ILSA Interlingual Live Subtitling for Access

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IO3 REPORT

Profile definition and competences
of the professional ILSer

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IO3 Report: Profile definition and competences of the professional ILSer

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Abstract:
This document reports on the completion of Intellectual Output 3 of the ILSA (Interlingual Live Subtitling for Access) project (2017-1-ES01-KA203-037948). Led by UWien and finished by the agreed deadline, this IO drew on the findings from the IO2 trials to define the profile and competences of the professional ILSer. After compiling and critically reviewing literature on the subject, the ILSA team drafted the first descriptive model and illustrative visualisation of the ILS competence profile. An article by two members of the consortium has already been accepted for publication in the next volume of Linguistica Antverpiensia and the results have been presented at Multiplier Event 3 in Vienna and will be presenting at the forthcoming Media for all conference in Stockholm.

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1. Introduction

This report offers a theoretical analysis of interlingual live subtitling (ILS) as a translational task, with the aim of defining the skill set and competence profile to be developed by future practitioners. The outcome of this task analysis will thus serve to guide curriculum design for training in ILS as well as the development of task-specific teaching methods. While taking account of findings from empirical studies conducted in the context of the EU-funded Erasmus+ project ILSA (Interlingual Live Subtitling for Access) as well as related research, our line of argument is essentially deductive, with models of the interpreting process and of translational competence as essential points of departure. Our process analysis of ILS, which makes reference to the Effort Models, will identify subprocesses and subskills, and the latter will be put together in a competence model as a framework that can be filled with specific learning outcomes for training in ILS.

2. Background

Drawing up the competence profile of future ILS professionals presupposes a thorough understanding of the task with regard to its process and skill components as well as the external demands and constraints on its actual performance in a given institutional and social setting. Whereas the broader issues of practical application will be dealt with in a subsequent phase of the project of which this work forms a part, our focus here will be on the process-based identification of competence requirements as a prerequisite for curriculum design.

As indicated above, ILS is a new type of task, essentially consisting in the real-time rendering of a spoken source-language utterance into a written target-language text. Most typically, this is used in live TV broadcasts to make commentary or other audio content in another language available to viewers in the form of on-screen subtitles. In a broader sense, also envisaged in the ILSA Project, such real-time speech-to-text translation can also be done at live events, with written text appearing in block mode or as scrolling subtitles or surtitles with PowerPoint, or as a scrolling running text on a separate screen. Though often referred to as speech-to-text interpreting (Stinson, 2015), this type of service has so far been offered mainly in intralingual mode.

Clearly, the novel task of ILS shares some common ground with other communication-enabling services such as (interlingual) subtitling and interpreting, and in particular with (intralingual) live subtitling as a major form of ensuring media accessibility. Aside from its similar designation, inter- and intralingual live subtitling share the technique by which real-time text production is achieved. This is generally referred to as respeaking and consists in repeating (and often rephrasing and condensing) the original while listening, to a speech recognition system which turns the recognized utterances into written text (Remael et al., 2014; Romero-Fresco, 2011). The fact that this rephrasing, with punctuation, is done interlingually in ILS raises some terminological issues that will be discussed further below. At this point, we would simply highlight the hybrid nature of

ILS as a task, which strongly suggests that our effort to identify the competence requirements for successful task completion should be informed by insights from such related fields as (audiovisual) translation, media accessibility, and interpreting studies. This is visualized in Figure 1 by showing ILS at the interface of different fields or disciplines with whose tasks it shares important features: like prepared subtitling in AVT and live (intralingual) subtitling in media accessibility, ILS is a speech-to-text process; like standard prepared subtitling and interpreting, ILS is interlingual; and like interpreting and live subtitling, ILS is performed in real time.
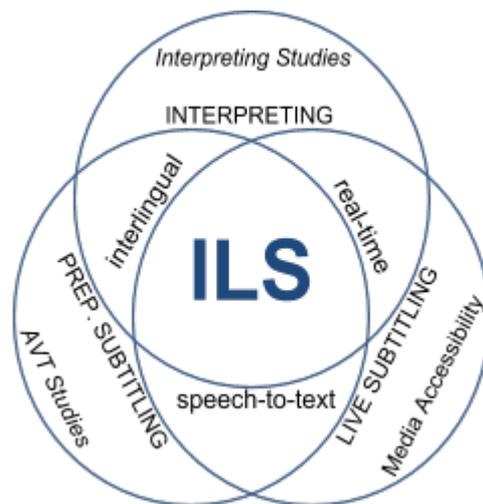

