1 Reuniting the Sister Disciplines of Translation and Interpreting Studies

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1. A Quick Family Portrait

Translation and Interpreting Studies are often called sister disciplines, and, as is the case with actual sisters, their relationship is often complex. Looking back on decades of research, one cannot but marvel at the different paths both disciplines have taken and the different travel mates they have chosen. While Translation Studies has forged a strong alliance with philosophical, literary and discourse traditions and with technology, Interpreting Studies has mainly thrived in the glow of psychology, sociology and conversation analysis. While the translation product has long been the main focus of attention in Translation Studies, Interpreting Studies has long been concerned with the process. Clearly, translation is the older sister: its research tradition is longer and it attracts more attention from its younger sister than the other way around (Gile 2011). Numerous calls have been made to put the sisters on speaking terms (Chesterman 2004; Shlesinger & Ordan 2012), and recent years have witnessed a significant expansion of their common ground in theory, methodology and technology. Nevertheless, with the exception of a few studies (Shlesinger & Ordan 2012), direct comparison of translation and interpreting data is still extremely rare.

1.1. Theory

While modelling of cognitive processes and constraints was the preserve of theories of interpreting in the past, around the turn of the century, the first publications appeared that advocated for a cognitive theory of both translation and interpreting or "language mediation". The 1997 Cognitive Processes in Translation and Interpreting (Danks et al. 1997) was the first of its kind, bringing together translation and interpreting scholars with psycholinguists and cognitive scientists. It was followed not long after by a Proposal for a Cognitive Theory of Translation and interpreting (Padilla et al. 1999), which drew inspiration from cognitive psychology to outline a "comprehensive theory of language mediation combining psychological work on comprehension with research approaches on translation and interpreting that

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stress the role of attention and memory capacity". Ever since, translation research increasingly moved toward cognition. From Tirkkonen-Condit's (2005) early literal translation hypothesis to the integrative models used by Shreve & Lacruz (2017), considerable conceptual and empirical progress has been made. Various micro-tendencies in translation have been connected to general cognitive constraints of the bilingual brain and the task of linguistic mediation (Halverson 2010; Kruger & Van Rooy 2016). Strikingly, translation scholars refer only sparingly to the considerable efforts that have been expended by interpreting researchers in this particular field. Conversely, but still in the field of theory, interpreting research has drawn closer to translation research in making room for pragmatic and functionalist perspectives (Pöchhacker 1995). This process was driven both by developments in translation theory and by the growing interest for sign language interpreting (Roy 1989) and dialogue interpreting (Wadensjö 1998).

1.2. Methodology

Empirical approaches in both disciplines seem to gradually converge on a number of key methodologies. Experimental research has become commonplace in translation research long after it was mainstream in interpreting. Thanks especially to the development of new research technologies, such as keystroke logging, translation can now also be studied in its temporal dimension (Hansen 1999), decades after recording technology was embraced by interpreting scholars. Eye-tracking is becoming popular in both disciplines to study cognitive load and focus of attention in translators and interpreters (Hvelplund 2017). The combination of keystroke logging and eye-tracking in the study of Eye-Key Span (Dragsted & Hansen 2008) in translation provides Translation Studies with a scientific construct that matches Ear-Voice Span in interpreting. Given the success of the latter concept and the amount of knowledge that research in interpreting has made available, fruitful exchanges between both disciplines were and are still to be expected (Timarová et al. 2011).

While Interpreting Studies long held a significant edge over Translation Studies in experimental methods, it lagged considerably behind in corpus-based methods. Corpora of interpretations are much harder to compile than corpora of translations, and their status as reliable research data is still not fully consolidated (Defrancq & Collard Forthcoming). Nevertheless, it is in the area of corpus-based research that the two disciplines have drawn closest to studies comparing translations and interpretations directly against an identical conceptual and methodological background (Bernardini et al. 2016).

