

Gesture in interpreting

Sílvia Gabarró-López

Université de Namur & Universitat Pompeu Fabra

Alan Cienki

Vrije Universiteit Amsterdam

Guest Editors

1. Gesture studies and interpreting studies: Long-time partners, and now a newlywed couple

The use of bodily articulators when humans communicate is a shared feature across different modalities, i.e., spoken, signed, or tactile. Hearing speakers, deaf-sighted signers, and deafblind signers use their bodily articulators to convey meaning in different ways depending on the language. The main articulators used in the signed and the tactile modalities are the two hands, which articulate various types of signs and gestures. Deaf-sighted signers also use facial movements and expressions as an integral part of visual sign languages. Although the main articulators used in spoken languages are found in the vocal tract, hearing speakers also produce manual and nonmanual gestures accompanying speech.

The integration of speech and gesture occurs naturally, so it can be observed not only in conversations among people sharing the same language but also in interpreted discourse. Modern gesture studies started in the 1970s with the works of Kendon (1972) and McNeill (1979). Since then, the field has flourished and approached gestures from different perspectives (e.g., pragmatics, L1 and L2 acquisition, gesture-sign integration, etc.), using different theories (e.g., those of Kendon, McNeill, Müller, etc.), methodologies (e.g., observational, corpus-based, or experimental studies), and terminology. These studies have been carried out mostly by linguists, psychologists, or anthropologists who have focused on non-interpreted discourse in different cultures around the world.

Interpreting studies started more or less at the same time as gesture studies, focusing on conference interpreting (Gile, 2009). Other interpreting settings (e.g., dialogue interpreting, sight translation, etc.) and theories (notably from psychology and linguistics) were progressively added, including both spoken and signed languages. Multimodality, understood here as the use of multiple bodily articulators, has been present from the onset of interpreting studies to a greater or lesser extent. When analyzing the renditions of sign language interpreters, scholars have considered the diverse semiotic resources employed by interpreters to convey meaning (e.g., Janzen & Shaffer, 2013; Nicodemus et al., 2017; Nilsson, 2015), mostly in the target signed language discourse. This tendency aligns with the fact that the spoken-to-sign language interpreting direction has been much more investigated than the signed-to-spoken language direction (Wang, 2021).

In spoken language interpreting, some scholars attested to the importance of resources beyond the verbal dimension in interpreting almost from the onset of the field (e.g., Anderson, 1979; Lang, 1976, 1978). The multimodal analysis of interpreted renditions followed in the coming decades and increased in the 2000s, but remained scattered, including a variety of settings (e.g., medical, legal, and pedagogical), embodied resources (e.g., nonmanual elements, seating

arrangement, or manual activity), phenomena under scrutiny (e.g., dynamics of inclusion and exclusion of primary parties, and the coordinating role of the interpreter), and theoretical frameworks (e.g., Conversation Analysis and Discourse Analysis, among others) (see Davitti, 2019 for an overview).

As of today, the study of the gestural behavior of interpreters at work is mostly based on spoken-to-spoken language interpreting (e.g., Cienki & Iriskhanova, 2020; Zagar Galvão, 2020) and, to a lesser extent, on signed-to-spoken language interpreting (Bø, in press; Gabarró-López, 2024). To join efforts and allow scholars working on both modalities to speak to each other, we organized a panel on “Gestures in spoken-to-spoken and signed-to-spoken language interpreting” for the 18th conference of the *International Pragmatics Association* (IPrA) held in Brussels on 9–14 July 2023. To the best of our knowledge, this is the first volume devoted to this young emerging interdisciplinary field of inquiry.

2. Outline of the volume

This thematic issue contains nine selected papers from the IPrA panel covering different topics and language combinations (see Table 1). Most contributions analyze spoken-to-spoken language interpreting, and two focus on signed-to-spoken language interpreting¹. We grouped the papers according to the setting in which interpreting took place and the methodology for data collection. The first four papers draw on data from interpreters working in a booth, whereas the other five papers worked on the renditions produced in other situations. All interpreters of the first type of papers interpreted monological speech simultaneously, mostly from recorded TED talks (Cienki, Martín de León & Zagar Galvão, and Ren & Wang) or from live discourse (Olza). Interpreters in the second type of papers also engaged in simultaneous interpreting of recorded dialogical or monological discourses (Gabarró-López and Janzen et al., respectively) or in live (simulated) dialogue interpreting (Beukeleers et al., Bø, and Chwalczuk).