Figure 1. ILS at the interface of tasks and disciplines

Against this background, we will pursue our goal of drawing up a competence model for ILS by engaging in a more thorough analysis of the task, in terms of its purpose, processing steps and techniques, before identifying the set of cognitive resources involved in and required for its performance. First, though, we will attempt to raise some conceptual and terminological issues surrounding the notion of ILS (Section 2). Section 3 will then be devoted to our process model of the task, followed by our sketch of a competence profile for ILS in Section 4. In the subsequent discussion section, our largely deductive modelling efforts will be related to available empirical findings so as to move toward an evidence-based conceptual model of ILS and highlight areas in need of further research.

3. Concepts and terms

A basic terminological qualification is in order here regarding some of the labels used for illustration in Figure 1, such as AVT, accessibility, and live subtitling. Rather than stable, clearly defined concepts, these notions have been undergoing change, convergence and diversification. The field of media accessibility, for instance, has increasingly converged with accessibility in the broader sense as well as with AVT (see Remael et al., 2019), and subtitling in AVT is also done intralingually. By the same token, the boundaries of interpreting are being extended beyond the spoken and signed modalities so as to also include written target texts (Pöchhacker, 2019). Thus, as suggested by Dam and Zethsen

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(2019), our understanding of these concepts often relies on prototypes, which are of course subject to changing social uses and professional practices.

A prototypical understanding of live subtitling also underpins the ILSA Project. This concerns the foregrounding of ILS in TV broadcasts, even though live events will also be covered in the project, and the focus on live subtitling using speech recognition technology ('respeaking'). While the former is reflected in the way the task is labeled, 'subtitling' may be too closely associated with audiovisual media to do justice to ILS for live events. Strictly speaking, the term speech-to-text interpreting (STTI), which refers to an essentially intralingual communication service for deaf and hard-of-hearing persons (Stinson, 2015), would be a more appropriate hyperonym, and our process model will indeed be conceived in these terms. This also prompts the question of how to label the end-product of the process, which is some form of written text. The term 'subtitle', like 'surtitle', suggests a particular positioning in relation to the media screen, which may not be the case for live events using separate screens or displays on mobile devices or even glasses. We therefore suggest using the term 'live-title' for the textual end-product in ILS. This ensures a clear distinction from prepared subtitles while retaining the word form traditionally used in media settings, also to refer to those carrying out the task. 'Live-titlers' could be working intra- or interlingually, and their output displayed in various different media and positions.

In a similar vein, the interlingual nature of ILS, which, as a form of 'live translation', is akin to interpreting as defined by Kade (1968), seems inadequately captured by the term 'respeaking', which is closely associated, semantically as well as in professional practice, with an intralingual language processing activity. In order to reflect the translational nature of ILS, we suggest adopting the term 'transpeaking', which was introduced in this context by Patricia Martínez Zapico around 2011.

With these conceptual clarifications and terminological proposals, we will now proceed to analyze ILS as a process and describe the structure and the skill components of the task.

4. Process analysis

While ILS, as conceived in the present report and in the ILSA Project as a whole, may appear like a novelty, it can in fact be traced to earlier experiments and practices. One is an experiment in live interlingual subtitling on Austrian television in the late 1980s. As reported by Kurz and Katschinka (1988), this involved two English-speaking participants in an arts program, whose contributions were made accessible to German viewers in the form of subtitles. These were produced by a team comprising simultaneous interpreters and a media professional (subtitler). The interpreter would produce a compressed German rendering of the source-language utterance, and her output would then be typed and 'spotted' live on the program by the subtitler. The problem of the extended time lag resulting from this two-step procedure is obvious, and may explain why the experiment had no follow-up – unlike another forerunner project in the Netherlands. The Dutch public broadcaster NOB first trialed live interlingual subtitling in the late 1990s, using specially trained velotype-subtitlers (den Boer, 2001). Subsequent efforts involved a broadcast delay of 20 to 30 seconds, and produced satisfactory performance, notwithstanding some loss of content. Rather than simultaneous interpreters, NOB relied on teams of two

professional subtitlers (translators), one of whom would 'interpret' and the other type, switching off with another team after some ten to 15 minutes (de Korte, 2006).

