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Alaric KOHLER
Université de Neuchâtel (Suisse)

Elements of Natural Logic for the Study of Unnoticed Misunderstanding in a Communicative Approach to Learning

Abstract: This paper presents a methodology building on Grize's Natural Logic to study unnoticed misunderstanding in teaching and learning communication. The study of unnoticed misunderstanding is important for education, as misunderstanding has been pointed out as a candidate mechanism for the reproduction of social inequalities at school. It is also a challenge, because most linguistic approaches rely on the interlocutors' attempts to repair a specific communicative failure for identifying and describing misunderstanding. Additionally, the study of misunderstanding at school requires not only a discursive but also a cognitive approach to *understanding*, in order to relate the description of misunderstanding to the school subject matter. We present one example of misunderstanding at college, in physics, to illustrate the methodology. I argue that Natural Logic provides a useful theory for relating a communicative level of analysis with a semiotic level, allowing a scientific study of interlocutors' interpretation *here and now*.

Keywords: Natural Logic, unnoticed misunderstandings, learning communication, communicative faillure.

1. Introduction

Misunderstanding is part of the everyday life, and has been studied long ago among the research topics of linguistics, pragmatics, psycholinguistics and other studies of language and communication, notably in relation to ambiguity (Caron 1983). Misunderstanding, however, is also a common sense notion. Any attempt to define it clearly is confronted with the difficulty to set criteria delimiting misunderstanding from other forms of ambiguity. Verdonik (2010) for instance reports some

borderline examples of misunderstanding. Misunderstanding is also difficult to define since communication is never leading to a perfectly shared understanding. Sayer (2013), for instance, tries to specify the relations between misunderstanding and mutual comprehension.

Bazzanella and Damiano (1999) have studied the way interlocutors handle moments of misunderstanding in their conversation, and distinguish *non- understanding* from *misunderstanding*, and *understanding* from *coming to understanding*, i.e. building a sufficiently common understanding. They insist on the importance to approach *understanding* or *coming to understanding* as a continuum rather than something that is or is not. In this approach, moments of misunderstanding are considered as participating to the construction of mutual understanding in communication.

Linell (1995) goes further in the distinction between various types of mismatches in communication, specifying notably *mishearing*, *misunderstanding*, *misinterpreting*, and *miscommunication*. Linell also recalls Rommetveit's standpoint that "understanding is necessarily partial and fragmentary" (Linell 1995, 181), even when understanding is a shared goal for the interlocutors. Linell concludes with: "Miscommunication and misunderstanding are difficult to identify, describe and explain" (Linell 1995, 206).

2. Identifying and describing misunderstanding

Generally, misunderstanding is identified from the presence of a reparation (Weigand 1999; Dascal 1999). In this sense, *understanding* is not studied as a cognitive process, but merely as the absence of evidence of communicative failures. There are a few exceptions in this way of proceeding, as for example the work of Trognon and Saint-Dizier (1999), aiming at reconstructing the cognitive content of communication. Still, even in this case, researchers rely on the reparation of one of the interlocutors appearing later in the conversation to analyze a specific misunderstanding.

Recent research has shown that the inconsistencies in communication are often overlooked by the participants (Galantucci and Roberts 2014). This result suggests that analyses based on explicit repair only fail to identify an important part of actual misunderstandings, remaining unnoticed by the interlocutors. Any attempt to identify, describe and analyze unnoticed misunderstanding is confronted to two important challenges. The first challenge is to develop a methodology

allowing to state that there is misunderstanding in a given conversation or discourse from a *third person point of view.* How can the analyst reconstruct the meaning of the conversation or discourse for the various interlocutors in such a ways that it becomes possible to show discrepancies between the meaning of one compared to the other without relying on explicit statement about these discrepancies made by the interlocutors themselves?

The second challenge is to provide a definition of misunderstanding in order to set a landmark between the ever achieved complete mutual understanding on one side, and the obvious mismatches that make a conversation fail altogether on the other side. This last problem is particularly difficult: which *degree* of mutual understanding can the analyst consider minimal, without relying on the interlocutors' noticing and repairing the gap between their interpretations?

Both methodological challenges require a method to study *interpretation* as a cognitive process and result. This method should not only provide a list of various possible interpretations of a given statement or keys to secret meaning, such as the traditional *heuristics*, but should provide a scientific method to make hypothesis about what specific interlocutors *mean* at a given moment of a particular communicative process.