Authors	Topics	Language combinations
Martín de León and Zagar Galvão	Comparative study of gestures in non-/interpreted discourse	English > Italian/Portuguese
Cienki	Gestures in (dis)fluent discourse	Russian > English/German
Ren and Wang	Gestures in disfluent discourse and cognitive load	English > Mandarin Chinese
Olza	Gestural alignment	Spanish > English/French
Janzen et al.	Gestural-conceptual alignment	English > French/Navajo/Spanish/Ukrainian
Chwalczuk	Gestural profiles	English > Bengali/Indonesian/Panjabi/ Portuguese/Spanish English/French > Arabic/Czech/Dutch/German/ Hungarian/Italian/Mandarin
Beukeleers et al.	Gestural omissions and additions	Turkish > Flemish Dutch Russian > Flemish Dutch

¹ The exclusion of the spoken-to-signed direction was a deliberate decision when we organized the panel. The reason behind it is that we wanted target productions to be similar, to foster discussion among participants: If we had included spoken-to-signed interpreting, the target discourses would have been too different and may have included other aspects that were beyond the scope of the gathering.

Bø	Gaze and head gestures	NTS (Norwegian Sign Language) > Norwegian
Gabarró-López	Reformulation structures	LSFB (French Belgian Sign Language) > Belgian French

Table 1. Topics and language combination of the contributions

In terms of the methods of analyzing gestures, some of the studies (Beukeleers et al., Olza, Ren & Wang) employ the mixed form/function system popularized in McNeill (1992), using the categories of iconic, metaphoric, deictic, and beat gestures. Other studies here (Chwalczuk, Cienki) rely on a specifically functional system of categorization, espoused in works such as Müller (1998), Bressemer et al. (2013), and Cienki (2013), using categories such as representational (concrete or abstract), pragmatic, deictic, and self-adaptor gestures. We can note that this difference reflects a debate on methods of analysis which is ongoing in the field of gesture studies.

The following provides a more detailed overview of the individual contributions.

Celia Martín de León and Elena Zagar Galvão conducted a comparative study of the gestures produced by five professional conference interpreters while interpreting a TED Talk from their B language (English) to their A language (Portuguese or Italian), simultaneously inside the booth and in a face-to-face interview with one of the authors. The analysis reveals that interpreters produced more gestures in the first (monological) condition, but the forms of the gestures were larger in the second (dialogical) condition. Regarding the rate of self-adaptors in the two conditions, the authors do not find a shared pattern by all interpreters of the dataset and conclude that this category of gestures needs to be further explored.

Alan Cienki and colleagues investigated gestures during disfluent and fluent speech in simultaneous interpreting. Forty-nine people who trained or worked as professional interpreters participated in the study. They had to interpret educational lectures about biodiversity from Russian (the A language of all participants) to English/German (one of them the B language of the participants) or vice versa. The results showed that the most frequently used gestures were pragmatic ones or self-adaptors, whereas representational gestures were produced to a lesser extent. The author explains this distribution as a result of the functions of gestures. While self-adaptors and pragmatic gestures can help regulate stress and organize structure discourse, respectively, representational gestures result from deeper semantic processing and may not be produced because of time constraints.

Similarly, **Yuetao Ren and Jianhua Wang** studied gestures produced in moments of disfluency in simultaneous interpreting and related their functions to cognitive load. Thirteen master's students were recorded while interpreting two talks from English (their B language) to Mandarin Chinese (their A language). The results suggest that gesture and cognitive load are interconnected, as most gestures occurred with or adjacent to processing difficulties. Furthermore, different types of gestures were produced depending on the disfluency: beat and metaphoric gestures were often produced during silence, whereas deictic and iconic gestures were used less frequently. Interestingly, this latter finding regarding iconic/representational gestures is in line with Cienki (this volume).

