A multidisciplinary theoretical and methodological framework for the study of telephone interpreting

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A Multidisciplinary Theoretical and Methodological Framework for the Study of Telephone Interpreting

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Abstract

The complex nature of remote interpreting (RI) demands a multidisciplinary approach. The focus of the present article falls on mapping RI and telephone interpreting (TI) in particular, in the light of the most relevant disciplines to suggest a coherent theoretical and inherent methodologic framework. This approach will contribute to describing and analysing the components and mechanics of this speech event, both for research purposes and for TI training. From the most general to the most fine-grained relevant paradigms, the authors will discuss the relevance of the following disciplines. The Ethnography of Communication will frame TI as a social activity. The sociology of Technologised Interaction will consider TI as the interaction between the social and the technical, where humans are constrained by the technical but also orient themselves towards the affordances offered by technology. In addition, Conversation Analysis will focus on talk as interaction. The role of Prosody and Phonetics in interpreter's positioning and agency and as a facilitator for a better coordination in turn-taking will also contribute to a more comprehensive approach to the study and training of TI. All these analytical paradigms need to be factored in when studying TI with a view to make RI trainees aware of the discursive mechanics- both linguistic and paralinguistic- and of their potential to become effective technologised communicators.

Key words: telephone interpreting, multidisciplinary approach, turn-taking, prosody, training

1. Introduction

Telephone interpreting (TI) is a form of interpreter-mediated, cross-cultural interaction, which takes place in conditions affected by the medium. It is a form of "technologised interaction" (Hutchby 2001a, 6). This highlights the need for the interplay of a variety of relevant disciplines to develop a theoretical and methodological framework to study and teach TI.

Starting from the premise that TI is a social activity in which talk performs a specific function and serves the communicative needs of clients of different linguistic-cultural backgrounds and the interest and agendas of service providers, the contribution of different disciplines is required to define this peculiar field of specialised human activity, ranging from a macro to a micro analysis, i.e. from the identification of telephone interpreters' situated goals and functions to the evaluation of the actual linguistic and paralinguistic exchanges between the three interactants: speaker of language A (service provider/call-taker), interpreter, speaker of language B (the caller). What follows is an attempt to assess the contribution of four possible research paradigms to develop a consistent multidisciplinary theoretical and methodological framework for remote interpreting research and interpreter training focusing on TI.

The first general paradigm of reference is the Ethnography of Communication (Hymes 1962, 1974) which provides conceptual categories to analyse speech situations in order to identify similarities and dissimilarities in goals, functions and message content. This paradigm appears functional to the achievement of the main objective of the *SHIFT in Orality* project, namely to compare *remote*, interpreter-mediated, technologised dialogic interaction with *face-to-face* dialogic interpreting, in order to develop a specific training for telephone interpreters (TInt) exploiting embodied, linguistic and paralinguistic features.

Since TI is an interpersonal exchange constrained by technical means, another relevant paradigm is one that adds a sociological perspective to the use of technology for communication, namely "Technologised Interaction" (Hutchby 2001a). This approach can be extremely useful in stressing the limitations and also the opportunities of remote interpreting (RI).

Talk-in-interaction has long been studied by conversation analysts in the framework of Conversation Analysis (CA) (Sacks [1964]1992; Sacks, Schegloff and Jefferson 1974; Schegloff 1986, 1992). Schegloff's framework was applied also to other languages and institutional settings (among others, see Kwong and Theodossia-Soula 2002; Thüne and Leonardi 2003; Varcasia 2013). Conversation Analysis offers both a theoretical and a methodological framework for the study of TI, as it highlights the pragmatic and discursive implications of TI linguistic and paralinguistic dimensions. Additionally, its methodological apparatus offers a comprehensive system of transcription conventions.

The paralinguistic dimension is particularly relevant in TI, as the aural stimuli, the voice, is both the message and the medium (MacLuhan 1964). This latter dimension deserves special attention in TI as it implies performing through a technological artefact. Making oneself clearly understood and making

efforts to render intentions and messages through technological media places challenges to sound acuity. We find Lindblom's Hyper- and hypoarticulation theory (1990) particularly fitting for the analysis of TI and its educational implications. It simultaneously represents the interactants' emotional states as well as the presence or absence of phatics and empathy toward conversationalists which are important qualities, particularly in healthcare TI.

These four analytical paradigms - ranging from the most sociolinguistic one (Ethnography of Communication) to the most fine-grained (prosody in conversation) - need to be factored in when studying TI, especially if the goal is to make telephone interpreter trainees aware of the discursive mechanics (both linguistic and paralinguistic), and of their potential to become effective technologised communicators.

In the present paper we will provide a further development of this multidisciplinary theoretical and methodological framework, which was presented in its preliminary stage in Iglesias Fernández and Russo (2017), together with an illustration based on excerpts from TI interactions of how it could be applied to interpreter-mediated remote conversations for didactic purposes.

