A multimodal corpus approach to dialogue interpreting studies in the Chinese context: towards a multi-layer analytic framework

Fei Gao

Binhua Wang
University of Leeds (UK)

Abstract

Analysing both linguistic and non-linguistic strata in dialogue interpreting (DI) studies sheds new light on the dynamic interaction where meanings are also constructed both verbally and non-verbally. Most existing literature in DI has focused on linguistic description, calling for the need to explore interpretative and explanatory frontiers. DI between English and Chinese involves linguistic and cultural complexities; albeit they impose significant difficulties, these complications provide useful data for analysis beyond description as the multimodal semiotic resources of DI work in an integrated entirety. Underpinned by the stratification theory in Systemic Functional Linguistics (SFL), we propose a multi-layer analytic framework (MAF) that integrates with the multimodal approach to DI, empowers the corpus techniques and enables DI researchers to investigate the 'how' and 'why' questions cross-modally, in particular when distant language pairs (such as English and Chinese) entail investigation into visual and contextual data. This article, though exploratory in nature, raises important methodological issues for future DI studies involving linguistically and culturally distant languages.

Keywords

Dialogue Interpreting Studies, Multimodal Corpus Approach, Multi-layer Analytic Framework, English-Chinese language pair.

Introduction

Dialogue Interpreting (DI) practice with the English and Chinese language pair is nothing akin to such interpreter-mediated communication with cognate language pairs (or many European language pairs) (Su 2009) which share linguistic and cultural phylogenies. The immense distance between Asian languages and European languages stems from not only linguistic divergences but also cultural complexities (e.g. Ra/Napier 2013). In this study, we attempt to investigate such complication with a focus on DI encounters taking place in China. The focus allows us to contrast the two languages and the cultures embodied by semiotic representations in the generally homogenous Chinese context. The complications involved in DI, both linguistically and culturally, provide intriguing research avenues for DI researchers who embrace the corpus-based approach.

Corpus technology today has immensely enhanced accessibility to data in corpus-based translation studies (CTS) (Laviosa 1998), ranging from exploring translation universals (e.g. Baker 1993, 1995), translation norms (e.g. Munday 1997) to socio-cultural contexts (e.g. Munday 2002) and ideology (Kemppanen 2004; Munday 2012a, 2012b). The incorporation of the corpus approach to interpreting studies has also propelled corpus-based interpreting studies (CIS) (Setton 2011; Bendazzoli 2018) with academic interests in linguistic phenomena (e.g. Wang/Li 2015; Bendazzoli *et al*. 2011), interpreting norms (Wang 2012; Wang/Qin 2015), stance-taking (e.g. Wang/Feng 2014; Szczyrbak 2016) and interpreting ideological discourse (Beaton 2007). Corpus techniques could be effective in describing linguistic features in CTS and CIS. These corpus-enabled descriptions, however nuanced they be, still rely safely on transcribed products, without capturing the elusive context or non-verbal dynamics, thus restraining CIS within the confinement of description that "means an absence of evaluation and thus isolation from social and political aspects of interpreting" (Mason 2006b: 105) and shelving the 'why' questions.

The problem we have identified in DI studies, analogous to the contributions of CIS, still lies in the reliance on the written (or transcribed) text for analytical purposes. Nonetheless, DI is essentially embedded in a socio-cultural situation where participants have different beliefs and values. The socio-cultural and ideological vectors constitute pivotal meaning-making constituents that require more than linguistic descriptions of transcribed texts to interpret and explain what Wadensjö (1998) delineates as a joint face-to-face interactivity. Studies of DI thus would require not only linguistic interrogations but also semiotic investigations, which entails the combination of multimodal corpus methodologies with linguistics-informed theoretical frameworks. While the corpus approach may capture the semiotic dynamism of DI on one hand, linguistic theories may account for the interwoven semiotics on the other.

Our aim in this article is to offer an analytical framework that can be utilised for comprehensive description and interpretation of multimodal corpus data in DI studies. The utility of the framework is exemplified with corpus techniques applied to a distant language pair (English-Chinese) that poses complications (e.g. Qian 2012; Wang/Gu 2016). We deem the complexities involved in such

language pair as a 'bonus' where not only the "live dimension of face-to-face interactive communication" can be preserved (Setton 2006: 375), but also shifts in verbal renditions could be interpreted and explained through triangulation from other semiotic means in the live communicative activity as an integrated entirety. In other words, the interpreter's attempt to reproduce the intended communication effect can be contemplated via the complementarity of the linguistic lens and the non-linguistic prism, such as gestures, gaze, body posture, and object manipulation, which have been studied sparingly by DI researchers (e.g. Pasquandrea 2011; Davitti 2013; Davitti/Pasquandrea 2017). We argue that the complications of the English and Chinese language pair could be elucidated through this multimodal exploration. By engaging the multimodal data in the corpus approach, it could greatly contribute to describing and analysing the configuration of meanings in DI. Meanwhile, our theoretical discussion attempts to construct a framework from the school of Systemic Functional Linguistics (SFL) that could accommodate and account for the complexities of multimodal data.

Nevertheless, empiricism is neither the means nor the end of this article that focuses on the theoretical side of DI investigations. There are two reasons for our choice of the focus. First, there is a lack of empirical corpus-based investigation in the Chinese context. Globalisation has brought English or other European-language speaking countries' immigrant populations who necessitate DI in their multi-racial communities or public service institutions. Empirical studies of DI in these places may constitute the bulk of corpus-based contributions. DI investigation in the Chinese context, however, may encounter some obstacles on the empirical avenue at this stage of globalisation that has brought few immigrants in the same sense but some English-speaking expatriates. The immigrant community is a rarity in the Chinese context; the expatriate group in China have their corporate in-house interpreting services and the data is not accessible. In consideration of the scarcity of empirical corpus-based research into DI in the Chinese context and the inaccessibility of the data, we argue for the necessity of developing theoretical frameworks that will enable researchers to analyse the empirical data more systematically, especially when distant languages and cultures create more linguistic and non-linguistic complexities in DI. Therefore, our choice of focus for this article may differentiate it from other corpus-based empirical studies in this special issue, but we hope it will contribute to corpus-based DI investigation theoretically.

This article starts with a review of the relevant literature (§1), which is followed by constructing a multi-layer analytic framework that has general applicable utility for research into distant language pairs in DI studies (§2). With the aim to seek potentially applicable research tools in the Chinese context, we then illustrate the operational nuts and bolts for applying the proposed framework to a multimodal corpus approach to DI studies (§3). The article concludes with a summary and a caveat for the utility of the framework in future DI studies (§4).

1. Taking stock of evolutions in DI studies: towards multimodality

1.1 Linguistic-oriented approaches to DI studies

DI, being largely face-to-face, immediately interpersonal and crossing cultural differences, has lent itself to distinct research orientations. The complex interplay of socio-cultural factors shaping and constraining the communicative interaction has been probed predominantly through linguistic-oriented frameworks such as Conversation Analysis (CA) (e.g. Wadensjö 1998; Mason 2001, 2006a; Davidson 2002; Pöchhacker/Schlesinger 2007), Discourse Analysis (e.g. Roy 2000; Wadensjö 2001; Hale 2004), Critical Discourse Analysis (e.g. Barsky 1994; Pöllabauer 2005; Inghilerri 2005; Monacelli 2016), and pragmatics-based frameworks like Relevance Theory (e.g. Mason 2006a; Blakemore/Gallai 2014). These contributions exemplify how well-established linguistic theories enable DI researchers to manoeuvre socio-cultural dimensions in live communicative interaction. Synthesis and adaptations of these theoretical frameworks have been made to better suit the purposes of DI studies. The "dialogic discourse-based interaction" paradigm (Pöchhacker 2004: 79), for example, synergised Conversation Analysis (CA) and Discourse Analysis (DA), and still inspires the DI community today.