Inés Olza explored the gestural alignment of two novice interpreters (interpreting into English or French) with the source speaker, who produces a monological talk on the history of technology in Spanish. The study finds alignment between the source speaker and the interpreters on the general level of gesture production; interpreters were more likely to gesture than not at moments when the source speaker gestured. However, in terms of the types of gesture used,

the findings suggest that gestural alignment may not necessarily be driven by the distinction between whether the gestures are related to the content of the speech or not. Instead, other factors of the source speaker's behavior may be more influential in determining when the interpreter gestures, such as the rhythm of the speech and other prosodic features.

Terry Janzen, Lorraine Leeson, and Barbara Shaffer also examined gestural alignment and combined it with conceptual alignment in their analysis, considering both of these between source text speakers and their interpreters. Their study considered 14 professional simultaneous interpreters; each interpreted talk in English from two different speakers into either French, Navajo, Spanish, or Ukrainian. The data reveal instances of gestural alignment and corresponding conceptual alignment, gestural and conceptual non-alignment, and less-clear cases that suggest a complex relationship between gesturing and conceptualization. The authors argue that interpreters' gestures may often reflect a blending of the interpreter's own viewpoint with that imagined to be held by the source speaker.

Monika Chwalczuk analyzed public service interpreting by investigating gesture production in a corpus of video recordings featuring 24 interpreters filmed in healthcare, educational, and police settings. While the interpreters' A language was either English or French, their B languages involved a range of 15 different ones. The gestural landscape (distribution of gesture functions used) and interpreters' gestural profiles (average distributions of different gesture functions) proved to be fairly similar across the settings, with pragmatic gestures being the most common in each case. Qualitative analysis revealed gestural alignment involving mainly deictic and representational gestures recruited in the processes of conceptual grounding, participatory sense-making, and disambiguation of lexical items. Through its consideration of patterns in gesture use, this research thus moves beyond previous descriptive, case-oriented studies on multimodal aspects of public service interpreting.

Inez Beukeleers, Laura Theys, Heidi Salaets, Cornelia Wermuth, Barbara Schouten, and Geert Brône studied the impact of gestural omissions and additions in interpreter-mediated medical encounters. The study involves data from interpreted consultations between two patients—one Russian-speaking and one Turkish-speaking—with Flemish Dutch-speaking healthcare professionals. A qualitative analysis of three excerpts from these interactions shows that omitting and/or adding representational and deictic gestures can potentially lead to changes in meaning, i.e., less or more concrete renditions of the original talk. The results highlight the semiotic complexity of healthcare interpreting, where visual elements (such as test results) and visualizable elements (including biological processes and medical procedures) are crucial topics of the discourse.

Vibeke Bø investigated embodied participation frameworks in one signed-to-spoken interpreted encounter between NTS and spoken Norwegian using embodied conversation analysis in a qualitative study. A crucial point here is that gaze is normally an important interactional resource in conversation, but in simultaneous signed-to-spoken interpreting, the interpreter's gaze is occupied with perceiving the signed discourse. Head gestures were therefore found to compensate as an alternative, and the research considers the various ways in which this plays out. The findings from this study highlight the need for further exploration of how interpreters navigate competing communicative demands.

Sílvia Gabarró-López also considered signed-to-spoken interpreting, but from LSF into spoken Belgian French. The focus of the study is on the use of reformulation structures in the rendering of two LSF dialogues and within the use of Belgian French as the target language. The most frequent forms of reformulation structures are found in both datasets, but a smaller number of reformulation structures was used in the target Belgian French discourse, likely due to factors such as the interpreters' cognitive load and the time pressure involved in producing

renderings (among other factors). In addition, while the interpreters drew on all their available semiotic resources to convey meaning, they did not seem to be influenced in their gesturing by the signs produced in the source LSF dialogues.

It is our hope that this special issue will help draw attention to the value that gesture studies can bring to interpreting studies, and vice versa, the value that the domain of interpreting can have for future gesture research. In particular, we would highlight the potential for researching the vastly understudied discourse of those providing spoken interpretation of signed languages. Finally, we would like to thank the editors of *Parallèles* for being willing to consider this topic that takes interpreting studies in a new direction (the multimodal turn) and for their efficient communication process with us throughout the development of this special issue.

