, students should be trained to handle different types of speeches and deal with various challenges during the whole process of training, perhaps even dealing with poorly used and designed presentations. However, well designed and appropriately used presentations can be of significant assistance in the initial part of simultaneous interpretation training.

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