The "Retrospective Commenting" Method for Longitudinal Recordings of Everyday Speech

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Abstract. The paper describes a pilot experiment aimed at revealing the occurrences of miscommunication between interlocutors in everyday speech recordings. Here, miscommunication is understood as situations in which the recipient perceives the meaning of the message in a different way from what was intended by the speaker. The experiment was based on the methodology of longitudinal recordings taken during one day, following the approach which is used for gathering audio data for the ORD speech corpus. But in addition it was enhanced by audition of the whole recording afterwards by the respondent himself/herself and his/her simultaneous commenting on some points of communicative settings with unobservable features. The task of the respondent was to note all occurrences of miscommunication, to explain to the researcher all unclear moments of interaction, to help in interpreting the emotional state of interlocutors, and to give some hints on pragmatic purposes, revealing those aspects of spoken interaction that are usually hidden behind the evident facts. The results of the experiment showed that miscommunication is indeed a rather frequent phenomenon in everyday face-to-face interaction. Moreover, the retrospective commenting method could significantly broaden the opportunities of discourse and pragmatic research based on long-term recordings.

Keywords: Everyday face-to-face interaction · Spoken discourse · Miscommunication · Dialogue · Longitudinal recordings · Stimulated recall · Retrospective interview · Retrospective commenting · Speech corpus · Emotional speech · Pragmatics · Communication strategies

1 Introduction

In recent studies of everyday face-to-face interaction, the concept of miscommunication is increasingly emerging (e.g., [1–3]). In this paper, following [4], miscommunication is understood as situations in which the recipient perceives the meaning of the message in a different way from what was intended by the speaker.

Rather often, miscommunication has a hidden character. For example, if the listener is not very interested in the current conversation, he can just *pretend* that he *is* listening [5].

Moreover, it turns out that knowing some rules of spoken dialogue, it is possible to teach an absolutely "deaf" robot to conduct a seemingly successful communication in the form of normal dialogue flow, in which the human interlocutor may not even realize that his cues do not reach the addressee [6].

Taking into account the high communication skill of most people, it is usually quite impossible to understand when miscommunication really occurs without involving the testimonies of the participants themselves. Therefore, it was decided to conduct an experiment, the task of which was to make recordings and to get 'hot-pursuit' commenting on them by the respondent. This paper describes the methodology and some results of the experiment.

2   The Methodology of the Experiment

2.1   Longitudinal Recordings of Daily Interaction

For collecting audio data, the method of longitudinal recording during one day was proposed. This approach for gathering audio data was traditionally used in Japan in studies of "language life" [7]. It was called the method of "the 24 h survey", although in most of the cases the recordings were made from early morning till late evening [8].

Later, this approach was used for collecting data for the JST/CREST Expressive Speech Processing corpus, which was compiled "to illustrate the wide range of speaking-styles that can occur in ordinary everyday conversational situations" [9]. A similar methodology of longitudinal recordings had also been used earlier for collecting data for the demographically sampled part of the British National Corpus [10]. In this case "recruits who agreed to take part in the project were asked to record all of their conversations over a two- to seven-day period" [ibid.].

Recently, this method has been used for collecting data for the ORD corpus of spoken Russian, which is being created at St. Petersburg State University. The recordings are gathered from volunteers who agreed to spend a whole day "with a voice recorder at their neck" which records all their spoken discourse during that day – both in professional and personal settings [11, 12]. All participants are required to fill in a sociolinguistic questionnaire and to undergo psychological testing (Hans Eysenck test, FPI test and Cattell's test).

The ORD recordings provide unique data for diverse linguistic, sociolinguistic, [13], discourse and pragmatic studies [14–16]. However, when interpreting the obtained recordings from a pragmatic point of view, it is sometimes difficult for the researchers (as well as for anybody who did not take part in the conversation) to completely reconstruct the situation on the basis of the audio recording alone. The same is true for miscommunication. We had proposed a hypothesis that many ambiguities could be clarified through commenting and explanations by the participant himself (herself) in combination with a researcher's interview [17, 18]. This was the reason for conducting this experiment.