3. References

- Anderson, L. (1979). *Simultaneous interpretation: Contextual and translation aspects*. Master's thesis, Concordia University.
- Bø, V. (In press). Investigating interpreter-mediated interaction through the lens of depictions, descriptions, and indications: An ecological approach. *Translation and Interpreting Studies (TIS)*.
- Bressem, J., Ladewig, S. H., & Müller, C. (2013). Linguistic annotation system for gestures. In C. Müller, A. Cienki, E. Fricke, S. Ladewig, D. McNeill, & S. Teßendorf (Eds.), *Body–language–communication: An international handbook on multimodality in human interaction* (Vol. 1, pp. 1098–1124). De Gruyter Mouton.
- Cienki, A. (2013). Gesture, space, grammar, and cognition. In P. Auer, M. Hilpert, A. Stukenbrock, & B. Szmrecsanyi (Eds.), *Space in language and linguistics: Geographical, interactional, and cognitive perspectives* (pp. 667–686). Walter de Gruyter.
- Cienki, A. & Iriskhanova, O. K. (2020). Patterns of multimodal behavior under cognitive load: An analysis of simultaneous interpretation from L2 to L1. *Voprosy Kognitivnoy Lingvistiki*, 1, 5–11.
- Davitti, E. (2019). Methodological explorations of interpreter-mediated interaction: Novel insights from multimodal analysis. *Qualitative Research*, 19(1), 7–29. <https://doi.org/10.1177/1468794118761492>
- Gabarró-López, S. (2024). Towards a description of PALM-UP in bidirectional signed language interpreting. *Lingua* 300, 103646. <https://doi.org/10.1016/j.lingua.2023.103646>
- Gile, D. (2009). Interpreting studies: A critical view from within. *MonTi: Monografías de Traducción e Interpretación*, 1, 135–155.
- Janzen, T., & Shaffer, B. (2013). The interpreter's stance in intersubjective discourse. In L. Meurant, A. Sinte, M. Van Herreweghe, & M. Vermeerbergen (Eds.), *Sign language research, uses and practices: Crossing views on theoretical and applied sign language linguistics* (pp. 63–84). De Gruyter Mouton.
- Kendon, A. (1972). Some relationships between body motion and speech. An analysis of an example. In A. Siegman & B. Pope (Eds.), *Studies in dyadic communication* (pp. 177–210). Pergamon Press.
- Lang, R. (1976). Interpreters in local courts in Papua New Guinea. In W. M. O. Barr & J. F. O. Barr (Eds.), *Language and politics* (pp. 327–365). Mouton.
- Lang, R. (1978). Behavioural aspects of liaison interpreters in Papua New Guinea: Some preliminary observations. In D. Gerver & W. H. Sinaiko (Eds.), *Language, interpretation and communication* (pp. 231–244). Plenum Press.
- McNeill, D. (1979). *The conceptual basis of language*. Erlbaum.
- McNeill, D. (1992). *Hand and mind: What gestures reveal about thought*. University of Chicago Press.
- Müller, C. (1998). *Redebegleitende Gesten: Kulturgeschichte—Theorie—Sprachvergleich*. Berlin Verlag Arno Spitz.
- Nicodemus, B., Swabey, L., Leeson, L., Napier, J., Petitta, G., & Taylor M. M. (2017). A cross-linguistic analysis of fingerspelling production by sign language interpreters. *Sign Language Studies*, 17(1), 143–171. <https://doi.org/10.1353/sls.2017.0000>
- Nilsson, A. L. (2015). Embodying metaphors: Signed language interpreters at work. *Cognitive Linguistics*, 27(1), 35–65. <https://doi.org/10.1515/cog-2015-0029>
- Wang, J. (2021). *Simultaneous interpreting from a signed language into a spoken language: Quality, cognitive overload, and strategies*. Routledge.
- Zagar Galvão, E. (2020). Gesture functions and gestural style in simultaneous interpreting. In H. Salaets & G. Brône (Eds.), *Linking up with video: Perspectives on interpreting practice and research* (pp. 151–179). John Benjamins Publishing Company.



This work is licensed under a Creative Commons Attribution 4.0 International License.