De Korte (2006) explicitly mentions the option of using speech recognition technology as a way of enhancing the live subtitling method. While this has increasingly become common practice for (public) broadcasters in the Netherlands and in Flanders, de Korte's early account anticipates a key issue to be addressed in the ILSA Project, namely, the skill set most suitable for the task. The fact that NOB decided against using interpreters at the time because they 'did not want every single word translated' (de Korte, 2006), whereas Kurz and Katschinka (1988) speak of a 'compressed' interpretation, points to a high degree of convergence between the relevant skills of subtitlers and interpreters. Hence the need for a more detailed analysis of the process.

4.1. Task description

As a communication-enabling service in response to specific social needs, ILS must be described, first and foremost, in terms of its purpose, users and contextual constraints. However, the hybrid nature of the task makes this rather difficult: Viewed as an extension of audiovisual translation and interpreting, ILS targets viewers with an insufficient understanding of the source language used in the broadcast; as an interlingual variant of SDH, on the other hand, ILS makes media users with sensory impairments the prime target group(s). In addition to this variation even within the TV setting, the use of ILS, or speech-to-text interpreting, in live events, including educational settings, brings in yet another set of user groups with specific communicative needs and contextual constraints. These different scenarios of application will be described more fully as part of the ILSA Project; for the present purpose, we will therefore concentrate on the process and competences for ILS aimed at TV audiences.

4.2. Process model

As in the early experiments mentioned above, ILS as a task cannot be accomplished in a single step. Rather, it is a multi-step process involving a primary phase in which source-language audio content is rendered in the target language by a transpeaker, followed by a secondary phase in which the transpeaker's output is turned into written text by an SR system. In the prototypical TV set-up the transpeaker, like the respeaker, listens to the audio input through a head-set and uses a microphone to rephrase this input to a computer with respeaking and subtitling software, which together turn the spoken input into written subtitles. These draft subtitles can then usually still be edited using the computer keyboard before they are broadcast, although this is not always the case. In live settings the subtitling software is often replaced by captioning software such as Text on Top® that projects the written output of the respeaking process onto a screen in the conference room. In this scenario, post-respeaking editing will often be visible for the viewers.

In a third phase of the transpeaking process, the SR output is monitored and, if necessary, corrected by manual keyboard input just before it is made available to target viewers. This editing phase may be in the hands of a second person, which we will refer to as the Duo TS model (in analogy to the Duo LS model in Remael et al., 2014) but can also be done by the transpeaker, in a Mono TS model. Thus, the three-step process of ILS can be

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accomplished by a single individual working in tandem with an SR system. This basic process is illustrated in Figure 2.
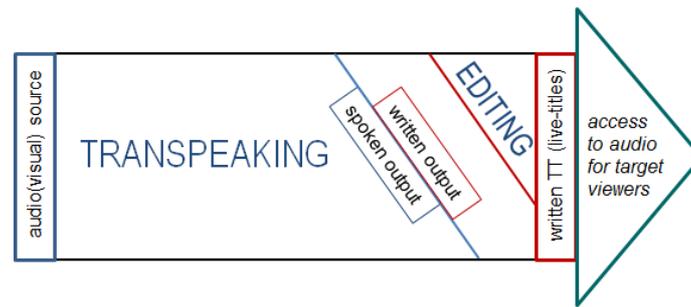

Figure 2. Basic ILS (speech-to-text) process

As indicated by the triangular shape on the right, the entire process is driven by the goal of giving a particular target audience access to what is spoken (and heard) in the (audiovisual) source text. Textual components are found at either end of this goal-oriented process as well as in-between: the former are the (spoken) source text and the written target text (TT), and the latter, intermediary texts are the transpeaker's output and the written output of the SR system, which is depicted as a cross-cutting stretch that feeds into the TT, with or without prior editing. Aside from the final editing phase, the interface between the transpeaker's output and the recognized text is a crucial point in the process, and is evidently shaped by the human agent as much as by the capabilities of the software. The initial transpeaking phase, by contrast, solely depends on the transpeaker, but is nonetheless marked by a high degree of complexity.

