Leadership in multimodal computer-mediated second language communication for reciprocal learning

Paola Leone

Università del Salento, Italy
paola.leone@unisalento.it

This study investigates interactional leadership in Teletandem conversations, in which two speakers communicate employing instant messaging and VoIP software (e.g. Skype), each alternately using her L2, i.e. the partner's native language. The research focuses on the impact of language competence (native/non-native) and content expertise (familiarity with the topic at hand) on the role assumed by each interlocutor in structuring conversation. The subjects are four female university student volunteers forming two Teletandem pairs. Two participants were Italian native speakers, one was a native speaker (L1) of English and one a native German speaker. For each pair, video-recorded and transcribed data were collected during 3 different meetings, in two of which the L2 speakers chose the topic for conversation. Findings show that L2 partners have the opportunity to manage the conversation in terms of topic initiatives and interaction space and L1 speakers produce more topic moves and leave L2 partners to practice

the target language during long turns.

1 Introduction

This study addresses the issue of interactional leadership in Teletandem conversations (Telles, 2009)[1], in which two speakers communicate via videocalls and text chat and alternate use of L2, i.e. the native language of the interlocutor. Specifically, the research focuses on the impact of language competence (native/non-native), content expertise (level of familiarity with the topic at hand) on the role assumed by each interlocutor in structuring conversation. Video-recorded and transcribed Teletandem conversations are the basis for the current research. The subjects are 4 female university student volunteers forming 2 Teletandem pairs. The first pair (PAIR1) was composed of one native Italian speaker (PAIR1ITL1) and one native English speaker (PAIR1ENGL1). The second pair (PAIR2) was composed of one native Italian speaker (PAIR2ITL1) and one native German speaker (PAIR2GERL1). The conversations were carried out via computer using instant messaging and VoIP software (e.g. Skype)[2]. Their language proficiency in L2 ranged from upper-intermediate to advanced. Data were collected during 3 different meetings (M1, M2, M3), each lasting approximately 1 hour (total of 6 hours of conversations).

The research questions were:

1. Is there one interlocutor who leads the communicative exchange flow?
2. Does content expertise have an impact on the way each speaker contributes to structure conversation flow?

2 Tandem and Teletandem discourse: differences and similarities

Teletandem learning is an online form of "conversation for learning" (Kasper, 2004), in which learners project their personal and cultural identity, develop competences in L2 as well as abilities for transcultural communication (Hepp, 2009) through computer-mediated communication (CMC). Teletandem communicative exchanges have similar characteristics to face-to-face tandem conversations (Brammerts, 2003). In both learning contexts, speakers have a "dual-focus" in mind (Apfelbaum, 1993; Bange, 1992). One is the language used for communication: for instance, participants correct/repair their interlocutor's language misuse, negotiate meanings, explain a rule related to their first language, etc. The other is the topic under discussion, marked, for instance, by the presence of appraisal/agreement sequences. This latter quality makes Teletandem conversation close to natural peer communication (Apfelbaum, *op.*

---

[1] www.teletandembrazil.org.

[2] VoIP (Voice over Internet Protocol) is a technology that allows to make videocalls via computer networks such as Internet. Skype is one of the most used software for communicating via videocalls and chat (http://www.skype.com/intl/it/home).

cit.; Anderson & Banelli, 2005; Leone, 2009a, 2009b).

In sequences of focus on form both negotiation of meaning and repair play an important role since they allow communication development to take place and contribute to the development of L2 language competence. Negotiation of meaning aims at resolving communication problems (Gass, 1997; Leone, 2009a, 2009b, forthcoming/a). In the specific case of Teletandem communication, written chat can be prompted by non-comprehension and use as a strategy to facilitate communication: by writing a word that has not been understood due to pronunciation or writing a translation of the word, interlocutors use a semiotic code that makes the message permanent and accessible over time (Leone, 2009b). Other sequences of focus on form are repairs which arise because appropriate target language vocabulary or expression is missing or because the non-native speaker is not sure whether certain forms are correct or understandable.