2.2   Selection of Respondents

The main criteria for selecting participants for this experiment was their willingness to participate in the recording, as well as their readiness to hold a frank discussion afterwards concerning the details and strategies of their spoken communication. Respondents had to be more than 18 years of age, have Russian as their native language, and be open to introspection. For the first experiment, we aimed at choosing a participant who would speak enough during the recording day, both in private settings (either with family members or with friends) and at work. The other important requirement was a full understanding of the aims of the experiment on the part of the respondent.

Finally, preference was given to the following candidate: a 40-year-old woman, with two higher education degrees, currently lecturing on the history of theatre and cinema at the university and also working part-time as an actress. It seemed to us that her experience on the theatrical stage and her skills in the emotional sphere would make it easier for her to look at her own everyday behaviour somehow 'from the outside', while her experience in teaching would help her to judge it quite objectively.

Naturally, participation in the experiment was anonymous. However, the respondent had to sign a consent form regarding participation in the project, which was prepared by the legal service of St. Petersburg University.

2.3   Pre-recording Instructions for the Respondent

Pre-recoding instructions for the respondent were much the same as in the regular procedure for ORD recordings (for details see [11, 12]). The participant was instructed to turn on the recorder in the morning and keep it operating until she went to bed in the evening. She was asked to choose a day for the recording when different communicative situations would be expected. Further, she should be ready to start analysing the recordings on the day following its implementation, and it was expected that the retrospective commenting procedure might take up to three days on average. In addition, the respondent was asked to note (at least mentally) the situations of miscommunication during the day of recording.

2.4   Post-recording and Pre-audition Instructions for the Respondent

The participant was told that the following points were of particular interest for the research:

- **Miscommunication situations** or any other types of communicative failure, e.g., when the recipient understood the speaker in a different way from what was intended by the speaker. Or when she did not understand anything at all, but pretended that she did.
- **The reasons that prompted a person to use this or that dialogue tactic** (e.g., *I am speaking this way because…*). This information is of particular interest for pragmatics studies. In addition, points concerning "recipient design" [1] should also be noted: *I adapt my speech behaviour, speaking with this interlocutor in such a way, because…*

- **Explanations of any communication situations that a stranger could not understand correctly**.

    Consequently, the task of the respondent was to indicate all such moments when listening to the recording and to comment on them.

    Furthermore, the researcher explained that her role as an interviewer was to get information from the respondent concerning what was unclear or incomprehensible from the audio recording. In particular:

- **Description/clarification of the context or word meanings**: *What were you talking about?* It is very often the case in private conversations that some words, names, notions and even the general idea of the dialogue may be difficult (or even impossible) to understand by researchers unfamiliar with the interlocutors' background. Thus, when the researcher does not understand something in the audition, he/she would ask the respondent to explain either the situational context or incomprehensible words, jargon, terms and proper names.

- **Attribution of emotions:** *What was your emotion here? What did you want to express?* Emotionality is inherent in everyday face-to-face interaction [19], but it is often difficult for the researcher, who does not know the respondents personally, to determine whether some phrase is neutral or "emotionally coloured". Therefore, it is valuable to have attributed samples of emotional speech, including the emotional meaning of some paralinguistic phenomena.

- **Pragmatic functions of individual speech acts**: *Why did you say it?* Of course, it is impossible to analyse everything in detail, but the important non-obvious moments should be explained.

- **Recognition of humour, irony, or language play.** These phenomena, too, are not always understandable a priori.

- **Decoding fragments of illegible or slurred speech.** Because they are made in natural conditions, the recordings often have fragments of simultaneous speech, background noise, or poor speech articulation, which makes them difficult to transcribe. Here, it is also possible to resort to the aid of the respondent.

2.5   The Retrospective Commenting Procedure

Both the respondent and the researcher-interviewer listen together to all the sound data that had been recorded shortly before. While listening, the respondent notes and comments on the events, referring to points of interest 1–3, mentioned above in Sect. 2.4. The researcher, on the other hand, monitors the general understandability of the communicative situation, as far as possible, and asks questions related to points 4–8 from Sect. 2.4. The procedure implies a discussion between the respondent and the researcher, which is also recorded on a voice recorder.