Whereas the ILS process as a whole is obviously different from the process of SI, the transpeaking phase is essentially an interpreting task, albeit with specific requirements. In line with Kade's (1968) definition, the source-language message is available only once, and there is very little opportunity to correct or revise the (spoken) target-language text, if the rendering is truly live. However, the transpeaker's output must be geared not to human listeners but to the capabilities and settings of the software, in such a way as to ensure written text output that can be read and understood at a glance. This alters the production part of the transpeaking process, over and above the strategic processing requirements arising from the time pressure at either end of the ILS process: whereas the transpeaker will likely need to cope with a high audio input rate, the speed of TT presentation is constrained by the target audience's reading-time needs, and its physical form by the space available. In many circumstances, this will result in the need for strategic compression, as described also for conventional SI.

Despite these special features, the shared ground between transpeaking and SI should amply warrant an approach inspired by Gile's Effort Models of interpreting (Gile, 2015), which are alluded to in the title of our report. The basic components of the SI model clearly must be accounted for also in a process model of transpeaking, but we make one exception: Gile's 'Memory Effort' refers to the need for short-term storage, which is considered a function of working memory. But since current conceptions of working memory also include information processing and retrieval as well as executive control functions (Timarová, 2015), and relate the construct of working memory to attentional resources interacting with (long-term) memory, we would assume the entire transpeaking process (depicted in the shape of a right trapezoid) to draw on available attentional (or

working memory) resources, along the lines of Gile's original notion of mental 'energy' or processing capacity.

Of the three remaining 'efforts' in Gile's model, we would adopt two with only a slight change in labelling: listening comprehension (Gile's 'L') and coordination & control ('C'). Gile's 'P' Effort, on the other hand, is very holistic and involves all the components of the production process that are distinguished, for example, on the output side of Setton's (1999) process model of SI. Given the special demands on the transpeaker's output, which serves as input to the second, software-based phase of the process, we prefer to make the output process more explicit by distinguishing three components of production: 1) 'strategic reformulation', conceived as a cognitive subprocess on a par with listening comprehension that corresponds to the 'Formulator' and 'Parser' components in Setton's (1999) process model of SI; 2) 'dictation', understood as a specific software-adapted style of articulation, which also includes the verbalization of punctuation, speaker change, and relevant auditory information, which is only occasionally still added through typing; and 3) (auditory) 'monitoring', which is particularly consequential at the interface with the automatic recognition process.

Beyond the transpeaking process, monitoring – of visual text – is also an important component process in the editing phase, where it may lead to keyboard-based intervention to correct the SR output and give it its final form. When such monitoring & correction is done by the transpeaker, there is an additional 'coordination & control' (C&C) component that spans the (auditory-oral) transpeaking and (visual-manual) editing phases of the process. Thus, in addition to the 'effort' of coordinating, vertically, as it were, the simultaneous subprocesses of the transpeaking phase, ILS requires an additional, 'horizontal' C&C effort that arises from the added task requirement of real-time editing.

Considering the cognitive complexity of ILS, it seems justified to devote special attention to the core process of the task. Nevertheless, and especially with a view to a comprehensive model of competence requirements, the cognitive micro-process between source-text input and target-text output must be complemented by a broader view of ILS as a professional course of action. Here again, reference can be made to existing (macro-)process models of interpreting, such as the four-fold distinction by Kalina (2000: 126) between pre-process requirements, peri-process conditions, in-process requirements, and post-process efforts. Kalina's (2000) scheme, which was developed to account for factors in the process of quality assurance, was subsequently adapted by Albl-Mikasa (2013: 19) to account for competence requirements for professional conference interpreters as elicited in an interview-based study, which will stand us in good stead in developing the ILS competence profile in Section 4.

Both Kalina and Albl-Mikasa include 'preparation' as a main requirement in the pre-process phase. While any prior learning and training relevant to task performance could conceivably come under this heading, ILS with SR in this respect includes the fundamental need to ensure optimum interaction with the SR system, which ranges from hardware settings and account creation to a fully developed SR profile and a list of macros and house styles. More specifically, with regard to a given assignment, preparation includes thematic research into the topic and program type (including the target audience) as well as linguistic and terminological research. In addition, the result of thematic and terminological research must literally feed into the SR system, by way of document uploads and additions to the terminological database.