Code-switching is another common characteristic of Tandem and Teletandem. Sometimes it is employed at a transactional level, such as for facilitating communication. i.e. when the non-native speaker uses the expression in another language to indirectly show his/her need to be assisted (Ex. 1), or for evoking a context in which, for example, an event takes place (Anderson & Banelli, *op.cit.*).

> **Ex.1** (PAIR1M3)
> ENGL1: studentesse [sì] a:hm e questo è speciali per noi perché abbiamo l'op-portunità di imparare come ((keyboard noise)) come a:hm **no se are run** umh
> ITL1: **forse come gestire in quel senso**
> ENGL1: **sì esatto come gestire un gruppo** grande di tre- di trenta ragazze[3]

Other times code-switching is used at the interactional level, as shown in the use of discourse markers, which combine lexical units in L1 and in L2 (e.g. ah sì ah ja).

As in face-to-face tandem, in the Teletandem conversations analyzed in this study, speakers also integrate gestures and body movements into their communication process. In the analyzed data, for instance, one of the partner's movement towards the webcam is interpreted by the primary speaker as a sign of non-understanding and a request for repetition. As can be easily imagined, however, since Teletandem is computer-mediated communication (CMC) the use of gestures is generally limited to a section of the upper body.

---

[3] Unless otherwise indicated, extracts are transcriptions of oral speech and translations into English are provided in footnotes. ENGL1: and this is special for us because we have the opportunity to learn how a:hm I don't know (in Spanish in the original) to run (in English in the original); ITL1: maybe you mean how to manage a big group with three- thirty girls; ENGL1: yes exactly how to manage a big group with thirty girls.

3 The analytical framework

The current study aims to analyse how Teletandem participants interpret the role they can assume in communication and in the learning process when internal conditions, i.e. language competence, and external conditions, i.e. topic choice, change. The research relies on an analytical framework employed for investigating dominance in different social contexts. In particular, for the purposes of the current research, data will be analysed following a framework I have already employed in a previous research project, whose focus was the role of the native speaker in structuring conversation flow, and the influence of content familiarity and topic choice on non-native speaker performance during one pair of students' Teletandem conversations (Leone, forthcoming/b; see also infra par. 3.3).

The following dimensions were considered for data analysis:
- sequential dominance, which regards "relationship between utterances" (Itakura, *op.cit.*, p. 1864). In each exchange only the controlling move is counted without considering the numerical evaluation of potential strength (as in Linell *et al.* 1988 and Linell, 2009). In order to establish whether the initiation move is controlling or not, the response is taken into account;
- quantitative dominance as measured by the average turn-length in terms of number of words.

In the following paragraphs I will briefly discuss previous studies on dominance (par. 3.1), then describe the data collection procedure used in the present study (par. 3.2), delineate the analytical framework (par. 3.3) and, finally, examine the data results (par. 3.4).

3.1 Previous studies

The analysis of conversation structure and the role assumed by each interlocutor has been the focus of applied linguistics research on "dominance", a word that I will henceforth avoid, preferring instead "leadership" which has a less negative connotation. "Dominance", a general term used in different fields of studies, particularly in psychology and sociology, expresses the position of authority of one human or animal group or individual over others and is intended as the opposite of submission. In common use, saying that one person is dominant evokes this person's power over another and carries negative cultural and emotional associations. On the other hand, "leadership" underlines the positive effects that controlling a conversation might have in

native/non-native communicative exchanges since the leader is also an active collaborator. In other words, (s)he is the one who assumes responsibility, for instance, for accomplishing a task (e.g. by talking with the partner), or for defining ways of finding solutions to communicative problems (e.g. by issuing clarification requests).