2. Materials and methods

The telephone calls analysed here are taken from the Spanish-English corpus collected in healthcare, legal and service settings for the SHIFT project. They were provided by the SHIFT partner DUALIA Teletraducciones[1], a company that provides TI services in 51 languages. It was set up in 2003 and currently covers 70% of Spanish public service market. Due to confidentiality reasons, the recorded calls do not include the original participants, except for the interpreter, who was not aware that she/he was being recorded[2], so calls are based on the genuine conversations with DUALIA's clients. The interpreters were all trained by the in-house Quality Department and were experienced TInts. Upon their subsequent approvals, the calls were made available for analysis and transcribed using the CA conventions (Sacks, Schegloff and Jefferson 1974).

3. The four paradigms

3.1. The relevance of the Ethnography of Communication

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[1] http://www.dualia.es

[2] At the signing of the contract with Dualia interpreters are indeed informed that in the future they would be recorded for quality evaluation purposes.

This discipline[3] was introduced by Hymes (1962, 1974) and "describes the different uses to which speech is put in different activities in different societies" (Levinson 1992, 70). Hymes developed the concept of communicative competence as "the knowledge required to use language appropriately in cultural situations" and "the ability to understand what one hears" (as quoted in Levinson 1992, 97). Understanding the use of language in a specific activity is made possible by activity-specific rules of inference, and by previous and shared knowledge of the goals and constraints of a type of activity. Hymes (as quoted in Levinson 1992) suggested eight key variables that would function as a classificatory grid for cross-cultural and activity comparisons. Their acronym is SPEAKING: each activity should be described as particular constraints on the Setting, Participants, Ends (or goals), Acts (including specific act sequences), Key (or tone), Instrumentalities (variety of language employed), Norms (e.g. attenuations, interruptions) and Genres.

Hymes' SPEAKING model was applied to interpreting studies by Angelelli (2000, 2004) to highlight differences and similarities between community interpreting and conference interpreting events. She concluded that different communicative events required different interpreter performance and, consequently, different pedagogical approaches to meet participants' interacting needs.

3.1.1. Applications to TI training

In this section, a comparison will be made between the interpreter–mediated, dialogue face-to-face (FtF) interaction in community interpreting analysed by Angelelli (2000) and a telephone remote interaction from our corpus. Awareness of the specificities of these institutional interactions will enhance TI students' communicative competence both at reception and production sides.

In the following TI conversation the caller is a Romanian woman who dials the emergency number 112 from a hotel in Madrid to report the disappearance of her female friend. She speaks English. The call-taker is a Spanish 112 operator who resorts to DUALIA's service to be assisted by an English-Spanish interpreter. The call lasted 4'55''.

According to Hymes' fundamental notions, these are the differences between the community interpreting (CI) situation analysed by Angelelli and TI:

CI: (Angelelli 2000, 585): the community interpreter is probably familiar with the *ways of speaking* of her/his community and, therefore, is a *fluent speaker* of that *speech community* that is shared by the client (a Hispanic driver); the *speech situation* is the interaction at the Office of Car Registration (OCR) between the Caucasian officer and the Hispanic client; the *speech event* is a dialogic exchange during the interview (the explanation of the registration procedure); the *speech act* is a remark during

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[3] Originally named Ethnography of Speaking.

the interview.

TI: the telephone interpreter is not familiar with the *ways of speaking* of her interlocutors as she belongs to neither of the caller's and call-taker's *speech communities*. Typically, a telephone interpreter (Tint) is in stand-by during his/her shift and receives a wide range of possible calls, ranging from dramatic emergency calls to more straightforward medical appointments. Therefore s/he has to immediately adjust to the caller's message content, register and ways of speaking. In this case, the female interpreter is a *fluent speaker* with a native accent both in Spanish and in English (her mother tongue). The *speech situation* (hence, the associated mental frame with the relevant implications, expectations, inferences and anticipations) appears obvious to a TInt only when s/he picks up the phone- in this case, an interaction between the 112 operator and the Romanian distressed caller; the *speech event* is the exchange between the operator and the caller to provide the required type of assistance (police intervention), and the *speech act* is a conversational turn.

With respect to the SPEAKING model, only the main differences of remote (TI) *vs.* FtF interpreting (community interpreting) will be reported here, as space does not allow for a detailed comparison of all the categories.

Setting (i.e. time and place of the speech act and, in general, the physical circumstances)

CI (Angelelli 2000, 586): 'the physical circumstances of a speech (such as time and place) are as evident to the interpreter as they are to the interlocutors. They play an essential role in communication as they provide the context for what is being said.'

TI: this is a 3-point-call, therefore, the place is not shared by any of the three interlocutors, which means that the lack of context-inferred information put all of them at a disadvantage from the communicative viewpoint.

Scene (i.e. cultural definition of the occasion, the "psychological setting")

CI (Angelelli 2000, 586): 'speakers and listeners do not share it, as they do not belong to the same *speech community*. Therefore it might be more accessible or evident for the interpreter as he explores it not so much as an outsider does but as a "discovering" party. The situation allows for clarification.'

TI: caller and call-taker do not share it. The TInt is also a "discovering party", but may be familiar with the cultural scene (frame) due to his/her professional experience (for example, emergency calls, routine calls etc.) and therefore draws as much as s/he can from it (probably more than the FtF interpreter) to fill the gap of context-derived information and to restore logical coherence.