The reliance on the transcription of video or audio data is "particularly enduring in the literature" (Mason 2006a: 359). Few DI contributions, nevertheless, address the interwoven semiotic resources other than the transcribed written text. Technical issues such as inadequate video-recording tools or limited access to videos may contribute to the reliance on transcription for analysis. In addition, ethical hindrances like confidentiality in personal and sensitive issues involved in DI encounters and anonymising video data are contributing factors (Bendazzoli 2016). These constraints are observed by Mason (2006a), who makes the point of the difficulty of sustaining the "real-time on-line nature of face-to-face dialogue interpreting" (*ibid.*: 360).

1.2 Multimodal approaches to DI studies

The multimodal approach is not new, yet the difficulties on this avenue render its application rather scarce. Lang (1978) trail-blazes the non-verbal route by investigating gaze in courtroom interpreting. The time gap then persists until around the late twentieth century, when Apfelbaum (1998) examines the rhythmic synchronisation of interpreter-mediated interaction; whilst Wadensjö (2001) investigates the interpreter's proxemics during psycho-therapeutic sessions. Both studies establish close links between rhythmic regularities and "communicative radius" (Wadensjö 2001: 82-83) of participants' body positioning. Also, in medical scenes, ad-hoc interpreters use non-verbal signals to trigger dyadic sequences during medical examinations (Ticca 2010). Then, the foci on gaze and bodily semiotics seem to have attracted a few DI researches. Bot (2005) probes gaze and gestures in relation to turn organisation in therapeutic scenarios. Mason (2012) describes the intricate relations between bodily position and identities in inter-

preter-mediated asylum seeker interviews. Pasquandrea (2011, 2012) and Krystal-lidou (2014) explore the negotiation of inclusion and exclusion via analysing how gaze and gestures play their part. Davitti (2012, 2013, 2015) focuses on the role of gaze and body orientations for triggering, eliciting and elucidating conversation moves in parent-and-teacher encounters. This line of enquiry, though still at the embryonic stage, culminated in a workshop on *Integrating Multimodality in the Study of Dialogue Interpreting* in Surrey in 2015[1], when many fresh ideas and interim findings were presented and inspired some later researches. Among them, Davitti and Pasquandrea's (2017) endeavours into the "ecology of action", that is, how the surrounding environment and objects affect participation of the speaker and the interpreter in a semiotic entirety (*ibid.*: 105). Recently, unpublished PhD research, based on simulations of interpreter-mediated dialogues, has investigated multi-modal semiotics (including audio, visual and contextual resources) with an aim at constructing the role played by the dialogue interpreter (Bao-Rozée 2016).

The initial efforts in the multimodal approach to DI have been encouragingly fruitful, albeit with some weaknesses. First, the multimodal approach remains a general perspective. The existing analytical methods render these studies large-ly descriptive. Therefore, the interpretation and explanation of the integrated semiotic resources in DI encounters are left out. The methodological frames of multimodal conversation analysis (MCA) used by, for example, Davitti (2012), Pasquandrea (2011, 2012) and Davitti/Pasquandrea (2013), prove feasible, yet still leave researchers unassisted when there is a need to integrate different layers of semiotic resources for the DI studies involving distant languages and cultures. These contributions utilise a semiotic approach to the holistic interplay of "con-currently relevant semiotic fields" (Goodwin 2000: 1499) with an aim to account for "the complexity of naturally-occurring communicative events" (Davitti/Pasquandrea 2017) in DI. Their methodologies of "combining diverse resourc-es (such as language structure, categories, prosody, postural configurations, the embodied displays of a hearer, tools, etc.)" (Goodwin 2013: 21), or integrating lay-ers of these semiotics to avoid the dichotomy of verbal and non-verbal analyses (Mondada 2014: 138), are utilitarian in describing the complexities of DI encoun-ters, yet fail to help cross the descriptive boundaries in DI studies. Second, most of the contributions examine multimodality partially (probably due to different research focuses or limited article space), not as an entirety; some complemen-tarities nestled in semiotic resources are largely missing from the analysis. Bao-Rozée's (2016) attempt to account for fuller multimodal resources fails to analyse DI multimodality as an integrated whole, leaving her analysis of individual cat-egories only descriptive. Third, research findings are tentative in that most of them rely on one or several encounters, forsaking the possibility of arriving at generalisable discoveries. Fourth, these contributions overwhelmingly investi-gate cognate or not so distant language pairs, such as English and Italian (e.g. Davitti 2012, 2013), whereby the non-verbal side of communication would be dif-ferent from distant language pairs (such as Chinese and English) in terms of how interlocutors and interpreters utilise non-verbal means of communication.

---

1   See http://www.ias.surrey.ac.uk/workshops/interpreting/index.php

2. Constructing a multi-layer analytic framework for the analysis

2.1 Stratifying linguistic resources

The investigation of DI encounters in this study involves complexities, which can be approached with analytical tools from linguistics. The existing contributions using the multimodal approach are largely descriptive of what happens in DI, yet do not explain what contributes to the "amoralities" (unexpected shifts) in the rendition. Translation shifts, i.e. "departures from formal correspondence in the process of going from the SL (source language) to the TL (target language)" (Catford 1965: 141), along with what has been reduced or added in the interpreted rendition (Wang 2012), constitute our starting point for constructing the framework. The shifts studied in the T&I literature describe lexical or structural alterations, i.e. changes in form, with the aim of identifying the shifts in meaning between SL and TL. The corpus approach also relies on formal linguistic data (machine-recognisable forms of language) as the mechanics to uncover meanings embodied in the formal data (Baker/McEnery 2015). The analysis of meaning in either T&I studies or corpus studies is incomplete without including relevant references to the context. Therefore, T&I studies and the corpus approach share three analytical vectors: linguistic forms, meanings and context. The corpus approach to DI studies in this article can capitalise on this accordance, yet is still in need of systematically structured linguistic theories for the synthesis of T&I studies and the corpus approach.

Informed by the linguistic theories of SFL, in this section we wish to construct a framework that can enable the interpretation and explanation of multimodal corpus data. With a linguist's hat, we find that the Hallidayan hierarchical stratification (Halliday 1978, 1994, 2014) can be operationalised for the analysis of multimodal data in the corpus study, whereby the corpus techniques work with lexis and phraseology at the linguistic level (e.g. Baker 2006; Baker *et al.* 2008; Baker/McEnery 2015). Linguistic perspectives, therefore, provide the toolkit for the corpus study of DI. As portrayed by Figure 1 below, the linguistic resources are taxonomised in five layers, from the micro level to the macro level: *phonetics, phonology, lexicogrammar, semantics,* and *the context of situation and culture,* the last one going beyond language proper (Halliday 2001: 15). This stratified framework is capable of not only capturing the multimodal resources of DI interactions, but also accounting for what descriptive interpreting studies fail to explain. For example, the interpreting shifts at the lexicogrammatical or semantic stratum might find explanation at the contextualised cultural stratum; the instance of *old* in DI is a case in point (also see §3.3), where the term *old* is associated with *being well-established* in the Chinese language. Therefore, the rendition of *the old system* from English to Chinese can be shifted lexically into 经久不衰的体制 (a system of long trial). The lexical shift here contributes to the functional equivalence since a positive connotation is attached to this culturally-loaded term (Munday 2012a).