in the last 30 years extemsove research on the role assumed by speakers in structuring conversation flow has provided scholars with a rich body of analytical frameworks and descriptive facts. A fairly well-known scientific contribution is the work by Linell and his colleauges (among others see Linell *et al.*, *op. cit.*; Linell, *op.cit.*) who propose a framework for analysis based on different dimensions: the number of words uttered in a turn by each speaker and the average turn-length and topic (or semantic) dominance, measurable for instance by the introduction of new content words. Another dimension, "interactional dominance", deals with patterns of asymmetry, and consists in a detailed analytical framework based on 18 categories of turns. The classification comprises both an initiative (I) and a response (R) (Sinclair e Coulthard, 1975), whose strength in structuring conversation is evaluated on a six-point scale. A strong initiative is for instance a question which brings about new topics; conversely, a weak initiative is a response which shows no tendency to develop new content in the dialogue.

Whereas the model proposed by Linell *et al.* (*op.cit.*) and Linell (*op.cit.*) chiefly aimed to characterize various social situations, showing different interactional behaviours in symmetrical (e.g. conversation between two native peers) and asymmetrical (e.g. doctor-patient interaction) contexts, for the purposes of the current study, it seems more appropriate to follow the analytical framework of Itakura (2001) which focuses on the description of a non-institutional context (i.e. L1 and L2 conversations between Japanese male and female speakers) trying to identify differences in behaviour between the two interlocutors. As in Itakura (*Ibidem*), the focus of the current study is on only one social situation, i.e. the role assumed by each actor in relation to the conversation flow, including the role each plays in solving communication problems, which are particularly relevant in native/non-native conversations. Itakura (*Ibidem*)'s analytical framework considers:

- sequential dominance, i.e. the direction of interaction, resulting from qualitative analysis and measurement of controlling topic moves;
- interaction space, i.e. a quantitative measurement of words and turns produced by each interlocutor;
- participatory dominance, i.e. a participant's right to take part in the conversation, i.e. interruptions and overlap.

As was the case in the study by Itakura (*Ibidem*), the current analysis will be carried out by measuring behaviours pertaining to opposite extremes, i.e.

controlling and non-controlling moves, instead of using an ordinal scale ranging from strong to weak moves, as the one mentioned above by Linell *et al.* (*op.cit.*) and Linell (*op.cit.*) Strong moves have an actual impact on the other speaker's contribution; conversely, weak moves do not lead to any change in the discourse (e.g. a repair which is not followed by an interlocutor's focus on form). Although this polar analytical measurement tends to result in a less subtly-articulated description of the interaction structure, it allows for a comparison of two interlocutors' general attitudes towards the conversation, showing who actually manages the discourse flow in terms of the measured variables.

Unlike Itakura (*op.cit.*), for the current research, interruptions and overlaps will not be considered since they have a low frequency in our data (e.g. 3 interruptions in PAIR1M2). Although the full-duplex technology offered by Skype allows participants to send and receive messages over the same channel at the same time, during Teletandem sessions disrupting an interlocutor's turn and speaking at the same time seem to be avoided by speakers who prefer not to violate a speaker's turn and right to talk (West & Zimmermann, 1983).

3.2 Data collection

Data were collected by video-recording two pairs of female university students (PAIR1 and PAIR2) during 3 different Teletandem meetings. Each meeting was programmed to last 1 hour. Unfortunately, during the third meeting PAIR2 had a problem with the Internet connection, so Meeting 3 conversation lasted less than one hour (48 minutes). In order to give homogeneity to the data related to PAIR2, the length of all the other meetings (i.e. M1 and M2) was reduced. Conversation during M1 was half in Italian and half in English for PAIR1, half in Italian and half in German for PAIR2. Conversely, during M2 and M3 speakers spoke in one language only, either Italian or English for PAIR1, either Italian or German for PAIR2. In M1 there was no previous topic choice whereas in M2 and M3 the topic was chosen by the L2 speaker.