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In the peri-process phase, special attention is given to teamwork and cooperation, and this applies to the teamwork of live-titlers no less than to simultaneous interpreters in a booth. Post-process tasks, finally, include debriefing with team members to identify issues to be resolved; accuracy assessment in the broader context of quality management; and remedial work to eliminate errors and weaknesses with a view to future assignments, for instance by adding terminology to the SR database or further training of the SR software.

This brief account of the ILS process and its subcomponents, both in-process as well as pre-, peri- and post-process, is summarized in Figure 3, and will serve as our point of departure for the identification of competences and skills in the following section.
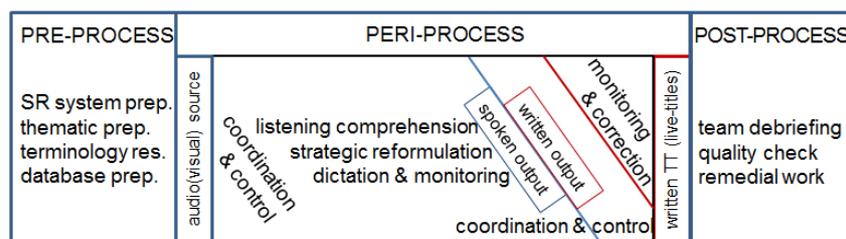

Figure 3. Process model of ILS

5. Competence profile

5.1. Definitions and models

Although 'competences' are a staple of the didactic literature on translation and interpreting, a clear-cut definition of the term remains elusive. On the one hand, it is an umbrella concept, defined, for instance, in the context of the European Qualifications Framework (EQF, 2008: 11) as "the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development". On the other hand, Albl-Mikasa (2013: 19), addressing interpreting, writes that competence is "a general term for everything an interpreter needs to know and be able to do to perform a professional task", which she then goes on to discuss in greater detail in terms of "skills".

For translation more generally, Robert et al. (2017) point out that translation competence was originally considered to be mostly a linguistic competence, but that it is now "generally recognized and conceptualized as a complex construct consisting of different sub-competences, that is, as a multicomponential competence". The above description of the transpeaking process demonstrates that transpeaking, too, is a construct comprised of multiple components. However, the question is what sub-competences translation, interpreting or, in our case, transpeaking competence is composed of. In translation studies the idea of a multicomponential translation competence has given rise to a growing body of translation competence models (e.g. Göpferich, 2009; Hurtado Albir, 2017) as well as the EMT Competence Framework (EMT, 2017) (see Robert et al., 2017 for an overview). However, similarly comprehensive models for (simultaneous) interpreting do not seem to exist. Albl-Mikasa's (2012: 63) "process- and experience-based model of interpreter competence" lists the major "skills" that interpreters

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themselves perceive are essential for their trade, and echoes SI skills and competences mentioned in other publications (see Grbić & Pöchhacker, 2015). We therefore propose our own multicomponent model for transpeaking, but one that finds its inspiration in the literature mentioned above.

In order to arrive at a workable definition of competence for our transpeaking context, we will draw on Robert et al. (2017) and use competence as a very broad notion that can refer to cognitive resources of three different kinds: declarative knowledge (knowing *what*), procedural knowledge or skills (knowing *how*), and socio-psychological resources, such as having the willingness and ability to work in a team. The set of competences posited below may thus involve different types of knowledge and abilities, which live-titlers will draw on at different stages of the process.

5.2. Competence model

The model outlined below and visualized in Figure 4 shares a number of components with existing competence models for translational activity, but also features (sub)competences that we consider unique to the task of ILS. Not surprisingly, special competence in the realms of language and culture is considered fundamental, as is a rich repertoire of knowledge that includes general ('world') knowledge as well as domain-specific knowledge of the subject matter at hand. Other types of competence found in most models include socio-psychological competences, including those relating to interpersonal relations, and the knowledge and skills required for service provision in a professional context, not least in the case of freelance work. The more unique components of our competence model, on the other hand, are closely linked to the nature of the task, and will be characterized as technical and methodological.
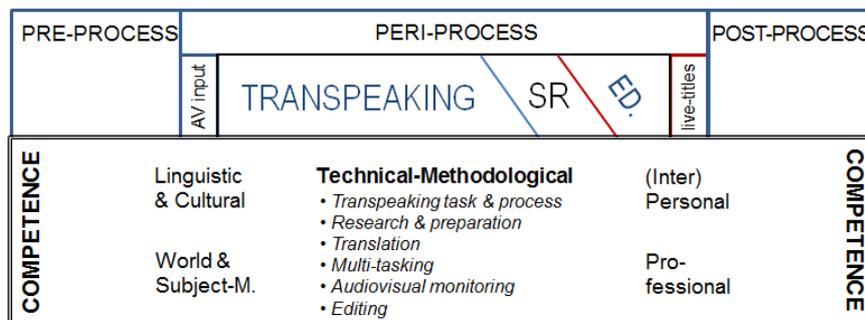