Purpose-goals (i.e. the intentions of participants and the strategies they define)

CI (Angelelli 2000, 586): 'the interpreter will focus more on the participants' intentions, on their goals within the outcome. As there is interaction, the interpreter has the opportunity to clarify.'

TI: the TInt also focuses on the participants' intentions and strategies, but given the lack of physical presence and, generally, visual input, s/he also focuses on how and if the message is put across effectively. As several authors have observed (among them Wadensjö1998; Varcasia 2013; Amato 2019; Russo, Iglesias Fernández, González Rodríguez 2019) s/he does so by resorting more often than the on-site interpreter to speech markers to coordinate turn-taking, to request for confirmation and to acknowledge receipt of information during or after the caller's speech turn ("backchannelling"); furthermore, for the operator to deliver the required service promptly, the TInt is expected to arrive at the reason for the call as quickly as possible, even by partially conducting exchanges autonomously. Regarding speech markers, in a case-study comparing FtF and TI interpreters in a legal setting Russo (2019) observed that they were abundantly used in both situations at the beginning of the turn but with different functions: for the on-site interpreter, they appeared to be linked to a recap operation upon processing the information (cognitive function), whereas for the telephone interpreter they appeared to indicate that the message had been understood (acknowledgement function) and helped select the next speaker (pragmatic function).

Message form (i.e. how something is said by member in a given speech community)

CI (Angelelli 2000, 586-587): Even if the community interpreter has had no personal experience of interactions at OCR with members of her community, she could be familiar with how the latter speak. Therefore, she has an advantage over the "temporary guest".

TI: The TInt is not a community member, and this is often the case with TI calls (Varcasia 2013; Russo, Iglesias Fernández and González Rodríguez 2019). Furthermore it is unlikely that TInts have experienced personally many of the situations they have to interpret. They may be familiar with the message form of one of the interlocutors (for instance the routine questions of the call-taker) if they have already worked for that particular service (for example the 112 operator). Certain types of information (proper names, figures etc.) may be more difficult to grasp and convey through the aural channel alone (Varcasia 2013; Russo, Iglesias Fernández and González Rodríguez 2019. Finally, callers often speak a lingua franca, in our case English, and this may impair comprehension and, hence, delay the prompt delivery of the service required.

Key

CI (Angelelli 2000, 587): 'the interpreter will focus on the tone, manner and spirit of the (sic) each

of the interlocutors.'

TI: the TInt should do so even more than the community interpreter since s/he relies only on the oral input and tone together with prosody to convey emotions and attitudes such as for instance friendliness, competence or persuasion. However, we have seen that Key is not always wisely exploited by TInts, at least in our call sample, see § 2.4).

Norms of interaction

CI (Angelelli 2000, 587-588): 'the interpreter will see a wide variety of interactions during this event. Often, the OCR officer and the non–English speaker (NES) do not share the same sense of appropriateness of ways of speaking. For example, if the NES is from Argentina, overlapping will be the rule over a conversation, while the officer may expect turn-taking.'

TI: the TInt will also see a variety of interactions during this event, which may include even emotionally-charged turns (for instance, the caller may start crying, shouting, fainting etc.). Furthermore, since no visual cues are available, turn overlappings are more likely; the TInt's coordinator role (Wadensjö 1999) is especially relevant. Specific protocols were developed by DUALIA to render interpreter-mediated exchanges more efficient, depending on the type of clients' requirements (for instance, operators of number 116 for domestic violence request the translation of each turn, whereas operators of number 112 for emergencies require a rapid rendition of the reason for the call and not necessarily a translation turn by turn).

To conclude, trainers will find in Hymes' model suitable categories to help TI trainees analyse remote speech situations and perform accordingly. Furthermore, RI peculiarities (in particular, lack of TInt's previous knowledge of the speech situation and participants, and fast turns in short interactions) call for TInt's specific background preparation *prior to* and communicative strategies *during* the speech event. To support TInt trainers, dedicated training materials were developed during the SHIFT project (see Spinolo and González Rodríguez in this volume and section 5 of Amato, Spinolo and González Rodríguez (2018) *Handbook of Remote Interpreting*, freely downloadable at www.shiftinorality.eu).

3.2 *The relevance of "Technologised Interaction"*

Wandensjö (1999) compared face-to-face interpreting (FtF) with telephone interpreting (TI) and resolved that in both modes two major tasks were involved: translating and coordinating talk, however, in the case of TI, the dialogue was not half as smooth as in FtF interpreting, and that the synchronisation of talk in turn-taking required an extra effort. TI interaction has been described by

some scholars as constrained by the limitations of the aural medium (Lee and Newman 1997; Hornberger et al. 1996). Research, however, has found that for TInts the telephone is not necessarily the reason for their dissatisfaction (Lee 2007; Iglesias and Ouellet 2018). Indeed, McLuhan (1964) suggests that "the telephone gives us an ear for an eye". Consequently, the full potential of the aural medium in TI is yet to be explored. Based on Wadensjö's reflections and our insight into the SHIFT TI corpus, we argue that many of the problems that seem to plague the practice of TI are more related to the coordinating task and the alignment of the interpreter with institutional agendas and the TI company that provides the service (company´s protocols), and less to the interpreting activity itself. In fact, technology cannot be "asocial" and the novel forms of interpreter-mediated interaction are actually the product of the providers' "appropriation of the technology to achieve their own goals" (Hutchby 2001a, 7). It follows that much benefit can be gained if we turn towards the sociology of technology in interaction to look for a theoretical approach concerned with the interface between technology, social practice and the normative structures of interaction (Hutchby 2001b, 6).