3.3 Data analysis

In the analysis the "dual-focus" of Teletandem conversations was taken into account. Hence together with initiations, which serve to elicit relevant information in relation to a topic (Ex. 2 below) or introduce new material into the conversation (Tsui, 1994), moves incorporated into metalingual sequences (e.g. negotiation of meaning) (Ex. 3 below) were also taken to constitute valid examples of potential "controlling moves". Therefore, indicators of non-understanding are actually considered appropriate responses to an unclear utterance, anticipating and projecting the metalingual focus of the subsequent contribution

if followed by a complying response.

> **Ex.2** (PAIR1M2)
> ENGL1: **would you want to go back to algeria**
> ITL1: ya I would like actually I liked really I enjoyed my staying there because
> it was at first it was really interesting I was always looking anywhere because I
> felt it really different from what I am used [so]

> **Ex. 3** (PAIR2M2)
> ITL1: e poi trovi il partner per fare teletandem
> GERL1: sì
> ITL1: prima metti la notizia e poi ti rispondono
> GERL1: **ehm non ho capito**
> ITL1: tu metti un annuncio una notizia su questo sito e poi chi è interessato
> risponde al tuo annuncio funziona così[4]

Conversely, the following moves are considered to be "non-controlling":
- moves that have a focus on form but do not lead to a change in the be-haviour of the other speaker, such as native speaker repairs that are not incorporated into the partner's subsequent turn;
- moves followed by listener responses (Clancy *et al.*, 1996) which have a strictly interactional value and show a lack of initiative properties such as backchannels (e.g. continuers, displays of interest: ja ja ja), jointly constructed turns as forms of collaborative behaviour and echo repetition;
- closing turns of fixed sequences such as a greeting sequence.

Some characteristics of speech, i.e. the proactive feature at the discourse level of turns were underestimated since the analysis aimed to highlight turn properties at a topic level. As shown in extract n.4, although the "ciao" by the Italian native speaker gives the interlocutor the opportunity to open a new sequence (i.e. hai video), it lacks proactive features in terms of topic.

> **Ex. 4** PAIR1M1
> ENGL1: ciao
> ITL1: **ciao** ((laugh))
> ENGL1: hai video

---

[4] ITL1: first you write the news for Teletandem; GERL1: yes; ITL1 first you write the news and then they answer; GERL1: ehm I do not understand; ITL1: you write the notice the news on this website and then who is interested answers your notice it works in this way.

ITL1: sì sì sì sì ciao[5]

In order to compare data between meetings, both M2 and M3 were divided into two parts (also called 'events'): part1 for PAIR1 30 minutes each, and part1 for PAIR2 lasted approximately 24 minutes. Thus, for data analysis, 6 different parts were considered (see figs. 1-4).

3.4 Results

For each pair the results were analysed by comparing each interlocutor's behaviour in terms of sequential and quantitative dominance (figs. 1-4). Then consistency between these two dimensions was considered in order to see if there was any correlation (e.g. increase in percentage of topic moves related to an increase in average turn-length).
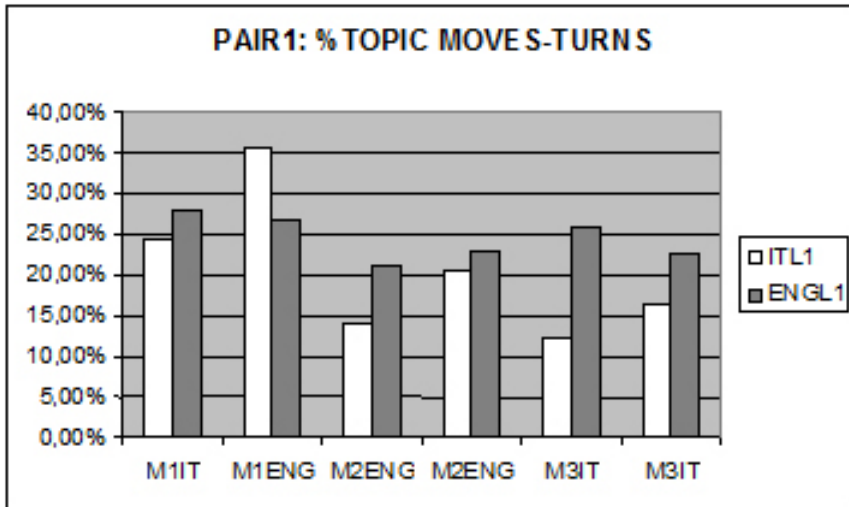

Fig. 1 - PAIR1: Percentage of controlling topic moves in relation to the total number of turns.