We therefore argue that the strata of lexicogrammar and semantics are most prone to interpreting shifts; contextual meaning in DI communications super-

sedes the lexical or semantic equivalence. Our contention is backed up by Halliday's view towards "good translation", where he proposes a generalised hierarchy of equivalence priority:

> [...] equivalence at different strata carries differential values; [...] in most cases the value that is placed on it goes up the higher the stratum – semantic equivalence is valued more highly than lexicogrammatical, and contextual equivalence perhaps most highly of all; (Halliday 2001: 15)

Hallidayan hierarchical stratification can be substantiated in the analysis of contextualised DI interactions, whereby, matching the relations of cultures overrides the need for finding an exact lexical correspondence. Halliday's view of contextual superiority coincides with what we propose for DI studies. Our argument on the primacy of contextual data is also supported by T&I researchers. Mason (2006a) points out the importance of contextual analysis since the context is mutually accessible by the speakers and the interpreter in DI. The magnitude of cultural context is also felt in that "interpreters cannot avoid functioning as intercultural mediators" (Wadensjö 1998: 75) and in seeing DI interpreters as "mediating across boundaries of language and culture" (Pöchhacker/Shlesinger 2002: 1). The need for theorising context in DI studies is voiced by Setton (2011: 37) with the call for the "theoretical prism for [...] processing and access to context". Thus, our theoretical prism with the contextual layer may explain the interpreting shifts occurring at lexicogrammatical and semantic strata. One problem still remains in our attempt to construct the analytical framework: how does the stratification model fit the multimodal approach? The next section matches the two and offers an analytical model.
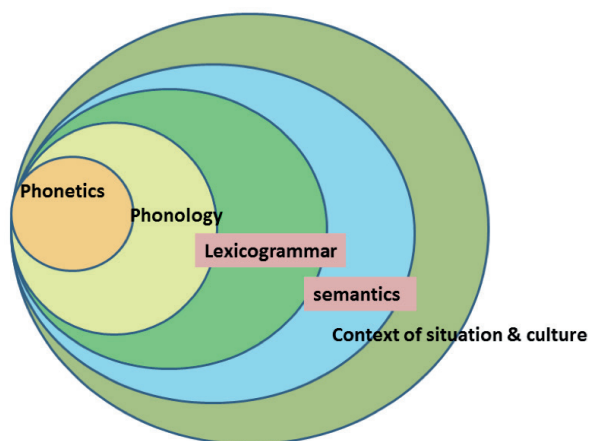

Figure 1. Stratification in a semiotic entirety.

2.2 Integrating the multimodal approach with the theory of stratification

The construction of our analytical framework also incorporates the multimodal approach into the Stratification Frame for DI studies. The immense diversity of multimodal resources discussed in mono-lingual CA (e.g. Goodwin 2013; Mondada 2014; Hazel *et al.* 2014) inspires the multimodal approach to DI studies, where some recent contributions, based on the corpus approach, like Bao-Rozée (2016) and Davitti/Pasquandrea (2017) exploit multimodal conversation analysis (MCA) (Deppermann 2013; Hazel *et al.* 2014). Their findings point to recurring patterns like projecting next action or speaker (Davitti/Pasquandrea 2017: 124) and the use of gaze or body orientation for turn-taking (Bao-Rozée 2016: 214). These multimodal findings complement what could be shifted on the verbal layers of DI interactions, and thus serve as pointers for us to identify multimodal resources that go into the corpus and into DI researchers' scope of analysis.

Summarising from existing literature on the multimodal approach to DI studies, albeit meagre as it may be, helps us identify audible and visible resources that go into the construction of our framework. Audible resources are largely verbal (including the written transcripts and the phonological properties of utterances), and the written transcript of utterances matches onto the linguistic strata of lexicogrammar and semantics, whilst the auditory properties[2] (such as pitch, intensity and duration) correspond with the strata of phonetics and phonology. The visual resources constitute gaze, gesture, body orientation, proxemics, and object manipulation. These multimodal resources are as important as the linguistic resources as parallel meaning-making semiotics, since they all work together as an integrated entirety of multimodal semiotics, rather than an ensemble of individual categories. The correspondence between the multimodal resources and SFL strata is pivotal in operationalising the corpus approach that entails machine readable data and clear annotation schemes (for details see §3.3). More importantly for DI, multimodal semiotics construe meanings within certain contexts of situation and culture. Therefore, these four categories of semiotic resources are summarised as the Multi-layer Analytic Framework (MAF) shown below in a formula where they carry equal weight in constructing the meaningful interaction in DI.

Written transcript of utterances (Lexicogrammar+ Semantics) **+** **Auditory properties** (Phonology + Phonetics) **+** **Visual semiotics** (Gaze, gesture, body orientation, proxemics, and object manipulation) **+** **Context** of situation and culture **=** **Multimodal resources for DI analysis**
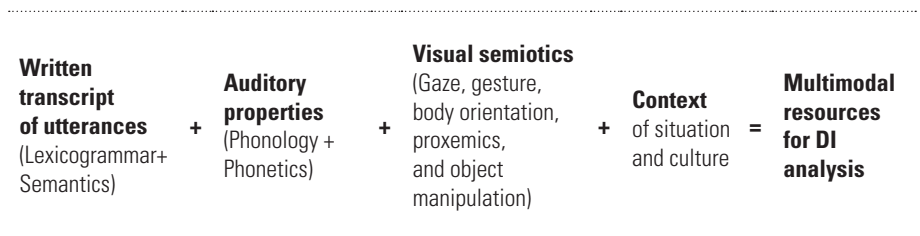
Figure 2. A Multi-layer Analytic Framework (MAF) for a multimodal approach to DI studies.

2   The auditory properties also include sound / noise produced by participants with their body (e.g. finger snapping) or with objects, though we have not been able to explore them in the present study.

The operationalisation of the formula above enables DI researchers to better capture and integrate these multimodal resources in the fuller-canvas analysis. It assumes the integrated sum of multimodal semiotics comes from adding the breakdown of different taxonomies. Therefore, if the researcher wants to explain what leads to the interpreting shifts identified at the written transcript vector, he or she can explore other vectors (auditory, visual and contextual) for possible explanations. The utility of this formula is the strongest when DI studies involves distant language pairs (such as English with Chinese, or with some other Asian languages), where, for instance, the differences in the context of culture can explain the non-equivalence at the semantic level. Hopefully, the formula makes it possible to explore the 'why' questions, in particular when probing the utterance transcripts fails to explain interpreting shifts or some other un-expectancies, which otherwise could be unravelled by auditory, visual or contextual data. The operationalisation of this framework with the corpus approach to DI analysis is described in the next section.