Figure 4. ILS process and competence model

The five main components of the model, specified as linguistic and cultural competence, world knowledge and subject-matter competence, technical-methodological competence, (inter)personal competence and professional competence, are explained in more detail below, and related to particular component processes of the task. In a subsequent stage, the ILS competence profile will serve to inform the design of a curriculum, which is the principal aim of the ILSA project. For this purpose, the various competences and skills will have to be translated into learning outcomes, defined by Kennedy et al. (2009: 5) as "statements of what a learner is expected to know, understand and/or be able to demonstrate after completion of a process of learning". This entails operationalizing the competences as actions that can be taught through concrete learning activities and assessed at different levels.

In our analysis of the cognitive resources interlingual live-titlers must draw on, and starting from the process model represented in figures 2 and 3, we first introduce the multicomponential competence that distinguishes transpeaking from related practices in that it is the unique core competence of our model: **technical-methodological competence**. The cognitive resources it includes also impact on the particular form that other competences take, and play a determining role in most if not all the stages of the transpeaking process. Specifically, we distinguish six sub-competences, some of which focus on (declarative) knowledge, whereas most involve operational competences, besides some socio-psychological ones.

The first sub-competence is mainly declarative knowledge of the *transpeaking task and process*. Transpeakers must have a full understanding of the entire speech-to-text process and its function within a specific communicative setting (whether broadcasting or live settings), and of the process-related requirements arising from these different contexts. The second sub-competence relates to *research and preparation* and consists in the knowledge and skills that are needed in the pre-process stage when transpeakers prepare the assignment by extending and activating their knowledge base as well as by fine-tuning the database in the SR software.

The third sub-competence, simply labeled *translation*, is at the core of the technical-methodological competence and encompasses all stages of the transpeaking process. It combines traits similar to those found in SI, intralingual live subtitling and interlingual subtitling, with specific additional features. The listening comprehension skills are similar, but not identical to those required for interpreting and paraphrasing. Transpeakers also work from auditory source input that is available only once, but TV audio can be very different and include overlapping dialogue, for instance. In any case, strategic reformulation requires the ability to distinguish quickly between what is essential and what is not (e.g., when aural input accelerates or varies in speed), and even to improvise, as in the case of poor audio quality or other technological glitches. Uniquely, the reformulated output must be articulated for a non-human recipient in a way that takes the particularities of SR and of the subtitling software into account, thus ensuring optimum recognition and appropriate formatting of the written text. While the translation sub-competence draws on linguistic competence to ensure correct spelling, grammar and punctuation, it also includes the motor skill of using the keyboard to input information that cannot easily be verbalized, such as colors for identifying different speakers.

The fourth sub-competence, *multi-tasking*, is of an eminently procedural nature. It is needed to ensure coping with multiple tasks and managing processing efforts in such a way as to avoid overload or even breakdown. Multi-tasking in transpeaking is unique in that it involves the simultaneous activation of various cognitive and/or psychomotor processes throughout the three main stages of the transpeaking process. As in SI, it requires juggling listening comprehension and strategic reformulation with self-monitoring of one's audio output; in addition, and similar to intralingual subtitling, it involves concurrent psychomotor skills (eye-ear-hand coordination) for occasional typing to edit the written output. Beyond these cognitive processing tasks, multi-tasking may also extend to the coordination of teamwork when the task is accomplished by two professionals working in tandem.

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Sub-competence number five is *audiovisual monitoring*, which is required to scan audiovisual texts for visual information beyond the verbal and the non-verbal auditory input, and to monitor one's own or a team mate's written output, which may have to interact with other visual information on the screen and non-verbal information in the audio.