TI is not just about relaying messages "in" channels, as the presence of a third party leads to various possibilities of alignment and asymmetry. Social processes such as institutional conversation and the properties of the phone are strongly intertwined. Technological artefacts come with their "affordances" (Gibson 1979 in Hutchby 2001b, 6), that is, possibilities for agentic action in relation to the phone. As we shall see, the phone provides opportunities to communicate intimately despite the physical distance, enabling sociability and involvement. However, institutional goals and the social processes underling the provision of public and private services together with the norms governing the social limitations of interpersonal communication (turn-taking, conversational norms) seem to constrain this opportunity for involvement, even in medical encounters, where it is seen as a key component of medical interaction (Hall, Harrigan and Rosenthal 1995). Therefore, the telephone comes with "promises" of some affordances or a number of things users have learnt they can do, that in practice cannot be enacted (Hutchby 2001a, 126).

The research question that arises could be: What are the structures of TI that favour a feeling of co-presence and involvement when in fact TInts are not present? And what are the structures of TI that preclude a feeling of co-presence and involvement when parties are distributed? How can the former structures be taught?

In our analysis of the corpus, we have realised that TI brings about novel ways of communicating. However, these are actually the product of "the interactants' appropriation of the technology to achieve their own goals" (Hutchby 2001a, 7) more than an appropriation of the actual technology opportunities the telephone can offer, that is, "intimacy at a distance." We see the telephone as a

medium affording a form of co-presence and intimacy, which impacts the positioning of interpreters vis-à-vis providers and users, as they are provided with agentic action.

Most interpreters in our sample follow the TI company's protocols, which are the product of the providers' public or private body's goals/interests. The Andalusian Health Service (*Salud Responde*), which represents a large part of the service calls in our corpus, is overstretched in the delivering of services, so it is no surprise that providers orient the call to requesting a set of requirements in order to grant the service and focus on factual data, constraining the possibility for building rapport. These protocols set courses of action that allow the TInt to appropriate the phone to shape the interaction so that calls be dealt with quickly, focusing on the reason for the call and avoiding interpersonal relations, thus serving the interests of the public healthcare institution. However, the protocols have not anticipated that many callers are non-native speakers, elderly and in poor health, and that often these very fast exchanges increase the client's anxiety, rendering the interaction inefficient.

3.2.1. Applications to TI training

- Example 1: Emergency call haemophilic patient (3'56")

In the case of a call placed by a German lady asking for an ambulance, it takes 15 turns, filled with overlapping, repetitions of proper names and requests for personal details, for the TInt to ask about the lady's husband medical record, and another 11 turns to find out that the bleeding patient is haemophilic. The TInt speaks too fast for a non-native speaker to understand (190 syllables/second), particularly when she faces very distressful circumstances. The interpreter follows the protocol to the letter, but this fast approach to the need of building a case before sending an ambulance only serves the interest of the *Salud Responde* service but not that of the patient. This is a clear example of gatekeeping.

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12. B: hallo? hallo?
13. I: >Yes hello madam how can I help you?< yes hallo madam how can I help
       you?
((beep))
14. B  eh::: I think I need a doctor please
(.)
15. I: >why do you need a doctor madam?< why do you why do you need a doctor
       madam?
16. B: it's a about my husband e::m he suffered a big blow on on the head area
       and bleed
      [((beep))]
17. I: [OK how did] how did it happen? (.) did he fall down? what happened?
18. B: he was playing golf
20. I: OK (hhh)compañero?
(.)
21. A: si?
(.)
22. I: su: marido que estaba jugando: al golf y que ha tenido: (hhh)un
       percance y: dice que ((beep)) en la frente en la cabeza tiene una
       brecha (.) y: que está sangrando
23. A: sangra mucho::? abundante: o::poco? [o::?]
24. I:                                     [is he] is he bleeding a lot or a little
       bit?
(.)
25. B: e::: not [exactly a lot] but he is bleeding
                [((beep))]
(.)
26. I: dice que no: no mucho pero si está sangrando
27. A: de acuerdo que edad tiene:: (.) el hombre?
28. I: how old is your husband?
(.)
29. B: my husband thirty:: thirty::: [five?] (.) thirty five
                                      [((beep))]
30. I: thirty five?
31. B: thirty five
32. I: treinta y cinco años
(.)
33. A: treinta y cinco (.) de acuerdo e:: tiene algún antecedente médico?
34. I: what is eh the medical history? (.) of your husband? does he ((Bleep))
       have any illness or disease in his life?
35. B: sorry sorry I don't understand could you please repeat?
36. I: yeah <what is the medical history of your husband? >(.) does he have
       any illness or disease in his life?
(.)
37. B: diseases oh he has a:: ((bleep)) he is hemophilical? hemophily?
38: I: pardon me?
39: I: hello?
(.)
40. B: yeah did you understand me?
41. I: OK wha- what did he [((bleep))]
42. B:                     [he has]   he has he has hemophily
43. I: hemophily?
44. B: yeah
45. I: Pues vaya me dice que **hemofilia**
(.)
46. A: hemofilico
47. I: si es hemofilico si
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Implications for training relate not only to the TInt, but also to the provider. For instance, the question related to the client's medical history (Example 1, line 33) comes after five turns by the provider requesting information about the client's age, information that is far less relevant than a medical record in an emergency call. Additionally, questions are posed very fast by the TInt, without taking into account the caller's little command of the service language. In this particular case, the provider postpones the question related to the reason for the emergency, but so does the TInt, in spite of his leeway to elicit this information at an earlier stage. In the absence of adherence to protocol by the