3. Studying unnoticed misunderstandings in teaching and learning communication

Developing a method of analysis of unnoticed misunderstanding is particular important for studying the teaching and learning processes. Research in sociology (Bourdieu et al. 1965; Bourdieu and Passeron 1970; Passeron 1991; Bourdieu et al. 1994; Bautier and Rochex, 1997; Bautier and Rayou 2009) has pointed out misunderstanding as a candidate explanation for the reproduction of inequalities, which is a general mechanism of our Western school systems. For these authors, the differences between social classes in terms of communicative skills, interpretation frame, pragmatic expectations and other features of the social interactions taking place in a school context, could be a major reason for the children originating from lower social classes and migration to have overall poorer school performances.

To put this hypothesis into further investigation, micro-level analysis of the effect of misunderstanding on school performance are needed. Several researchers (Grossen 1988; Perret-Clermont and Nicolet 1988; Schubauer-Leoni et al. 1992; Breux and Perret-Clermont 2014) have

shown with micro-level analysis how influential communication processes can be on children's performance in laboratory settings. For investigating more precisely the role played by *misunderstanding* in the performance at school, it is necessary to develop a method for the identification and description of misunderstanding even when they remain unnoticed, such as they appear in the communication produced in every day school practice. Such misunderstanding may be more influential on learning outcomes than misunderstanding leading to communicative repair. Yet, the study of misunderstanding in relation to learning requires a cognitive approach to understanding, in order to provide a description of specific misunderstanding related to the subject matter and taught knowledge.

My standpoint in this presentation is that Natural Logic can contribute to solve these methodological challenges. Campos (2011; 2014) shows how Natural Logic is a theory and methodology relating discourse, meaning, and cognitive psychology, in particular the piagetian *genetic epistemology*. Natural Logic can be used for what Piaget (1972) calls a *transdisciplinary approach*, articulating the cognitive dimension of communication with the linguistic and discursive dimension involved in the construction of meaning, and the pragmatic dimension studying interlocutory dynamics of social interactions.

4. Elements of Natural Logic to contribute to the study of unnoticed misunderstanding

With the example presented below, I will try to show how Natural Logic can contribute to studying misunderstanding as simultaneously discrepancies in the meaning (the discursive), discrepancies in the understanding of a learning issue (the cognitive), and as a process of collective construction taking place here and now and resulting from a situated social interaction and specific interlocutory dynamics (the pragmatic and the social).

Grize's theory of communication and method of analysis of logico-discursive operations (Grize 1996) are made for articulating the discursive and the cognitive. The definition of a schematization as a *discursive representation* is emblematic of this point: *representation* refers to a cognitive content, and the adjective *discursive* stresses the fact that such a representation is not a *mental image* – to recall Piaget's words – but *a discourse* set in an interlocutory situation. If all discourse cannot be taken for a corresponding individual thought, Grize (1996) stresses the fact there are undoubtedly thinking processes involved in the activity of

producing discourse and of communicating. I will try to show that the articulation of these two dimensions, cognitive and discursive, can contribute to an approach of unnoticed misunderstanding in teaching and learning communication, because both the cognitive content related to the taught knowledge, and the discourse used for the analysis are related with a common theoretical framework.

Besides, two levels of analysis must be connected: the communicative level, including discourse production and interlocutory dynamics, and the semiotic or operational level, at which the interpretation can be studied as a cognitive operation shaping discourse.

The communicative level will be analyzed as situated in a particular interlocutory situation and as the progressive co-construction of a schematization by the various participants in the conversation. Grize's theory of communication (Grize 1996) is particularly useful for bridging the cognitive and discursive together with the concept of *schematization.* In addition to Grize's theory of communication, the micro-genetic analysis of the co-construction of a shared schematization through school conversation[1] requires elements of conversational pragmatics (Ghiglione and Trognon 1993), notably to identify conversational recall and to describe their function within a particular conversation. From the analysis of the usage and the recall of elements of discourse by the interlocutors, we can build hypotheses about the interpretations and the semiotic operations performed by the interlocutors. In other words, the analysis of the interlocutory dynamics of a particular situated conversation should allow hypotheses about the participants particular logico-discursive operations performed while co-constructing the schematization, informing the researcher about the interlocutors' particular interpretation at specific moments. Comparing these interpretations may lead to identify and describe unnoticed misunderstandings.