The method as such is not new. Some versions of it have been used in teacher training, second language acquisition and intercultural communication research. The general idea of such studies is to ask informants to comment on their own performances in audio or video recordings. It is meant to reveal people's meta-analytic understanding of their attitudes, feelings and interpretations regarding situations in which they have been involved.

Two terms are used to describe this kind of methodology: *stimulated recall* (e.g. [20, 21]) and *retrospective interview*. The latter term has also been applied to research where recordings are not used as a stimulus for reactions, but informants have been asked to describe their recollections of incidents or events they have experienced (see, e.g. [22, 23]). We prefer a more precise name of the method: *retrospective commenting* on one's speech.

In our case, the method is used in a different context from earlier. In research on communication, the method is seen as a complementary means of obtaining more detailed evidence on problems in understanding. The other methods and approaches used include a thorough scrutiny of the dialogue by applying conversational analysis and study of the backgrounds of the participants [24]. As a rule, the participants know each other well and the researchers also know them beforehand. In the case of ORD material, the situation is fundamentally different. During the day there are numerous encounters with various people, in which they talk about all kinds of themes depending on the changing circumstances. The heterogeneous nature of the material makes retrospective commenting a very demanding task for both the researcher and the respondent. The method is at the same time introspective and ethnographic.

3   Some Results of the Experiment

The experiment was held in St. Petersburg in late January, 2017. During her "day of speech", the respondent recorded about 14 h of audio data, of which the fragments containing speech are up to 10 h. They refer to her spoken communication with family members (daughter, mother, and husband), with colleagues (university lecturers), with her students, with partners (actors), with friends, acquaintances, health workers and with herself.

Despite the preliminary agreement, it turned out that the respondent was unable to undertake commenting the day after recording because of family matters. She was able to begin the procedure of retrospective commenting only three days later. However, it seems that this forced delay did not affect the results of the experiment: listening to the recording, the respondent seemed to be able to recall even minor details of the situation.

The joint work of the respondent and the researcher lasted three days, about 8 h each day. The first day was started with a discussion on the objectives of the experiment, followed by the rather detailed pilot commenting. As a result, only 2 h of recordings were analysed on the first day. On the second and third days, the work went faster.

When it became evident to both participants in the experiment that it would be impossible to finish commenting within the three days scheduled for the retrospective commenting if the discussion of each communicative episode continue to be so detailed, it was decided to speed up the process, skipping some fragments during which nothing special took place. This included, for example, most of the 12 examination answers of students taking an exam on the history of theatre.

In general, it turned out that the procedure of retrospective commenting is rather time consuming and needs constant attention from both the side of the respondent and the researcher.

Concerning the primary goal of the experiment, the results are as follows. First, the experiment showed that miscommunication is indead a rather frequent phenomenon in everyday face-to-face interaction.

It is interesting, but when asked about miscommunication episodes before listening to the recording, the respondent could only recall two situations that drew her attention. Both referred to rather difficult conflict situations, in which there was internal opposition between the respondent and her interlocutors that had to be resolved during the conversation (and it really was). The first one took place in a discussion with the doctor of her daughter, and the second occurred in the university with one of her students that had earlier behaved strangely and it felt as though he did not respect his lecturers. The second case relates to miscommunication *in the past* resulting in current tension in relationships.

However, in the process of audition the most frequent types of miscommunication appeared to be the following: (1) *talking past each other*, which frequently happens in domestic conversations, and (2) *not listening to the interlocutor* because of fatigue, lack of interest and some other reasons. These results were fairly predictable [5].

Our respondent seemed to feel quite free to disclose her communication strategies. For example, she explained that when speaking with a doctor, in order to obtain a medical certificate, she pretend to behave like a shy and timid person. Later, she commented on her conversation with her boss thus: *Here I am flattering my directress*. And so on.