provider/operator, TInts should conduct independent questions or "non-renditions" to comply with good practices in emergency calls.

- Example 2: Vaccination of a Russian baby (4'13")

Contrarily to the example above, we have found a female interpreter who builds up trust through verbal and non-verbal means. Faced with a non-native speaker of English, she repeats information *verbatim* as a strategy for information acknowledgment. She follows the protocol but reduces her speech rate, speaks more clearly and pauses at grammatical junctions, rendering a very calm and reassuring speech. Consequently, turn-taking is much more orderly as the client seems to follow her signals, having put her trust in her. Backchannelling and emphasis rendered by dynamic intonation contribute to build personal involvement (Tannen 1984, 134)

```
     11. I: hello good afternoon (.) how are you feeling today?
     12. B: well (.) thank you
→    13. I: >you are feeling well?< good and <have you brought the: booklet with
             your daughter's vaccinations?> ((beep))
     14. B: I have the vaccinations here with me
→    15. I: you have it with you OK (.) sí dice que sí
     16. A: vale de acuerdo dile que me la dé por favor que tengo
             que comprobar las vacunas que lleva la niña
     17. I: de: acuerdo can you please give it to ehm to the nurse
             she needs to check the vaccinations ((beep)) that your daughter has
             had
     18. B: xxx here is the list of he vaccination ((very poor sound))

     (...)

     38. A: vale y ya por último la del meningococo por favor ((beep))
     39. I: de::acuerdo and has she also had the vaccination for
             meningococco meningitis?
→    40: B: oh I see that we (2) oh no no
     41. I: no she hasn't it? No eso no ((beep))
     (3.5)
     42. I: compañera?
     43. A: sí (.) dime
     44. I: sí ese no lo ha tenido
```

Be it a public body or a private company, the sequences of questions-answers, and requests fall at the hands of providers and operators who have agendas. In many instances, these interests run contrary to the client's interests but TInts seem to be unaware of this. TInts adhere to provider/operator´s questions, in spite of them being irrelevant or repetitive, which can prove fatal in emergency calls. This behaviour leads to a reduced number of caller's slots and increased caller's anxiety. In fact, supportive communication (verbal and nonverbal) can decrease patients' anxiety (DiMatteo and Taranta 1979). Call-placers must build a case to justify entitlement to receive a service (Raymond 2014, 36). TInts align with the provider and screen the caller to determine whether the service should

be granted, thus becoming gatekeepers to services and resources.

Suggestions for TInts' good practices would therefore include striking a balance between providers' needs and agendas, and client's interest. It seems that gaining the client's trust could help reducing anxiety in the face of lack of visual stimuli. This is particularly so when non-native-speakers, the elderly, clients in poor health or the hard of hearing are involved. Verbatim repetitions, backchannelling, pausing and emphasis at paralinguistic level appear to be an adequate way to appropriate technology and so is paralinguistic displays that are involved in empathic behaviour (Tannen 2007; Knapp and Hall 2007) and enable rapport (Tannen 2007, 134).

3.3. The relevance of Conversation Analysis

The study of Conversation Analysis (CA) was initiated by Sacks in 1964. He studied telephone conversations in a mental health hospital and showed that conversations proceeded in turns within sequences, with each conversational unit being composed of two turns. He argued that social interaction went well beyond the telephone line. The first framework for the study of telephone calls was developed by Schegloff in 1968. In 1986, he provided a detailed analysis of 500 telephone calls and identified four core sequences in the opening section (ib., 9):

- a summon-answer sequence […]
- an identification/recognition sequence […]
- a greeting sequence […]
- initial inquiries ("How are you?") […] (Schegloff 1986, 118).

Openings have been abundantly studied because they constitute easily definable conversational units (such as identification and self-identification by callers and call-takers). This is not the case of other conversational components, which have less clear-cut boundaries and multiple developments (like closings).