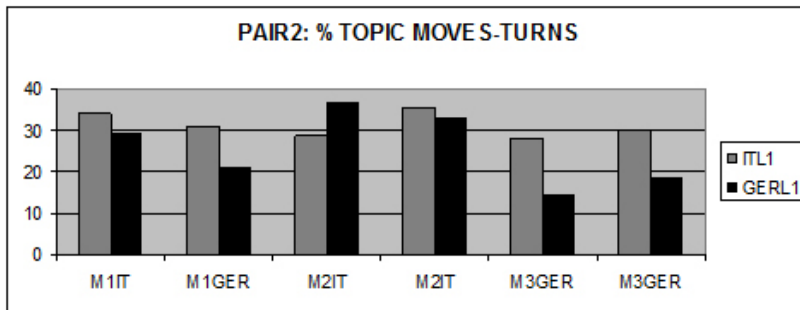[5] ENGL1: hi; ITL1: hi; ENGL1: do you have video; ITL1: yes yes yes yes hi.

Fig. 2 - PAIR2: Percentage of controlling topic moves in relation to the total number of turns

Figures 1 and 2 show that no speaker controlled topic development in all 6 events. However, 2 speakers did produce more topic moves in 5 out of 6 events: PAIR1ENGL1 and PAIR2ITL1. Therefore, there was no significant difference in topic moves with the partner in 4 events. The gap in percentage between each interlocutor's topic moves became consistent in favour of the non-native speaker for PAIR1 during M3IT and for PAIR2 during M3GER. Therefore, we may conclude that topic familiarity, depending on topic choice, favoured the non-native speaker who showed a tendency to be topic leader (i.e. PAIR1ENGL1; PAIR2ITL1).
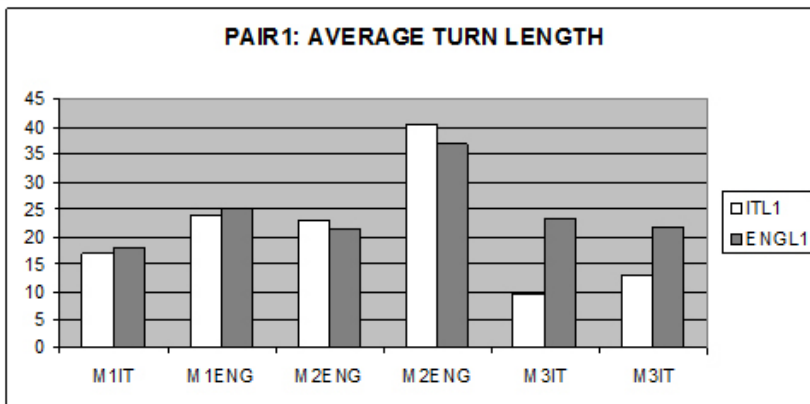

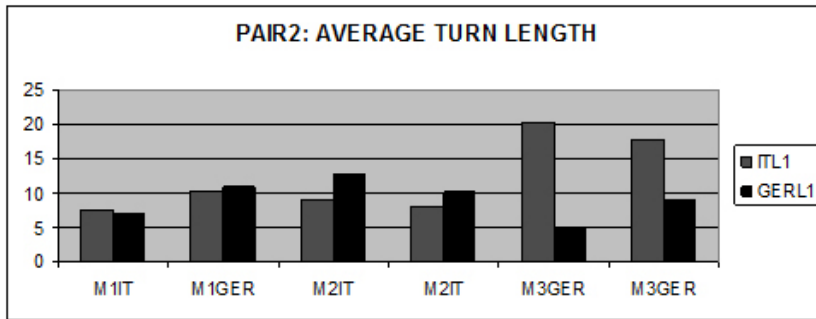Fig. 3 - PAIR1: Average turn length (spoken and written words).