3. Operationalising the analytical framework

3.1 Data collection in the Chinese context

One of the gravest obstacles in doing DI studies derives from data collection and data quality, in particular for a multimodal approach that necessitates video-recording of the whole event. This hindrance is not uncommon since DI studies cannot escape the delicate nature of the interactional scenarios being studied, such as "healthcare, courtrooms, pedagogy, police stations, and immigration offices—all of which pose serious problems in obtaining permission to video-tape and study such data" (Pasquandrea 2011: 456). Monacelli (2016) echoes the challenges of data accessibility in her research on confidential settings for DI encounters. This quandary is similar in China, where the doors of e.g. hospitals, educational institutions, corporations, and courts are mostly closed to outsiders, even to researchers like us (e.g. Su 2009; Deng/Wen 2012).

Nevertheless, the obstacles described above should not hinder the growth of DI studies on the English-Chinese language pair in China: they could rather compel researchers to explore niches of possibilities. Two areas have been found promising in this respect, namely educational encounters and business promotional events. Universities and research institutions in China are witnessing increasing academic collaboration with the Western world (e.g. Hammond 2016) and interactional communication that ensues necessitates professional DI mediation. Fortunately, academic staff and "practisearchers" (Gile 1994), who often interpret for the local management-board of these institutions, have access to these cross-cultural and cross-language encounters. Video-recording some non-confidential conversations mediated by an interpreter is thus possible for academic research. Another feasible access comes from business-related events that do not involve business confidentialities but only aim at advertising. Some of the multimodal resources (text information, photos and videos) are occasionally put on-

line. Additionally, student interns interpreting for business communication provide another form of access to authentic DI data. Some of them may record their own performance, after getting consent from their clients, for the purpose of observation and practice, thus their data can also be utilised for research purposes.

We do not attempt to be exhaustive in identifying all niches of data access for DI studies in this paper, yet provide some degree of focus and potentiality. The two areas of data source introduced here are bound to grow in terms of accessibility in future, though obtaining consent for use from participants might continue to be a challenge.

3.2   Data presentation in the multimodal form

The presentation of multimodal corpus data is a major issue due to its innate nature of multi-layered complexity. Efforts are made to capture multimodal data (audible and visible semiotics) (Bao-Rozée 2016), and the reliance on the transcription conventions from monolingual CA indeed provides tools to record multimodal data in corpus form. McNeil's (2006) transcription method for coding multimodal information helps the synchronisation of gesture movements with co-occurring utterances. His hyper-phrase symbols such as ♯ (for an audible breath pause), / (for a silent pause), * (for self-interruption), italics (for gaze), and drawings and screenshots (for bodily actions) might be useful in DI studies. McNeil's (2006) transcription methods helps Bao-Rozée (2016) in capturing complicated gaze and bodily semiotics in simulated DI interactions and are proved to be suitable for displaying the synchronicity of gestural movements with their co-occurring speech.

However, the field of interpreting studies (DI included) lacks agreed conventions for transcription and presentation of multimodal corpus data; it is not realistic to aim at a "universal" one (Setton 2011: 53). Therefore, DI researchers either rely on transcription conventions of CA or DA, which are prone to over-marking and over-analysis (*ibid*.). Alternatively, they create their own conventions that suit the purpose of their study (e.g. Davitti 2013; Davitti/Pasquandrea 2017). We suggest the combination of both approaches could be a possibility. We also need to bear in mind the suitability of the research design since transcription should be limited to the features to be subsequently analysed (O'Connell/Kowal 1994).

ELAN[3] is a corpus software tool with multiple functions to annotate and retrieve multimodal data. Its effective data presentation utility is seen in some DI studies with the multimodal (auditory, visual and textual data) corpus approach (see, Davitti 2013, 2015; Bao-Rozée 2016; Davitti/Pasquandrea 2017). The intuitive vertical layers enable the clear presentation of multimodal resources, from layers of written transcript, auditory features (like pitch and intensity), to layers of visual dimensions (such as gaze and body orientation). Contextual data can be recorded in parallel layers, but it is advisable to have file-headers or separate files to enter the meta-data (e.g. Setton 2011). The beauty of using ELAN lies with its em-

---

3   ELAN 4.9.2 (available for downloading at https://tla.mpi.nl/tools/tla-tools/elan/download/)

powering synchronisation of all the multimodal resources (with an annotation scheme geared to research purposes) and its structured multi-layer search. For example, the ELAN screenshot below shows the synchronised seven layers where the researcher transcribes the SL and TL, gaze and gestures of the interlocutors, as well as the eye contact between them. The structured multi-layer search function can bring up the video in which all the multimodal semiotics take place. Therefore, with the synchronised presentation of data, the multimodal analysis of DI becomes possible when researchers need to analyse what happens there and then.
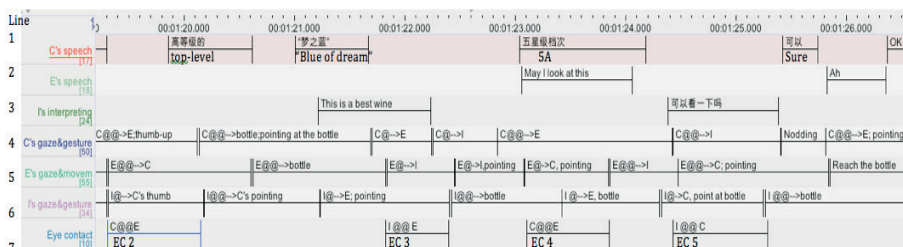

Figure 3. ELAN screenshot of the synchronised multi-layer transcription (Bao-Rozée 2016: 158).

Total reliance on ELAN is not sufficient though, because data preparation and analysis need to be supplemented with additional corpus tools. The discussion on corpus methodologies in the following section (§3.3.2) demonstrates how the corpus techniques contribute to further analytical procedures.

3.3 Data analysis with MAF

3.3.1 Understanding data linguistically and cross-culturally

The analysis of DI data in the Chinese context entails a researcher's full understanding of linguistic and cross-cultural divergences before feeding data into corpus tools. The linguistic and cultural differences between the distant English-Chinese language pair are known for posing great challenges; nonetheless, we discern potentialities for the multimodal approach to DI studies. The wealth of literature on linguistic and cultural differences cannot find space in this article but enables us to offer something genuinely pertinent to DI studies involving these two languages and cultures.

Linguistic differences between English and Chinese, most relevant to our DI studies, come from the broader Translation and Interpreting Studies, which perceive linguistic differences as pivotal since "language-pair-specific differences can indeed have an impact on the difficulty of interpreting" (Gile 2011: 213). First, pronouns pose vast disparities in language use. For instance, "what is expressed by a subject pronoun in English is conveyed by other means in what are known as 'pro-drop' or 'null subject' languages" such as Chinese, Japanese and Arabic (Munday 2012a: 73). The DI interpreter, therefore, may need to infer from the context what the subject is when s/he is working from Chinese into English. Second, Eng-

lish is hypotactic while Chinese is paratactic; this distinction engenders a crucial structural difference that has been noted by T&I researchers in China (e.g. Qian 2012). Hence, connectives (i.e. formal cohesive words or phrases) are added when working into English, and vice versa (e.g. Wang/Qin 2015). DI interpreters may thus better organise what goes into their renditions based on their understanding of this language-pair-specific difference. Third, the structural asymmetry in the English and Chinese language pair is identified as language pair specificity, which is "exemplified by right-branching structures in English and left-branching structures in Chinese" (Wang/Gu 2016: 1). This language-pair specificity could result in interpreters' strategic waiting, pausing and segmenting (*ibid.*).