1.3. Technology

With regard to technology, the process of building common ground is only just beginning. Translation studies boasts a decades-long tradition of research into technologies that can support the translation process. Not only has this research led to the development of new technologies such as CAT tools or TEnTs (Macken et al. 2019), it has also extensively investigated the interactions between these tools and the human translator (O'Brien 2012), among which figures rather prominently the revision of machine translation, known as post-editing. Due to the much slower development of support technologies for interpreting, efforts are only beginning to be undertaken to explore interpreters' interactions with new technologies (Fantinuoli 2018).

1.4. Opportunities and Challenges

The picture that emerges is clearly one of progress on many fronts but a general lack of coordinated progress in interpreting and translation research. Obviously, not all research topics and methodologies are relevant for both disciplines, and a considerable degree of divergence will continue to exist. However, as we have shown, there are enough areas offering opportunities for exchange and convergence. This volume aims at exploiting some of these opportunities.

The last few years have also witnessed a growing diversification and specialization of datasets and statistical techniques to study them. This has certainly led to a deeper understanding of translation and interpreting and to significantly better-substantiated claims. However, these evolutions make replication much harder, reducing the methods' ability to be applied to other modes of the translational activity. The bridgeheads created by such research are often disconnected from the slowly moving mainstream research corps. They also tend to be isolated from one another, with few opportunities for cross-fertilisation. At the same time, the specialisation of experimental methods widens the ecological validity gap with the contexts in which the studied activities normally take place (Alves & Hurtado Albir 2017). Furthermore, the connection with theory becomes ever thinner, mainly because the theoretical development of the field fails to follow the disparate findings of the empirical research. This is especially striking in Interpreting Studies, where the main theoretical framework offered by Gile (1995) has only begun to be challenged recently. Finally, there is a growing tendency, fuelled by new research data and analytical techniques, to place translation and interpreting in a wider framework of bilingual and even monolingual activity (Kruger & Van Rooy 2016). This is certainly needed, as mediated forms of communication are practiced by individuals who also (and probably predominantly) engage in non-mediated forms. However, this focus perhaps downplays features shared by both modes of language mediation. In cross-modal research, translation and interpreting appear to differ quite a lot (Bernardini et al. 2016; Ferraresi & Miličević 2017). It might be worth asking whether this is not the result of a theory-related focus on particular features, underscoring the need for a broader perspective. These questions

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relating to the interaction between theory and data have been a main concern in composing the present volume.

2. The Volume

This volume brings together 14 contributions that were selected predominantly, but not exclusively, from the Translation (and Interpreting) in Transition Conference, whose third edition was organised at Ghent University in July 2017. We have sought to present a collection of both research papers and review papers. The former explore either new empirical or new methodological horizons; the latter represent a theoretical frame of reference for the former to be situated and interpreted. The structure of the volume thus attempts to broaden the theoretical horizons adopted in the research papers.

Throughout the volume we sought to keep a (relative) balance between translation and interpreting and to systematically confront Translation and Interpreting Studies within each thematic unit. Ideally, this dialogue between the two disciplines should also have played out at the level of the individual papers, but comparative analysis of interpreting and translation is still so much in its infancy and research taking such an approach is so scarce that it is not represented here. Instead, we have tried to spark dialogue between the two disciplines by selecting a number of papers that adopt methods that are far more popular in the other disciplines. For instance, the volume includes papers presenting corpus-based analyses of interpreting and cutting-edge experimental research into translation processes.

The research papers are presented in three thematic units: the first unit groups studies focused on the target text, the second unit centers around the source text and the third unit targets the translator/interpreter.