As mentioned above, technical-methodological competence also includes a sub-competence for *editing*. The knowledge and skills required may differ considerably in quantity and quality, depending on the setting in which the transpeaker is operating and the type of software that is used.

In addition to the core competence of ILS with its six sub-competences, the model features four competences that more closely resemble those associated with the related tasks and domains visually represented in Figure 1. Nevertheless, the nature of these more generic competences will of course be shaped by the different components of the technical-methodological competence as described above.

As in most models relating to mediated communication, **linguistic and cultural competence**, which is of a declarative as well as a procedural nature, must be posited as a basic requirement. In ILS, linguistic proficiency is essential for source-text comprehension but plays an even greater role in the production and editing stages in the target language, which require the correct use of word forms, grammar, spelling and punctuation and due regard for register and textual cohesion. Working with and between two languages also requires familiarity with the respective sociocultural systems of reference. In transpeaking, cultural competence must be particularly rich for receptive processing, given the highly varied speaking styles and cultural backgrounds encountered in programs to be subtitled. At the same time, this competence must also be sufficiently developed to understand the more or less specific needs of potential communities of target-language users, such as persons with a hearing impairment.

No less indispensable are **world knowledge and subject-matter competence**, where the latter can be regarded as a subset of the former. Since there are limits to what can be prepared in the pre-process stage and fed into the terminology database of the SR system, transpeakers, like interpreters, must be able to draw on a vast store of general and specialized knowledge, and mobilize these resources with great efficiency. As highlighted by the activation of concepts and terms, there is considerable overlap between world knowledge and linguistic competence as well as with cultural competence, where culturally specific concepts and expressions are concerned. The same applies to the need for alternative contextually appropriate solutions when some terms are not expected to be recognized by the SR system.

In ILS socio-psychological traits and requirements, to which we refer as **(inter)personal competence**, take a number of different forms. As in the performance of other highly demanding tasks, the ability to manage stress and the motivation to perform well constitute important demands on the individual. At the same time, interpersonal skills are particularly important for teamwork in duo-transpeaking, where teams alternate, but are also needed in collaborative efforts to prepare the SR software in the pre-process stage. Finally, **professional competence** is considered a core requirement for translation service provision in any setting. However, it is difficult to say at this stage which sub-competences should be foregrounded for ILS, since the profession is only just emerging,

and the type of service provision may vary depending on the setting. Aspects of professional competence may range from compliance with the employer's relevant guidelines and procedures to networking and marketing skills for freelancers and to continuing professional development, not least regarding accessibility and digital technologies, in order to optimize one's role in a complex overarching workflow, for instance within a broadcasting company. Thus, as in the case of the other competences listed above, the specific set of professional competence requirements is interrelated with both the sub-competences of the technical-methodological core competence and the organizational and institutional frameworks in which task performance is embedded.

6. Conclusion

In line with the aim of the ILSA Project to develop a professional profile for ILS, we have sketched a first competence model for this novel task by undertaking a descriptive analysis of the process and identifying the competences required for successful performance. Though the relative importance of the competence areas in our model – from linguistic and cultural to personal and professional skills – is still difficult to determine, as it is subject to the particular form the task may take in a given situational and professional context and communicative setting, there is little doubt about the crucial role of the technical-methodological competence that we consider unique to the task. Its six sub-competences, in turn, are highly diverse and interrelate in a roughly cascading fashion, from global task understanding to editing skills, with multi-tasking and translation as key sub-competences.

Though our competence model is largely hypothetical, it is in line with initial empirical findings as presented by Robert, Schrijver and Diels in this volume: The "prerequisites" for successful ILS that were elicited in their questionnaire-based survey among professionals, trainers and service providers can all be subsumed under one or more of the competences we have distinguished. Admittedly, the definition and interrelation of the various competences and sub-competences must remain open to discussion, and much further research will be required to understand how they inform the various stages and components of the transpeaking process and the ILS task as a whole. Still, we hope to have succeeded in providing a conceptual foundation and theoretical underpinning for the development of a training curriculum, for which the competences will be reformulated as concrete learning outcomes, and task performance will be contextualized with reference to specific communicative scenarios from TV broadcasts to live-event settings.

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