More elusive than linguistic differences are the cultural differences of the English-Chinese language pair. The analysis of utterances in cross-cultural communication is not feasible without the knowledge of cultural differences. As Nida (2001: 13) famously puts it, "the role of language within a culture and the influence of the culture on the meanings of words and idioms are so pervasive that can scarcely any text be adequately understood without careful consideration of its cultural background". Halliday (1999: 19) further explains the relations between language and culture by defining culture as the "semiotic construction" of reality "that results from the particular use of language by members of a community". Both attest to the complementary nexus between language and culture. Hence, we argue that explanations of the interpreting shifts from lexicogrammatical or semantic layers could be sought from cultural differences when verbal renditions seemingly fail to provide equivalence in their complementary nexus. Cultural awareness equips people with cultural empathy and sensitivity (Tomlinson/Masuhara 2004), DI interpreters with the tools to bridge cultural barriers (Deng/Wen 2012) and researchers with the explanatory power to uncover what verbal texts fail to provide an answer for. One example may help substantiate what we mean by the term "explanatory power". *Old* is an example of "a culturally loaded word" and could be "at the heart of the debate over the values" projected onto people or entities (Munday 2012a: 55). In Chinese culture, a person being 老 (old) equates to connotations of "经验和权威" (experience and authority); a system being 老 (old) connotes "久经考验" (of long trial). Whereas, in the English-speaking culture, a person being *old* suggests some degree of invalidity; a system being *old* implies out-dated. If the DI interpreter is able to provide what the term *old* really implies instead of rendering *old* verbatim, his or her cultural knowledge about the positive-and-negative contrast might well explain what contributes to the verbal shift in rendition.

Some generalisations on the cultural differences between the East and the West have been made in cross-cultural studies, albeit with a grain of circumspection. They are important in our contextual analysis for DI studies. Hall's (1976) seminal work distinguishes high-context culture (such as in China) and low-context culture (in English-speaking countries). DI researchers like Mindess (1999) and Lee (2009) both identify Asian languages (such as Chinese or Korean) as "contextual" languages in DI encounters. In a similar fashion, collectivism (for the East) versus individualism (for the West) is described by culture scholars (e.g. Hofstede 2001). Mindess (2006: 179) observes the avoidance of "loss of face" in the more indirect

Fei Gao and Binhua Wang

communication styles within the collectivist culture. DI researchers, in this sense, need to take into account the two facets of cultural divergences in their analysis.

These linguistic and cultural disparities indeed pose challenges for DI interpreters working between English and Chinese. Nonverbal cues along with cultural factors are crucially important in understanding the full messages in DI. The nonverbal side of communication is more salient in distant language pairs than is the case in cognate pairs that may pose fewer challenges at the verbal level. The multimodal approach can hence be more fruitfully exploited and be more explanatory when analysing distant languages and cultures (English and Chinese in our case) because it is more likely to come across major differences and mismatches at multiple levels. These differences and mismatches offer potentialities to construct MAF (§2) and we demonstrate the utility of this framework for corpus procedures in the next section.

3.3.2 Analysing multimodal data with the corpus approach

The corpus approach can benefit DI studies in a number of ways. The (semi) automatic tools render the analysis of corpus data more efficient (e.g. Partington 2003). It reduces researcher bias where discursive events (such as DI interactions) are analysed in favour of empiricism and objectivity (Baker 2006). It also "reveals patterns of use previously unthought-of" (Partington 2003:12). In addition, triangulation is feasible by running multiple corpus procedures (Baker 2006). The deployment of a corpus approach to DI studies supersedes a non-corpus approach by its efficiency, objectivity and the power to interpret data via identifying patterns and triangulating results.

The multimodal data we have attempted to analyse with corpus techniques could enable DI researchers to explain shifts or non-expectancies in one layer of semiotic configuration with the answers triangulated from other layers. This framework we have constructed (in §2) is particularly pertinent when DI interpreters mediate between distant languages (like Chinese and English), where non-verbal meaning making semiotics, like gaze and gestures, could compensate what is missing or shifted verbally. The effectiveness of the framework is demonstrated by some relevant corpus techniques, which forge synergy between the corpus techniques and the multimodal approach to DI studies.

Machines only recognise forms, not meanings; annotation is one way of making machines understand meanings. Opinions are divided when it comes to annotating corpus data, in that annotation is laborious, however, fruitful in subsequent findings (e.g. Baker 2006, 2010). We therefore offer two analyses with the corpus-based method using annotated data (Analysis 1 and 2) and then another analysis with no annotation using the corpus-driven methods (Analysis 3).

Analysis 1

One type of annotation scheme for our parallel corpus focuses on interpreting shifts at the verbal level. Refusing or declining (by saying *no*) is one area that

draws lexicogrammatical shifts between Chinese and English-speaking cultures. In one interpreter-mediated education scene (though we failed to get permission to video record the encounter, we were allowed to use this instance), the director of the student-exchange-programme office with a Chinese university is talking to his UK counterpart in his office. The Chinese director is not happy with the proposed programme and declines by an elongated pause followed by the utterance "这个学生交换项目，可能，大概，不行吧。" [*This student-exchange programme, possibly, roughly, not possible*]. The interpreter then unexpectedly renders "*This programme stands no chance.*" Annotation alone could uncover the lexical shift (tagged) at the verbal layer, yet leave the researcher wondering why this shift occurs. Observation of the synchronised visual data could then enable the researcher to identify the speaker's hesitation by a long pause and frowns (facial expression) in the ELAN video data. The contextual data (recorded as meta-data) specifies the cultural differences in context: indirectness in the Chinese culture vs. directness in the English-speaking culture, which could also help the researcher understand the unexpected shift in the contextualised analysis. Therefore, by applying the proposed framework, we are able to uncover what is behind the shift by identifying how the multimodal data (visual and contextual) complements the verbal data.

Analysis 2

Annotation of gestures (visual data) helps extracting relevant footage from ELAN. This enables researchers to analyse how gestural deixis is rendered (e.g. pointing at certain people and objects as demonstrated by picture "A" in Figure 4; indicating directions as demonstrated by picture "B" in Figure 4).

Figure 4. Images of gestural deixis

Does the Chinese interpreter emulate the gestural deixis of the speaker, ignore the gestures or render cross-modally into corresponding verbal deixis (such as *this/这, that/那, these/这些, those/那些, this way or here/这边, that way or over there/那边* etc.)? Equally worth investigating is language direction to see how the interpreter renders from Chinese (being paratactic, where connectives are conventionally non-existent in oral communication) into English (being hypotactic with formal connectives to assist in the logical flow of ideas). We therefore show

FEI GAO AND BINHUA WANG

how cross-modal interpretation occurs in a DI interpreter-mediated cross-cultural encounter, that is, how much gestural deixis is rendered to verbal ones in the following example.