Fig. 4 - PAIR2: Average turn length (spoken and written words).

As regards average turn-length (figs. 3 and 4), the difference in behaviour between speakers in the same pair does not seem to be particularly significant, apart from M3 when PAIR1ENGL1 and PAIR2ITL1 communicate in L2 about the topic of conversation the L2 speaker chose. As pointed out above, these two speakers are the ones who show a tendency to produce more topic moves (figs. 1 and 3).

Consistency between the two measured variables is noticeable in PAIR1 M3IT and in PAIR2M3GER (figs. 2 and 4): ENGL1 and ITL1 produce substantially more topic moves and longer turns. On the other hand, there is inconsistency as the relationship between the two measured variables does not show coherence with regards to discourse controlling behaviour. This is the case when the speaker produces many topic moves (e.g. more questions) but her average turn-length is less than that measured for her partner. This is how, for instance, PAIR1ENGL1 behaves in M2ENGL_part2 (figs.1 and 3) and PAIR2ITL1 in M2IT_part2 (figs. 2 and 4), showing that speakers collaborate in building a communicative context in which the native speaker facilitates the communication process by, for instance, asking questions and allowing the partner to talk thus letting the non- native speaker practice the target language.

Conclusions

The aim of current study was to evaluate the impact of individual variables, i.e. language competence, and external variables, i.e. topic choice, on conversation structure in Teletandem sessions during which speakers talked via computer in order to develop communicative competence in L2. Two dimensions were measured: sequential dominance, i.e. quantity of topic moves produced by each speaker and the interaction space, i.e. average turn-length.

The absence of statistical analysis imposes the necessity for caution in con-

sidering this data. Nonetheless, this analysis seems to indicate that individual tendency to control topic conversation flow (as in PAIR2ITL1 and in PAIR2GERL1) is inhibited when the language of conversation is the partner's L2. In fact, neither speaker talks consistently longer than her L2 partner. On the other hand, speakers show a spirit of collaboration by building a communicative context in which: L2 partners have the opportunity to manage the conversation in terms of topic initiatives and interaction space (e.g. average turn-length for PAIR1M3, PAIR2M2 part1 and PAIR2M3) or L1 speakers produce more topic moves and L2 partners practice the target language during long turns (PAIR1M2; PAIR2M2_part 2).

Whereas consistency between sequential dominance and average turn-length demonstrates L2 speaker leadership (e.g. M3), inconsistency shows conversation patterns similar to those of an institutional asymmetrical context in which the native speaker acts as a teacher, asking questions and letting the partner practice the target language. Future research will focus on statistical analysis of the data, e.g. using t-tests, and an analysis of each speaker's contribution to the conversation structure by investigating the use of discourse markers (e.g. so, ehm, uhm, okay), i.e. signals the speakers and listeners use to shape the conversation and show their relation towards their interlocutor.

REFERENCES

Anderson L., Banelli D. (2005), *La commutazione di codice negli incontri Tandem*, in: G. Banti, Marra A., Vineis E. (eds.), Atti del 4° Congresso di Studi dell'Associazione Italiana di Linguistica Applicata: 89-110, Perugia, Guerra Editore.

Apfelbaum B. (1993), *Erzählen im Tandem. Sprachlernaktivitäten und die Konstructio eines Diskursmusters in der Fremdsprache (Zielsprachen: Französisch und Deutsch)*. Tübingen: Narr

Bange P. (1992), *A propos de la communication et de l'apprendissage en L2*, notamment dans le forme institutionnelles, Aile, 1, 53-55.