Her other comments are also very valuable. Thus, she could explain not only the reasons for her speaking behaviour, but also for many paralinguistic phenomena, and even for singing at home to herself (e.g., *Here, I am singing this song because I'm thinking about my mother – it is "her tune"*).

In most cases, the respondent easily described the emotions of her speech, although sometimes it was difficult for her to find the proper words. It should be mentioned that after the initial training on the first hours of recordings, the researcher-interviewer became able to better understand the emotions and intentions of the respondent's speech. Thus, on the second day of commenting, instead of questions such as *What did you want to express?,* the researcher was able to make his own suggestions, such as: *It sounds like irony, does it not?* In many cases the respondent agreed with the researcher (*Yes, it's irony*), but could also correct (*I would say it's sarcasm*).

The quality of the recording was good enough, so there were not many cases of the unintelligible speech. However, it turned out that there were some fragments when the respondent herself was unable to transcribe her own speech, even of fine quality.

4   Conclusion

The methodology of retrospective commenting was proposed in order to reveal miscommunication situations in everyday dialogues and to clarify some other non-obvious aspects of real communication situations. Besides miscommunication situations or any other types of communicative failure, the following points were of particular interest for the research: the reasons that prompted a person to use this or that dialogue tactic; explanations of any communication situations that a stranger could not understand

correctly; description/clarification of the context or word meaning; attribution of emotions; recognition of humour, irony, or language play; revealing pragmatic functions of individual speech acts; and decoding fragments of illegible or slurred speech.

The experiment on retrospective commenting was successfully conducted and showed that miscommunication is indead a rather frequent phenomenon in everyday face-to-face interaction. The most frequent types of miscommunication appeared to be the following: (1) talking past each other, which frequently happens in domestic conversations, and (2) not listening to the interlocutor because of fatigue, lack of interest and some other reasons. The respondent seemed to feel quite free to disclose her communication strategies, easily described the emotions of her speech and in most cases she could freely answer questions posed by the researcher-interviewer.

The experiment showed that the retrospective commenting method could significantly broaden the opportunities of linguistic and pragmatic research based on longitudinal recordings. Moreover, this method can be applied not only to the analysis of longitudinal recordings, but also to all kinds of research on authentic human speech and spoken interaction.

Along with the apparent advantages, this approach also has weaknesses, the major one of which is that, like many qualitative investigations, it is rather time consuming and resource intensive. Despite this drawback, the method of retrospective commenting seems worthwhile and promising, because there are no other possibilities for understanding the nuances of spoken conversations between people whom the researchers do not know personally. For qualitative pragmatic research, it seems worth spending time with respondents in order to clarify the details of interaction, instead of trying to imagine what happened.

Our experience also showed that commenting on one's own linguistic behaviour is a very demanding task. It is evident that not all people are ready and competent to analyse their own actions during a speech day.

Even if a person agrees to an experiment, the researchers cannot be entirely confident that he or she is completely sincere when interpreting the discussed situation with the interviewer (possibly embellishing some details of conversation or concealing others). And even if the respondent is trying to be sincere, one cannot be sure that he or she is not mistaken in interpreting the behaviour of his/her interlocutors. However, a 'sincere informant' can be expected to correctly identify at least his/her own emotions and behaviour strategies.

Our next task is to expand the research and to prove to what extent the experiment is reproducible with participants of diverse social groups and professions. Further, we plan to carry out similar experiments not only on Russian material, but also on other languages. Our main goal is to get a deeper and more reliable understanding of what ultimately takes place in human interaction. Social life in modern society is largely determined by communication between people. In this regard, it is extremely important to understand in more detail the mechanisms that rule and influence its course.

(Speech Corpus of Russian Everyday Communication "One Speaker's Day") and # 12–04–12017 (Information System of Communication Scenarios of Russian Spontaneous Speech), the Russian Ministry of Education project Sound Form of Russian Grammar System in Communicative and Informational Approach. Significant extension of the corpus was achieved in the framework of the project "Everyday Russian Language in Different Social Groups" supported by the Russian Scientific Foundation, project # 14–18–02070.

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