This is an instance we have observed at a trade-fair in a major city of China. A British businessman, accompanied by a Chinese interpreter, approaches a Chinese staff member about the whereabouts of the exhibition hall. The Chinese staff member describes the way to the hall with rich and clear accompanying gestural deixis:

Chinese speaker: "这边转弯到那边　(with accompanying gesture B pointing to the left then to the right direction)，往上走两层(with gesture A pointing to the staircase，过走廊就是。"
(Gloss: This way, turn that way, climb up two stories, across the corridor, there is.)

Interpreter: "You <u>first</u> turn **left**, <u>next</u> make a **right** turn, <u>then</u> go along the stairs to the 2nd floor, **on the other side** of the corridor is the exhibition hall." (No accompanying gestures)

Listening to the utterances alone does not make any sense. Analysis for this instance entails taking the multimodal semiotics as an integrated entirety within our MAF. The annotation of the gestural deixis could also utilise the synchronised visual data (showing how the Chinese speaker relies on gestures in communicating the location) and the written transcript data of ST and TT. Gesturing and changes of gaze are observed on the part of the speaker but not at all on the interpreter; the gestures used by the Chinese speaker to convey directional messages are omitted kinetically in the rendition, whereas verbal compensations are made by the interpreter not only in terms of deixis (marked in bold) but also in terms of sequential connectives (*first*, *next* and *then* underlined). This cross-modal rendition could be explained by the fact that meaning construing is highly dependent on the context in China (Hall 1976); the gestural meaning embedded in the Chinese "high-context culture" is explicated with verbal compensation in deixis and connectives for the more explicit English rendition. This example of cross-modal interpreting demonstrates the way verbal and non-verbal semiotic means are utilised in DI encounters involving distant languages and cultures, and MAF can be effectively deployed for analysing multiple semiotic means at play in DI.

Analysis 3

In the two analyses above we use the corpus-based approach with assumptions before we start the corpus procedures. Assumptions on lexicogrammatical shifts (in Analysis 1) and gestural deixis (in Analysis 2) are embedded in the annotation. The third example of corpus approach to the multimodal data in DI studies we wish to introduce here is data-driven, in that it starts with exploratory corpus procedures without any assumption. Though without authentic data for operational demonstration, it may reveal synergy via mobilising other corpus tools and techniques to complement analysis with ELAN.

Baker/McEnery (2015: 10) justly point out the usefulness of multiple corpus techniques, such as frequency, concordance, collocation, and keyness, which are often adopted to give "a much more detailed insight into the working language in use". Lexis and phraseologies at the lexicogrammatical layer are the machine-readable linguistic items in the absence of annotation. We subsequently harness the utility of keyness and collocation with words or phrases to complement multimodal corpus analysis. The analysis of machine-readable lexis could start with other corpus tools for mono-modal text analysis. Antconc[4], Wordsmith[5] or Sketch-Engine[6] (on-line interface) could produce keywords that highlight lexical saliency (Baker 2006, 2010). Topical information is often revealed in forms of nouns and verbs (*ibid*.). When the keyword procedure is run in both ST and TT, the topical shifts can be identified. What follows could be the analysis of collocates of identified keywords in GraphColl[7], which shows how strong the keywords are associated with others "in terms of frequency and exclusivity" (Baker 2010: 24). Comparing collocates with their node keywords in the parallel corpus is revealing, since "[i]dentifying the collocates around a word gives us an indication about subtle meanings and connotations that a word possesses" (*ibid*.: 25). Areas of cross-cultural subtlety and nuances are most prone to interpreting shifts between STs and TTs (e.g. Munday 2012a), which then could be observed with the parallel corpus tool Paraconc[8], which juxtaposes text strings in two languages (English and Chinese in our case) for comparison. The lexical shifts identified from text-based corpus procedures, before multimodal analysis with ELAN, can then be aligned with visual and contextual data that could possibly provide an explanation. Analysis with this proposed framework could hence triangulate explanations of shifts (at the verbal layer) from the synchronised auditory and visual modes, with the triangulation from the contextual data.

The three examples illustrated using MAF with the corpus approach to DI studies are demonstrative of how corpus techniques can be empowered within the proposed framework. Different corpus techniques or tools could be used to account for interpreting shifts or unexpected renditions that occur in one mode with explanations found in another among the synchronised layers. This best illustrates how utilitarian the proposed framework is, or in other words, how complementary these multimodal semiotics (across-layers) are in unravelling the 'why' questions that the pure linguistic description fails to achieve in Interpreting Studies.

4   http://www.laurenceanthony.net/software/antconc/
5   http://www.lexically.net/wordsmith/
6   https://www.sketchengine.co.uk/
7   http://corpora.lancs.ac.uk/lancsbox/download.php
8   http://www.paraconc.com/

4. Conclusion

This article ventures with confidence into a new line of DI studies inspired by theories and methodologies from different domains. The MAF we have proposed for DI studies is inspired by the well-established linguistic theory of stratification from SFL and by the previously limited application of the multimodal approach to DI studies, from both of which we discern potentialities of complementary utility for the corpus approach to DI investigations. The stratified linguistic layers in the former remedies the fuzziness of multimodal resources in the latter; the stratum of context of situation and culture, beyond the language proper (Halliday 2001), compensates what DI researchers (such as Mason 2006a; Setton 2011) deem vital for the analysis of real-life DI encounters. The corpus approach is also enabling for DI studies whereby the machine-readable formal data (linguistic data at the lexicogrammatical strata or manual annotations) are combined with corpus techniques to seek more meaningful multimodal data, which provide interpretation, explanation or triangulated results to demystify what descriptive interpreting studies alone are unable to explain.

Built on a well-established linguistic theory, we intend to propose MAF as a theoretical framework with heuristic utility in analysing multimodal corpus data for DI studies. With this contribution, we hope that our accounts on the difficulties and differences with respect to DI studies involving the English-Chinese language pair in China may provide a glimpse into the gap in the literature, while being aware that our analyses call for greater empirical strength. The construction of the framework seems robust with theoretical underpinning, yet it necessitates empiricism in the analysis of authentic video data for DI studies. The corpus procedures in the analyses with the proposed framework offer hands-on usefulness for researchers, albeit further trials are needed with authentic data.

The future of the multimodal corpus approach to DI studies looms large; in particular, the complexities of distant language pairs (English and Asian languages) entail the observation of synchronised live auditory and visual data in addition to the investigation of contextual data. The pointers this article raises methodologically can, hopefully, accommodate these shortcomings. We end with a word of hope for future research. The much coveted authentic video data of cross-cultural DI encounters will be obtained however difficult it is now to obtain them in Asian countries like China. This could be achieved through the future researchers' effort in expanding niches and opening up the dialogue between DI practising venues and academic towers in the DI community.

References

Apfelbaum B. (1998) "Instruktionsdiskurse mit Dmolmetscher-beteiligung. Aspekte der Turnkonstruktion un Turnzuweisung", in A. Brock / M. Hartung (eds) *Neuere Entwicklungen in der Gesprächforschung*, Tübingen, Narr, 11-36.

Baker M. (1993) "Corpus linguistics and translation studies: implications and applications", in M. Baker / G. Francis / E. Tognini-Bonelli / J.M. Sinclair (eds) *Text and Technology: In Honour of John Sinclair*, Amsterdam/Philadelphia, John Benjamins, 233-250.