Brammerts H. (2003), *Autonomous language learning in tandem: the development of a concept*, in: Lewis T., Walker L. (eds.). Autonomous language learning in tandem. Sheffield: 27-36, United Kingdom, Academy Electronic Publications.

Clancy P. M., Thompson S.A., Suzuki R., Tao H. (1996), *The conversational use of reactive tokens in English, Japanese, and Mandarin*, Journal of Pragmatics, 26, 355-87.

Gass S. (1997), *Input, interaction and the second language learner*, Mahwah, NJ: Lawrence Erlbaum.

Hepp A. (2009), *Transculturality as a Perspective: Researching Media Cultures Comparatively*, Forum: Qualitative Social Research 10(1): Art. 26, (33 paragraphs), URL nbn-resolving.de/urn:nbn:de:0114-fqs0901267 (accessed on 9th August,

2012).

Itakura H. (2001), *Describing conversational dominance*, Journal of Pragmatics, 33 (12), 1859-1880.

Kasper G. (2004), *Participant orientations in German Conversation-for-Learning*, The Modern Language Journal, 88(4), 551-567.

Leone P. (2009a), *Comunicazione mediata dal computer e apprendimento linguistico: gli incontri Teletandem*, Studi di Glottodidattica, 3(1), 90-106. URL http://ojs.cimedoc.uniba.it/index.php/glottodidattica/article/view/77/71 (accessed on 9th August, 2012).

Leone P. (2009b), *Processi negoziali nel corso di scambi comunicativi mediati dal computer*, in: Consani, C., Furiassi, C., Guazzelli, F., & Perta C. (eds.), Oralità/scrittura. In memoria di Giorgio Raimondo Cardona: 389-412, Atti del IX Congresso Internazionale dell'Associazione Italiana di Linguistica Applicata (AItLA), Perugia, Guerra Edizioni.

Leone P. (forthcoming/a), *È questo che volevi dire? Parlante nativo e non nativo nei dialoghi Teletandem*, to appear in Itals, 10 (28), 2012.

Leone P. (forthcoming/b), *Content domain and language competence in computer-mediated conversation for learning*, to appear in Apples Journal 2012.

Linell P. (2009), *Rethinking language, mind, and world dialogically. Interactional and contextual theories of human sense - making*, Charlotte, NC: Information Age Publishing.

Linell P., Gustavsson L., Juvonen P. (1988), *Interactional Dominance in Dyadic Communication: A Presentation of Initiative–Response Analysis*, Linguistics, 26, 415–42.

Linell P., Luckmann T. (1991), *Asymmetries in dialogue: Some conceptual preliminaries*, in: Markovà I., Foppa K. (eds.), Asymmetries in dialogue: 1-20, Hemel Hempstead, Harvester Wheatsheaf.

Sinclair J., Coulthard M. (1975), *Towards an analysis of discourse: The English used by teachers and pupils*, Oxford, Oxford University Press.

Telles J.A., ed. (2009), *Teletandem. Um contexto virtual, autônomo e colaborativo para aprendizagem de línguas estrangeiras no século XXI*, Campinas/SP, Pontes Editores.

Telles J.A. (2011), *TELETANDEM: Transculturalidade nas interações on-line em línguas estrangeiras por webcam*, Projeto de Pesquisa. UNESP – Universidade Estadual Paulista, URL: http://www.teletandembrasil.org/site/docs/TELLESTRANSCULTPROJECT2011.pdf (accessed on 9th August, 2012).

Tsui A. (1994), *English conversation*, Oxford: Oxford University Press.

West C., Zimmerman D. H. (1983), *Small Insults: A Study of Interruptions in Conversations Between Unacquainted Persons*, in: B. Thorne, C Kramarae, Henley N. (eds.) Language, Gender and Society, Rowley, MA: Newbury House, 102-117

Yngve V. H. (1970), *On getting a word in edgewise*, in: Papers from the Sixth Regional Meeting, Chicago Linguistic Society, Chicago, IL, 567–578..