2.1. Target

Chapters 2 and 3 feature contributions by Gert De Sutter and Eline Vermeire and by Amelie Van Beveren, Gert De Sutter and Timothy Colleman, both comparing data drawn from corpora of translated text and corpora of non-translated texts. Both chapters study the use of optional grammatical items. De Sutter and Vermeire revisit the topic of Olohan & Baker's (2000) seminal paper and study the optional conjunction *that* in English translations from Dutch source texts and non-translated texts. In the other study by Van Beveren, De Sutter and Colleman, the same analysis is applied to the optional Dutch conjunction *om*. The advanced statistical techniques used in both studies allow the authors to demonstrate that translated texts indeed present higher frequencies of the optional items. By carefully linking variables to competing motivations for the use of optional *that* (cognitive complexity, risk aversion, source language

influence), De Sutter and Vermeire are able to show that variables related to risk aversion best predict the occurrence of optional *that*. In the study by Van Beveren, De Sutter and Colleman, risk aversion is also referred to as a major explanatory factor, with translators using optional *om* more often in contexts where the cognitive complexity of the structure is lowest. Source language influence, however, also contributes to the higher frequency of *om*.

Chapter 4 pursues the comparison of mediated and non-mediated corpus data but focuses on simultaneous interpreting instead of translation. Daria Dayter rightfully points to the inherent difficulty of exploiting nano-corpora such as most corpora of interpreting. Building on Bernardini (2015), she therefore turns her attention to POS chains in order to study the collocativity of simultaneous interpreting (in the Russian-English pair) and non-mediated oral language and uses a large reference corpus to overcome the limitations imposed by the modest sizes of the oral corpora. Dayter only finds three POS chains to be used differently by interpreters and speakers, only two of which point to higher collocativity in non-mediated spoken language. The diverging tendencies are best explained according to Dayter by Shlesinger's (2008) hypothesis that interpreting has an equalizing effect on the features of source texts: it diminishes the orality of markedly oral source texts and the writtenness of markedly literate ones.

With Chapter 5 by Jean Nitzke, we move on to how problematic the production of particular items in the target text is for translators and post-editors. Using key-logging data in an experiment involving translation and post-editing tasks for the German-English pair, Nitzke identifies key problematic areas in the target texts. Interestingly, verbs seem to pose most problems for translators and post-editors, especially if their frequency is low. Nitzke's study convincingly demonstrates how the combination of particular observation technologies, advanced statistical treatment and carefully designed experimental setups can uncover relevant facts for training. Key-logging data are also used in Marta Kajzer-Wietrzny's Chapter 6 on the comparison between interlingual (Polish-English) and intralingual translation (Polish only). Whereas Nitzke's analysis does not compare translation and post-editing directly, Marta Kajzer-Wietrzny's does compare both forms of text rendition. The target items in her study are linking words, as these are known to occur according to particular patterns of explicitation in translations, which begs the question of whether these patterns are due to the change of language or to a broader reformulation process of texts. The answer appears not to be straightforward: patterns of explicitation are found in both modes, but seem stronger in the interlingual condition, although significance is not reached. Linking words appear to be inserted mostly at an early stage of the process, and a majority of them do not show evidence of declarative processes. Experienced translators also appear to explicitate more than

novices, underscoring the impact that training and experience seem to have on the translation process.

Finally, Chapter 7 focuses entirely on post-editing. Gys-Walt van Egdom and Mark Pluymaeker analyse language service providers' perceptions of the quality of post-editing. Using an experimental design in which post-editors are requested to post-edit machine translations at different levels of intervention, the study aims at determining which level(s) of intervention are perceived to deliver the best quality. The results suggest that more intervention does not necessarily mean better-perceived quality, especially at the high end.

2.2. Source

The contributions by Ena Hodzik (Chapter 8) and Arndt Freiwald, Jonas Heilmann, Tatiana Serbina and Stella Neumann (Chapter 9) both focus on word order in the source language (German) and its impact on the interpreting and translation process, respectively.

Hodzik looks into the effects of transitional probability (i.e. the statistical likelihood with which words appear together in language) on prediction during language processing in shadowing and simultaneous interpreting tasks. She considers the relationship between transitional probability and word order and between transitional probability and literalness. Her findings indicate that differences in syntactic structure between source and target language influence interpreting latency. Interestingly, she remarks that comparable effects of parallel processing have been found in translation process research, where translators' fixations were found to be longer when processing asymmetrical syntactic structures in source and target text compared to symmetrical syntactic structures.