The CA paradigm is extraordinarily robust to study talk-in-interaction and, therefore, TI training methodology could include the following notions:

- the identification of turn sequences and of agenda of talk (Schegloff 1992);
- the organization of talk in institutions where turn-taking is strongly constrained by normative procedures (Drew and Heritage 1992);
- the role of context in shaping utterances and actions which, in their turn, are context renewing (Drew and Heritage 1992);
- the social identities and attributes (i.e. gender, ethnicity, power, occupational role etc.) that turn participants involved in institutional talk into social interactants (Drew and Heritage 1992);

- the social structure of conversation (i.e. knowing "who the parties are") which is relevant for producing and interpreting conduct in interaction (Schegloff 1992);
- the detection of the relevant turns which help recognise the illocutionary force of utterances and the categorial identities of the interactants (Schegloff 1992, Zimmerman 1992);
- the verbal and paralinguistic signals (acknowledgement tokens) that interlocutors send to each other to display reception and interpretation of the intended message (linguistic and paralinguistic backchannelling) (Keller 1979).

Particular attention should be paid to the following features: i) organization of talk in institutions; ii) categorial identifications and social structure; iii) the structure of service/emergency calls; iv) the call-taker's goal to handle calls as routinely as possible; v) the degree of caller and call-taker alignment or non-alignment.

As to the first aspect (i) which relates to the organization of talk in institutions Drew and Heritage (1992) identified the following dimensions for research (hence their possible application to TI training):

- lexical choice;
- turn design selected by the speaker (syntactic, lexical, prosodic, etc.);
- sequence organization (i.e. question-answer, opening, closing) and agenda of talk (topics are generally selected by one of the participants in asymmetrical conversation);
- overall structure organization (depending on the type of the task-oriented interaction);
- social epistemology and social relations (i.e. professional "cautiousness" in interaction and interactional asymmetries in institutional settings).

As to "lexical choice", the term "medical history" (Example 1, line 34) used with a non-native speaker and uttered at a very fast speed proves ineffective, as the TInt has to paraphrase it in a new turn as "any illness or disease in his life". Institutional talk has its norms, but the TInt should adjust institutional terminology when interpreting for non-native speakers, particularly in emergency calls. "Sequence organisation" is also established by the provider, who selects the chain of questions dictated by the protocol without regard for the client's profile and his/her needs, which does not serve the emergency of the situation. This can be seen in the questions-answers related to the age of the client (line 27) which are far less critical than the client's his medical history and which take three turns to be elicited.

The second aspect (ii), i.e. "categorial identification", allows interactants to understand who is speaking (i.e. doctor, patient, interpreter etc.), and consequently mobilise the relevant knowledge (inferential schema) needed to understand the meaning of utterances, the social relation and the type of expected response. The categorial self-identification (for example, "This is Riverdale Police") places the call in a particular footing: "my organization to your organization" (Zimmerman 1992, 452). This aspect of the verbal exchange is of paramount importance as it triggers a swift reaction

(i.e. prompt alignment with the interlocutor, provision of assistance, etc.).

With respect to "the structure of service/emergency calls" (iii), Zimmerman (1992) specifies that "The alignment of (A) [the caller] and (B) [the call-taker] is the work that the talk performs in accomplishing the call for emergency services [911]" (ib., 420). The following turn sequences are detected:

- pre-beginning (the very fact of calling 911 warns the call-taker that it is an emergency);
- opening: identification, acknowledgement sequence;
- reason for call: request, reports, descriptions, narratives;
- moving the interrogative series forward;
- repair and verification;
- response;
- closing.

Recurrent contingencies in emergency (especially in TI) calls are: achieving identification, aligning identities, requesting assistance, eliciting information, commitment to help, and closing.

The educational implication at the pre-beginning stage is that the TInt is always at a disadvantage because he/she never knows what to expect. Trainee's exposure to genuine TI and transcriptions of the calls (SHIFT TI corpus and other corpora) can contribute to students acquainting themselves with recurrent topics and issues in TI.

As far as the latter two aspects are concerned (iv and v), they are strictly associated. That is, call-taker's goal to handle calls as routinely as possible often implies the degree of caller and call-taker alignment or non-alignment (Whalen 1990 in Zimmerman 1992): the IT trainee has to be aware that this may lead to several ineffective turn sequences (see above). Indeed, in order to streamline their task-oriented day's work and to ease the context-derived pressure, practitioners (call-takers) need to manage emergency calls as swiftly as possible. This implies that they strive to turn even a caller's dramatic experience (he/she may be experiencing an emergency situation for the first time in her/his life) into a routine call. But this does not necessarily mean depriving the client of involvement and support which can put him/her at ease. Rendering messages swiftly to non-native speakers of the service language, the elderly and those in poor health is only conducive to overlapping and long inefficient turns. TI trainees should be taught to adjust their renderings when these types of clients are involved.

The divergence of concerns between callers and call-takers is perhaps the master contingency for both parties, for this divergence poses potential obstacles to a timely and appropriate completion of the call (Zimmerman 1992).

There may be protocols developed by institutions which favour callers and call-takers alignment during the call, for instance by gaining the attention of the emotionally overwhelmed caller or by imposing compliance with instructions ("stop shouting and listen"). TInts and TI trainees should be aware of this requirement to consciously favour it and render his/her own interpreting performance as routinely as possible.