The interlocutory dynamics such as it is studied in pragmatics is probably the less developed aspect of Grize's work on communication. Still, Grize (1996) insists in the presentation of his theory of communication on the fact that any schematization is set within a *situation of interlocution.* He devotes one of the five postulates for his theory to the *dialogicality* of communication. The dialogical approach of

[1] Grize's example of analysis are mainly of mono-logical all-made discourse, while the data analyzed for studying misunderstanding are progressively produced through oral or written dialogues. Their analyses thus requires to take the interlocutory dynamics and the pragmatics into account, as well as to consider the objective of the interlocutors to reach a shared understanding throughout the process.

communication (Grossen 2010) considers the meaning constructed through communication as a collective activity and production[2]. Discourse itself is related to this collective dimension, notably by the Baktinian concept of *heteroglosia*: The presence of *voices* from others even within the discourse of a single locutor. Without considering the communication as dialogical, the schematization in Grize's theory would be understood as the (more or less effective) discursive production of individual thought. The cognitive would be considered as either antecedent or subsequent to the communicative activity: A learner, for instance, would be considered *putting into words* his own representation into a schematization, or *memorizing* a discourse heard or produced. With such a model, the actual construction of knowledge by the learner still remains a mystery, or is simply represented by a more or less faithful exteriorisation or interiorisation of a discourse into an individual representation. The interlocutory dynamics stressed by pragmatics, discursive psychology and dialogical approaches, is necessary to represent the making of meaning as a situated activity, and the articulation between the individual and the collective in the logico-discursive production of a schematization, in order to analyze how one interlocutor changes the schematization while it is being constructed, providing a genetic approach to the articulation between discourse and thought. The schematization is not merely the more or less faithful exteriorisation of an individual thought: It is also the process within which the cognitive content is collectively constructed, i.e co-constructed. Grize (1996) defines the schematization as both a process and a product: In a learning activity, the co-construction of a schematization can therefore be considered – at least sometimes and partially – the activity through which learners are constructing their knowledge, through which they are making meaning. The dialogicality of Grize's theory of communication allows us to consider both the process and product as collective: A schematization is a process of co-construction, and a collective produced discursive representation. Hence, the interlocutory dynamics is participating in the construction of knowledge, i.e. in the collective processes of teaching and learning. The description of the schematization represents – as an analytical hypothesis – the meaning being constructed by the interlocutors at a given moment in their specific situation of interlocution.

[2] I am stressing only one aspect of the dialogical approach here, and at a very general level, which is common to the various trends within the dialogical approach despite the diversity between the various authors. For a more precise discussion of the dialogical approach, please refer to Grossen (2010).

For the semiotic level of analysis, the *logico-discursive operations* defined in Natural Logic can be used to describe the cognitive process of the interlocutors using discourse to make meaning, addressing the discourse previously communicated. Hence, Natural Logic articulates the communicative level with the semiotic (meaning making and interpretation), through an approach of discourse as both the transformation by the logico-discursive operations performed by the locutors in the situation, and the mean by which such transformation is achieved. Consequently, the task of the analyst is not to infer invisible cognitive processes of the subject from any behaviour, but consists rather in the detailed step-by-step description of the interlocutors' operations on the discourse with discursive means, the transformation of the schematization throughout the conversational dynamics that is directly observed. The analyst can make hypothesis about the cognitive operations of the interlocutors, because the studied cognitive operations are discursive. Obviously, only a part of the cognitive processes involved in interpretation can be analyzed this way – the part made visible by acting on the discourse and through discourse – still, it becomes possible to make hypotheses about the specific interpretation (or understanding) of a particular interlocutor at a chosen moment of the conversation in a given interlocutory situation.

Thus, the *logico-discursive operations* informs us about the *understanding* of the locutors in a way that can be related to teaching and learning, the concept of *operation* used by Grize referring directly to Piaget's genetic epistemology, it is a form of knowledge. Hence, it becomes possible, in certain cases, to describe the interpretation of specific locutors at a given moment of the conversation, through the way locutors act on the discourse with logico-discursive operations.

5. Example of misunderstanding analysis

A misunderstanding analyzed with the elements of Natural Logic presented above is briefly presented here.