Freiwald et al. study the translation into English of German sentences with AVS structure (adjunct, verb, subject) with the additional influence of subject-heaviness, using keystroke logging and eye-tracking. Their findings do not confirm their hypothesis that subject-heaviness has an impact on the order of grammatical constituents in the target text. What their data does show is that an increased proficiency in the source language leads to deviation from the expected structure in the translation and that certain translation strategies require more cognitive effort than the inversion of the subject and verb order. They also find that the number of pauses in the reading process is higher for an English VS translation of a German SV original than for an English SV translation of that same sentence, which echoes Hodzik's findings of increased interpreting latency for different syntactic structures in interpreting.

In addition to being examples of source-text orientedness, these contributions share some theoretical and methodological features that highlight the importance of a continued and improved knowledge exchange in the

fields of Translation and Interpreting Studies respectively. Both contributions use regression models in their statistical analysis (fixed effects models in Hodzik, linear mixed regression modelling in Freiwald et al.), both borrow concepts from psychology (Hodzik studies probability effects on predictive processing, Freiwald et al. study controlled and automatic processing) and both refer to translation universals (literal translation in Hodzik, explicitation in Freiwald et al.).

2.3. Interpreter/Translator

Part III brings together papers on various interpreter and translator-related variables such as translator experience, interpreter training and sex. Chapter 10 by Ekaterina Lapshinova scrutinises differences between professional translators and novice translators. Unlike Kajzer-Wietrzny's contribution to this volume, where translation expertise is one of the studied variables, Lapshinova's is a systematic exploration of textual evidence of differences in expertise, based on Hallyday's systemic functional grammar. Classification algorithms are used in an attempt to automatically distinguish professional from novice translation on the basis of a set of pre-defined features. Precision rates vary between 62 and 66%. More importantly, Lapshinova's method also identifies features typical of each experience level, with notable differences in terms of modal verbs, evaluative patterns and connectors. The analysis of misclassified translations shows that register may play a role in misclassifications.

The next two chapters—Chapter 11 and Chapter 12—deal with the simultaneous interpreter and present two different perspectives on the interaction between the interpreter and the interpreting activity. First, Laura Keller, Alexis Hervais-Aderman and Kilian G. Seeber study the effect interpreter training has on interpreters' brains, while Camille Collard and Bart Defrancq analyse whether interpreters' sex has an effect on their production of disfluencies. Both contributions are also different with regard to methodology with a classical experimental approach taken by Keller et al. and a novel corpus-based method applied by Collard and Defrancq. Keller et al. aim at finding out if training in simultaneous interpreting affects interpreters' executive and language control, compared to a group of translation trainees. No differences are found on executive control tasks. For language control, performances partially improve on switching tasks in the interpreters' group but not in the control group. No differences are found for interference resistance. The corpus-based study proposed by Collard and Defrancq tests a whole set of speaker and source text variables together with interpreters' sex to find out which of these variables affects the number of disfluencies produced by interpreters in the European Parliament (for all pairs involving Dutch, French and English). Different types of disfluencies are analysed. Using generalised linear mixed models to tease out individual effects, they

conclude that male and female interpreters only differ on two types of disfluency, namely lengthenings and false starts, and that frequencies are mainly impacted by the speaker's delivery rate and the interpreters' EVS.

2.4. Outlook

Chapters 13 and 14 are contributions by leading figures in the field of translation and interpreting research. Junying Liang and Qianxi Lv, on the one hand, and Haidee Kotze on the other present an overview of literature on empirical interpreting and Translation Studies along two dimensions: product and process. Both papers highlight areas of convergence and integration and propose an outlook for the future.

3. Toward a Family Reunion

While the sister disciplines of Translation and Interpreting Studies will (and should) retain their idiosyncrasies, there are many areas in which they could benefit from a closer collaboration from a theoretical, methodological and technological perspective. With the contributions collected in this volume, we highlight some of these potential and related challenges. By putting the sisters on speaking terms again, we hope to start a dialogue that continues to grow and deepen, to the disciplines' mutual benefit.

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