3.3.1 *Application to TI training*

- Example 3: Missing Person Emergency call (4'55'')

This excerpt is taken form the call placed by a lady to the 112 operator to report the disappearance of her girlfriend. The sequence of turns shows: (i) evidences of TInt's backchannelling by short linguistic forms signalling that the "channel" is open, thus encouraging the caller to go on narrating ("Yes" lines 9, 11, 13); recapitulating by *verbatim* repetition of information by the lady (lines 15 and 17) (ii) dyadic exchanges TInt/Caller to negotiate meaning and discover the reason for the call also through questions at TInt's initiative in order to "move the interrogative series forward" (15-22; (iii) TInt's coordinating role in selecting the next speaker (23):

```
 8. C: <I´m from Romania I´m here in Madrid in a hotel
 9. I:                                          [Yes]
10. C: in Trip Gran Vía Hotel>
11. I:                [Yes]
12. C: <with a friend of mine and: yesterday (.) evening I
       planned to meet with her to have breakfast in the hotel at eight
         o´clock in the morning.>
13. I:                                          [Yes]
14: C:                                 = and she hasn´t ah: she
       hasn´t come. so ah: ((beep)) and she isn´t in the hotel now (.) and:
       I don´t know what is happens
15: I: So you came here together (.) on holiday? she went out at night,
16: C: Yes at seven o´clock yesterday at night ((beep)) (0.2)
17: I: She went out and she hasn´t come back? (0.2)

18: C: She hasn´t come back
19: I: Do you know where she went?
20: C: Ah:: no:: only to:: to see a friend of her here in Madrid but I don´t
       know where exactly
21: I: And does she have a telephone?
22. C: Yes but the phone is here in the hotel.
23. I: I see (hhh) compañero?
```

Trainees can benefit from being exposed to these distressful calls rendered by the empathic TInt (Example 3). Trainers can have trainees perform the same role-play with these efficient backchannelling and non-renditions and without them, to see for themselves the difference in the fluency of the interaction. Trainees can repeat the same role-play with an empathic paralinguistic display and another group of trainees can repeat it without these features and ask the rest of the class which interaction favours a smooth flow of the conversation. It seems that peppering TInt's narrative with supportive backchannelling, and placing emphasis on relevant utterances serve to build personal

involvement, leading to rapport-building with the client (Tannen 2007, 134).

3.4. The relevance of phonetics and prosody in conversation

The above-mentioned statement by McLuhan (1964) that "The telephone gives us an ear for an eye" epitomises the roles of prosody and phonetics in TI research. Studies have revealed that the nonverbal dimension is at least as important as the verbal dimension in interpersonal communication, as it contributes to shaping the outcomes in monolingual interaction (Burgoon, Birk and Pfau 1990), healthcare interpreting (Cirillo 2010; Iglesias Fernández 2010), and conference interpreting (Collados Aís et al. 2007; Iglesias Fernández 2007) The voice is one of the strongest and most intuitive channels for conveying intimacy, immediacy, involvement, empathy or dominance and detachment (Burgoon, Birk and Pfau 1990). Indeed, inferences about emotions and feelings rely more on nonverbal components (Zajonc 1980), particularly on the tone of voice, which helps to gauge affect even more accurately than on message content (Argyle et al. 1970). The nonverbal dimension and, in the case of TI, the paralinguistic dimension are affected the most in comparison to face-to-face interpreting, since fluency is greatly impaired (Wadensjö 1999) and interactants' reliance on turn completion or augmentation are signalled by intonational contours amongst other linguistic resources. However, these clusters of linguistic and paralinguistic features are also used by speakers to convey affect (Gumperz 1982), a dimension of communication that has been greatly neglected in TI research.

The aural channel is the sole medium through which TI is relayed. Therefore, we argue for the integration of the phonetic approach to the study of voice production in challenging sound conditions by resourcing to the Hyper- and Hypoarticulation model (Lindblom 1990). Not only are changes in footing by interactants signalled by prosodic cues (Couper-Kuhlen and Selting 1996), speech rate and the degree of articulation (Lindblom 1990), but also the efficient control of the flow of talk, and turn-management.

TInts face challenges posed by the communicative and situational demands of the remotely distributed communication. Confronted with these constrains in speech production and reception, TInts' behaviour will have an effect on their positioning towards the client and the provider, their affective contributions, and the fluency in the turn-taking process. TInts can be more or less intelligible on the phone. This is related to their awareness of the challenges posed by the phone to sound acuity. Those TInts who are more sensitive towards the client's profile, and his/her needs will speak more slowly and articulate more. However, those TInts who adhere to the letter of the protocol may be oblivious that by performing swift interactions at a fast rate, clients' understanding may be compromised and an increase in disfluencies may occur. Comparisons between the degrees of

articulation displayed by TInts when addressing providers or when talking to clients will provide information as to the TInts' role and alignment.

We will focus our analysis in the following set of phonetic and prosodic variables that are related to various degrees of intelligibility, articulation, tempo and intonation.

Trainers' and trainees' awareness of these prosodic and paralinguistic features could lead to a better understanding of who takes/holds the floor, leading to less overlapping, a major cause of information loss (Lee 2007), especially in turn ending movements. Additionally, interpreters can better channel interlocutors' emotive contributions.