Baker M. (1995) "Corpora in Translation Studies: an overview and suggestions for future research", *Target* 7/2, 223-243.

Baker P. (2006) *Using Corpora in Discourse Analysis*, London, Bloomsbury.

Baker P. (2010) *Sociolinguistics and Corpus Linguistics*, Edinburgh, Edinburgh University Press.

Baker P. / Gabrielatos C. / Khosravinik M. / Krzyżanowski M. / McEnery T. / Wodak R. (2008) "A useful methodological synergy? Combining Critical Discourse Analysis and Corpus Linguistics to examine discourses of refugees and asylum seekers in the UK press", *Discourse & Society* 19/3, 273-306.

Baker P. / McEnery A. (eds) (2015) *Corpora and Discourse Studies: Integrating Discourse and Corpora*, Basingstoke, Palgrave Macmillan.

Bao-Rozée J. (2016) *Using Multimodal Analysis to Investigate the Role of the Interpreter*, PhD Thesis, School of Arts and Humanities, University of Stirling, UK.

Barsky R.F. (1994) *Constructing a Productive Other*, Amsterdam/Philadelphia, John Benjamins.

Beaton M. (2007) "Interpreted ideologies in institutional discourse: the case of the European Parliament", *The Translator* 13/2, 271-296.

Bendazzoli C. (2016) "The ethnography of interpreter-mediated communication: methodological challenges in fieldwork", in C. Bendazzoli / C. Monacelli (eds) *Addressing Methodological Challenges in Interpreting Studies Research*, Newcastle upon Tyne, Cambridge Scholars Publishing, 3-30.

Bendazzoli C. (2018) "Corpus-based Interpreting Studies: past, present and future developments of a (wired) cottage industry", in M. Russo / C. Bendazzoli / B. Defrancq (eds) *Making Way in Corpus-based Interpreting Studies*, Singapore, Springer, 1-19.

Bendazzoli C. / Sandrelli A. / Russo M. (2011) "Disfluencies in simultaneous interpreting: a corpus-based study", in A. Kruger / K. Wallmach / J. Munday (eds) *Corpus-Based Translation Studies: Research and Applications*, London/New York, Continuum, 282-306.

Blakemore D. / Gallai F. (2014) "Discourse markers in free indirect style and interpreting", *Journal of Pragmatics* 60/6, 106-120.

Bot H. (2005) *Dialogue Interpreting in Mental Health*, Amsterdam/New York, Rodopi.

Catford J.C. (1965) *A Linguistic Theory of Translation*, London, Oxford University Press.

Davidson B. (2002) "A model for the construction of conversational common ground in interpreted discourse", *Journal of Pragmatics* 34/9, 1273-1300.

Davitti E. (2012) *Dialogue Interpreting as Intercultural Mediation: Integrating Talk and Gaze in the Analysis of Mediated Parent-Teacher Meetings,* PhD Thesis, School of Arts, Languages & Cultures, University of Manchester, UK.

Davitti E. (2013) "Dialogue interpreting as intercultural mediation: interpreters' use of upgrading moves in parent-teacher meetings", *Interpreting* 15/2, 168-199.

Davitti E. (2015) "Interpreter-mediated parent-teacher talk", in L. Grujicic-Alatriste (ed.) *Linking Discourse Studies to Professional Practice*, Bristol, Multilingual Matters, 176-200.

Davitti E. / Pasquandrea S. (2013) "Interpreters in intercultural communication: how to modulate the impact of their verbal and non-verbal practices?", in *Best Practices Catalogue*, <http://bridge-it.communicationproject.eu/Publications.htm, last accessed, 23 August, 2017>.

Davitti E. / Pasquandrea S. (2017) "Embodied participation: what multimodal analysis can tell us about interpreter-mediated encounters in pedagogical settings", *Journal of Pragmatics 107*, 105-128.

Deng C. / Wen J. (2012) "Situations and implications of dialogue interpreting in China", *Foreign Language and Literature* (《外国语文》) 28/5, 113-117.

Deppermann A. (2013) "Turn-design at turn-beginnings: multimodal resources to deal with tasks of turn-construction in German", *Journal of Pragmatics 46/1*, 91-121.

Gile D. (1994) "Opening up in Interpretation Studies", in M. Snell-Hornby / F. Pöchhacker / K. Kaindl (eds) *Translation Studies: An Interdiscipline*, Amsterdam/Philadelphia, John Benjamins, 149-158.

Gile D. (2011) "Errors, omissions and infelicities in broadcast interpreting: preliminary findings from a case study", in C. Alvstad / A. Hild / E. Tiselius (eds) *Methods and Strategies of Process Research. Integrative Approaches in Translation Studies*, Amsterdam/Philadelphia, John Benjamins, 201-218.

Goodwin C. (2000) "Action and embodiment within situated human interaction", *Journal of Pragmatics 32*, 1489-1522.

Goodwin C. (2013) "The co-operative, transformative organization of human action and knowledge", *Journal of Pragmatics 46/1*, 8-23.

Hale S. (2004) *The Discourse of Court Interpreting*, Amsterdam/Philadelphia, John Benjamins.

Hall E. (1976) *Beyond Culture*, New York, Doubleday.

Halliday M.A.K. (1978) *Language as Social Semiotics: The Social Interpretation of Language and Meaning*, London, Edward Arnold.

Halliday M.A.K. (1994) *An Introduction to Functional Grammar* (3rd ed.), London, Edward Arnold.

Halliday M.A.K. (1999) "The notion of context in language education", in M. Ghadessy (ed.) *Text and Context in Functional Linguistics*, Amsterdam/Philadelphia, John Benjamins, 1-23.

Halliday M.A.K. (2001) "Towards a theory of good translation", in E. Steiner / C. Yallop (eds) *Exploring Translation and Multilingual Text Production: Beyond Content*, Berlin/New York, Mouton de Gruyter.

Halliday M.A.K. (2014) *Halliday's Introduction to Functional Grammar* (4th ed.), London/New York, Routledge.

Hammond C.D. (2016) "Internationalization, nationalism, and global competitiveness: a comparison of approaches to higher education in China and Japan", *Asia Pacific Education Review* 17/4, 555-566.

Hazel S. / Kristian M. / Gitte R. (eds) (2014) *A Body of Resources – CA Studies of Social Conduct*, Special issue of the *Journal of Pragmatics* 65.

Hofstede G. (2001) *Culture's Consequences: International Differences in Work Related Values* (2nd ed.), Beverly Hills, CA, Sage.

Inghilleri M. (2005) "Mediating zones of uncertainty: interpreter agency, the interpreting habitus and political asylum adjudication", *The Translator* 11/1, 69-85.

Kemppanen H. (2004) "Keywords and ideology in translated history texts: a corpus-based analysis", *Across Languages and Cultures* 5/1, 89-106.

Krystallidou D. (2014) "Gaze and body orientation as an apparatus for patient inclusion into/exclusion from a patient-centred framework of communication", *The Interpreter and Translator Trainer* 8/3, 399-417.

Lang R. (1978) "Behavioral aspects of liaison interpreters in Papua New Guinea: some preliminary observations", in D. Gerver / W.H. Sinaiko (eds) *Language, Interpretation and Communication*, New York, Plenum Press, 231-244.

Laviosa S. (1998) "The corpus-based approach: a new paradigm in translation studies", *Meta* 43/4, 474-479.

Lee J. (2009) "When linguistic and cultural differences are not disclosed in court interpreting", *Multilingua: Journal of Cross-Cultural and Interlanguage Communication* 28/4, 379-401.

Mason I. (2001) *Triadic Exchanges: Studies in Dialogue Interpreting*, Manchester, St. Jerome.

Mason I. (2006a) "On mutual accessibility of contextual assumptions in dialogue interpreting", *Journal of Pragmatics* 38/3, 359-373.

Mason I. (2006b) "Ostension, inference and response: analysing participant moves in Community Interpreting dialogues", in E. Hertog / B. van der Veer (eds) *Taking Stock: Research and Methodology in Community Interpreting*, Hogeschool Antwerpen, Hoger Instituut voor Vertalers en Tolken, Antwerpen, 103-120.

Mason I. (2012) "Gaze, positioning and identity in interpreter-mediated dialogues", in C. Baraldi / L. Gavioli (eds) *Coordinating Participation in Dialogue Interpreting*, Amsterdam/Philadelphia, John Benjamins, 177-200.

McNeil D. (2006) "Gesture, gaze and ground", in S. Renals / S. Bengio (eds) *Machine Learning for Multimodal Interaction. Second International Workshop, MLMI 2005, Edinburgh, UK, July 11-13, 2005, Revised Selected Papers*, Berlin/Heidelberg, Springer-Verlag, 1-14.

Mindess A. (1999) *Reading between the Signs: A Practical Approach to Cultural Adjustments,* Paper presented at the RID 1999 National Convention Proceedings, Silver Spring, MD.

Mindess A. (2006) *Reading between the Signs: Intercultural Communication for Sign Language Interpreters* (2nd ed.), London, Nicholas Brealey Publishing.

Monacelli C. (2016) "Methods to contextual madness: taking what is not given in confidential settings", in C. Bendazzoli / C. Monacelli (eds) *Addressing Methodological Challenges in Interpreting Studies Research*, Newcastle upon Tyne, Cambridge Scholars Publishing, 31-60.

Mondada L. (2014) "The local constitution of multimodal resources for social interaction", *Journal of Pragmatics* 65, 137-156.

Munday J. (1997) *Systems in Translation: A Computer-assisted Systemic Approach to the Analysis of the Translations of García Márquez*, PhD thesis, Department of Modern Languages, University of Bradford.

Munday J. (2002) "Systems in translation: a systemic model for descriptive translation studies", in T. Hermans (ed.) *Cross-cultural Transgression. Research Model in Translation II: Historical and Ideological Issue*, Manchester, St. Jerome, 76-92.

Munday J. (2012a) *Evaluation in Translation: Critical Points of Translator Decision-making*, Abingdon, Routledge.

Munday J. (2012b) "New directions in discourse analysis for translation: a study of decision-making in crowdsourced subtitles of Obama's 2012 State of the Union speech", *Language and Intercultural Communication* 12/4, 321-334.

Nida E.A. (2001) *Language and Culture: Context in Translation,* Shanghai, Shanghai Foreign Language Education Press.

O'Connell C. / Kowal S. (1994) "Some current transcription systems for spoken discourse: a critical analysis", *Pragmatics* 4/1, 81-107.

Partington A. (2003) "Corpora and discourse, a most congruous beast", in A. Partington / J. Morley / L. Haarman (eds) *Corpora and Discourse,* Bern, Peter Lang, 11-20.

Pasquandrea S. (2011) "Managing multiple actions through multimodality: doctors' involvement in interpreter-mediated interactions", *Language in Society* 40/4, 455-481.

Pasquandrea S. (2012) "Co-constructing dyadic sequences in healthcare interpreting: a multimodal account", *New Voices in Translation Studies* 8, 132-157.

Pöchhacker F. (2004) *Introducing Interpreting Studies*, London, Routledge.

Pöchhacker F. / Shlesinger M. (2002) *The Interpreting Studies Reader*, London, Routledge.

Pöchhacker F. / Shlesinger M. (2007) *Healthcare Interpreting*, Amsterdam/Philadelphia, John Benjamins.

Pöllabauer S. (2005) "I don't understand your English, Miss", *Dolmetschen bei Asylanhörungen,* Tübingen, Gunther Narr Verlag.

Qian H. (2012) "Investigating translators' positioning via the Appraisal Theory: a case study of the Q & A part of a speech delivered by the U.S. Vice President Cheney", *Sino-US English Teaching* 9/12, 1775-1787.

Ra S. / Napier J. (2013) "Community interpreting: Asian language interpreters' perspectives", *Translation & Interpreting* 5/2, 45-61.

Roy C. (2000) *Interpreting as a Discourse Process,* Oxford, Oxford University Press.

Setton R. (2006) "Context in simultaneous interpretation", *Journal of Pragmatics* 38, 374-389.

Setton R. (2011) "Corpus-based interpreting studies (CIS): overview and prospects", in A. Kruger / K. Wallmach / J. Munday (eds) *Corpus-based Translation Studies: Research and Applications*, London, Continuum, 31-75.

Su W. (2009) "Dialogue interpreting in China", *Shanghai Journal of Translations* (《上海翻译》) 5, 42-45.

Szczyrbak M. (2016) "Say and stancetaking in courtroom talk: a corpus-assisted study", *Corpora* 11/2, 143-168.

Ticca C. (2010) "Configurazioni diadiche nel dialogo mediato medico-paziente", in M. Carreras Goicoechea / M.E. Pérez Vázquez (eds) *La mediación lingüística y cultural y su didáctica: un nuevo reto para la universidad*, Bologna, Bononia University Press, 102-119.

Tomlinson B. / Musuhara H. (2004) "Developing cultural awareness", *MET* 13/1, 1-7.

Wadensjö C. (1998) *Interpreting as Interaction*, Routledge, London.

Wadensjö C. (2001) "Interpreting in crisis: the interpreter's position in therapeutic encounters", in I. Mason (ed.) *Triadic Exchanges: Studies in Dialogue Interpreting*, Manchester, St. Jerome, 71-85.

Wang B. (2012) "A descriptive study of norms in interpreting : based on the Chinese-English Consecutive Interpreting Corpus of Chinese Premier press conferences", *Meta* 57/1, 198-212.

Wang B. / Feng W. (2014) '*When Chinese leaders speak English through the interpreter*' – *a corpus-based study of interpreted political discourse from China*, Plenary keynote speech at the 1st International Conference on Empirical Translation Studies, Shanghai Jiaotong University, May 23-25.

Wang B. / Gu Y. (2016) "An evidence-based exploration into the effect of language-pair specificity in English-Chinese simultaneous interpreting", *Asia Pacific Translation and Intercultural Studies* 3/2, 146-160.

Wang B. / Li T. (2015) "An empirical study of pauses in Chinese-English simultaneous interpreting", *Perspectives: Studies in Translatology* 23/1, 124-142.

Wang B. / Qin H. (2015) "Describing the target-language communication norms in Chinese-English interpreting – a corpus-based analysis of the shifts of addition in on-site interpreting", *Journal of Foreign Language Teaching and Research* (《外语研究与教学》) 47/4, 438-451.