Example 4: Emergency call. Missing person

```
25. I: Ella ha venido aquí con una amiga desde Rumania están en un hotel en
       Madrid ((beep)) la amiga salió anoche a las siete de la tarde para ir
       a ver a una amiga o un amigo no sé, habían quedado para desayunar
       juntas a las ocho de la mañana hoy y la amiga no ha regresado, y no
       sabe qué hacer. La amiga ha dejado su teléfono aquí en el hotel?

                              (…)

62. I: OK and what colour is her hair?
66. C: She is tall ((beep)) is dark hair
67. I: Dark. Yes and her eyes?
68. C: Blue eyes.
69. I: Blue eyes now when you say dark hair do you mean dark brown or black
70. C: Ah: it's it's is very dark in fact.
```

In this emergency call and following the protocol, the TInt follows the provider's objective and collects as much objective information as possible (Bolden 2000, 414) resorting to autonomous questions (lines 69 and 26). Contrarily to other TInts and aware of the client being a non-native speaker she speaks making an effort to pronounce utterances more clearly.

Educational suggestions clearly emerge from this excerpt of an effective TInt's performance. Even in an emergency call, she displays a clear intention to be understood and to support the anxious client by means of expansions and emphatic paralinguistic displays of stress: high dB, dynamic pitch range (PR), slower speech rate (SR). This results in hyperarticulated speech to trade off the challenging sound situation and the client's emotional state.

- Example 5: Emergency call. Haemophilic client

```
34. I: What is the medical history? of your husband?
    ((beep)) does he have any illness or disease in his life?
35 C: Sorry, sorry, I do not understand can you please repeat? Cómo
36 I: Ya <what is the medical history of your husband?>(.) <does he have
   any disease of illness in his life.>
37 C: Diseases oh: he ((unintelligible)) ((beep)) is hemophilical?
   hemophilic?
38 I: Pardon me?
39 (pause) (( unintelligible talk in the background)) Hello?
40 C: Ya? did you understand me?
41 I: what is, what is
42 C: [He has] he has he has hemophili
43 I: Hemophili?,
44 C: Ya.
```

Trainers can use this call to show students how paralinguistic behaviour can lead to an ineffective interpretation for an emergency call. The TInt's SR is so high that the message proves very difficult to understand (line 35). The client requests repetition but the TInt's SR is still fast despite facing a non-native speaker. This leads to a very troublesome turn-taking with more repetitions and overlappings. The operator's decision to send an ambulance comes too late in the talk (lines 34 and 45). He seems to adopt the social identity of the health acting as a gatekeeper who keeps the interview on track (Bolden 2000. 414).

We have shown how immediacy at a distance can be achieved through paralinguistic resources in spite of lack of visual stimuli being the voice the most intuitive tool for interpersonal communication. Trainees should be taught how to use their paralinguistic behaviour to favour intimacy at a distance and an effective coordination. Access to the recordings of the SHIFT TI corpus can help them gain a better understanding of this nonverbal dimension, scarcely addressed during interpreting training.

4. Conclusions

Today TI is common in a large variety of settings worldwide but the implications and linguistic and paralinguistic peculiarities of this social activity need to be fully appreciated. Considering that the speech situation becomes apparent to the TInt only when he/she picks up the phone, a high degree of mental flexibility and communicative competence are required, and these can be undoubtedly enhanced by awareness of the components of a speech situation, such as setting, participants, goals, acts, tone, varieties of language used, genres and norms. TInts' communicative competence can also be strengthened by their familiarity with institutional call structure and mechanics. As empowered participants, interpreters must learn to enact their role as relayers and, above all, as coordinators, not only in efficiently managing the exchange flow but also by communicating trust and involvement, putting clients at ease when they are distressed, or are not native speakers of the service language.

This is particularly important in emergency calls.

Public and private services make use of technologised TI as a way to cut costs and bring immediacy at a distance. In our corpus we have seen how one TInt achieves immediacy in a swift emergency call by her apt use of linguistic and paralinguistic resources. Yet, the rest of TInts do not seem to be aware of the fact that technology is always "social", and by strictly and blindly adhering to TI companies' protocols they are playing the role of gatekeepers, by "appropriating" the telephone to pursue providers' interests instead of those of the clients. Dualia's protocol is very much in line with many codes of ethics and practices that articulate the role of the interpreter, particularly in medical encounters, as a neutral party, neglecting the emotional side of the interaction (Hsieh et al. 2009; Leanza 2005). However, many scholars have addressed the inadequacy of these codes and their articulation of the interpreter´s role (Angelelli 2004; Davidson 2000; Bolden 2000). Trainers should highlight the need to strike a balance between blindly adhering to companies' protocols without losing sight of the clients' needs. Trust plays an essential role in achieving a smooth turn-taking. TInts lack education about their role as fully ratified participants both towards providers and clients. TI students should be exposed to inefficient hypoarticulated exchanges that lead to troublesome turn-taking and to effective hyperarticulated exchanges that contribute to a swifter flow of interaction, so as to familiarise with the paralinguistic and prosodic variables involved in these speech styles.

To conclude, telephone-based remote interpreting calls into question such a vast array of features that only a comprehensive multidisciplinary theoretical and methodological framework for research and training can be of guidance. The present contribution hopes to be a first step in this direction.

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