5.1 The situation of interlocution

The data presented in the example have been collected during a research on misunderstanding in physics teaching and learning (Kohler, to appear). For the purpose of this paper, the description of research, data collection, and context are reduced to the most minimal information, and the emphasis is made on the procedure of analysis. At the beginning of the

school year, second grade college students were asked to fill a questionnaire by their teacher. The teacher's pedagogical objective was to collect the "naive" answers of the students before the beginning of the instruction on the topic. The students had not yet started to study mechanics, namely the three Newton's laws. Yet, they had a previous course on kinematics and were therefore not full beginners in physics. In this context the questionnaire can be considered as a diagnostic evaluation of student's learning: The teacher intended to test the students on problem-solving activities in order to interpret if and how they were making use of their knowledge of physics.

A written paper-and-pencil questionnaire was provided to the students with various questions on the subject of kinematics and mechanics known in literature to be problematic. The students had to reply individually without any instructional support or resources, providing the best justification to support their answers. As it is often the case in such school practice, the written replies of the students are generally brief, and as such they constitute a real challenge of interpretation to the teacher, in particular for the evaluation of students' knowledge. In the analysis presented below, a few answers to the first item of the questionnaire will be presented. The question submitted to the students is the following (see figure 1).

Here is a tennis ball and a ball of pétanque (with identical shape), which one will touch the ground first if I let them fall from the same height?
[translated from*:* "Voici une balle de tennis et une boule de pétanque (de forme identique), laquelle touchera le sol en premier si je les lâche de la même hauteur ?"]

Figure 1. The question addressed to the student in the first item of the questionnaire

5.2 Setting the approach

Investigating misunderstanding in this situation requires to approach teaching as an overall process of communication, aiming at mutual understanding. Are there any misunderstanding in this situation? To reply to the question, several analytical decisions must be taken into account: Who are the interlocutors? How do we delimit a schematization and compare the participation of various interlocutors? What are the traces of discourse that can be used to reconstruct the schematization?

The definition of the interlocutors in a school context is not trivial. On one side there is the teacher, of course, but a closer look at the communication in a school context immediately stresses the *heteroglosia* of the teacher's discourse : Not only is he sometimes repeating what he red or heard from others, but also he relies on books, exercise sheet and other devices that often have different authors. Hence, considering the overall communication of "teaching physics", the interlocutor on the "teacher's side" consists in the teacher's discourse and any other institutional discourses found in the program, exercise sheet, tests, etc., that are integrated into the college definition of what is the physics to be taught (for a more precise discussion of the various levels of knowledge encountered in the teaching process, see Tiberghien 1997).

On the students' side of the communication, the definition of the interlocutors is notably a matter of grouping: Often teachers consider the whole class as a single interlocutor, which is grounded on a representation of the students as the mere recipient of the communication. As a researcher, I cannot endorse this perspective without verifying, at least, the coherence of the class as an interlocutor: If the teacher's side of the communication can be enriched by the discourse of a colleague about physics, documents and books, it is because there is a certain level of effective coherence between all these elements[3]. Such coherence cannot be taken for granted for the students, as a group of interlocutors, and must be verified. Most likely, when reconstructing the schematization on the students' side, several "groups" can emerge, constituted of a few students or sometimes even only one, depending on the part they take in constructing the schematization. Some students co-construct – typically during group work – a schematization they have in common, at a given moment, while

[3] The effective coherence is probably overestimated, and it would be an interesting topic of research, within a communicative approach of teaching and learning, to investigate in detail such a coherence between discourse, school material and ressources. Yet, a further discussion of this problem would lead us away from our main concern in this paper, which is to show a method of analysis.

later or within a different situation of interlocution (individual work, e.g.) the schematization is shared by a different set of individuals.

As the individual representations is not the focus in this approach – the aim is not to state which student has learned which content – the analyst can define a schematization around a question, problem or an element of knowledge and compare the description at various moment of the co-construction of the schematization throughout the teaching sequence and/or between various interlocutors or groups of interlocutors at a given moment in the communicative process. Each of these moment should be selected according to element of the situation of interlocution, such as the change of activity (students move from oral discussion to the writing of an answer, the bell rings for the end of a lesson, etc.) or of interlocutors (students moving from an individual phase of work to group work, the teacher joins a group conversation, etc.).

In the situation analyzed here, the schematization is delimited as the answers to the first item of the questionnaire (see figure 1), and the comparison is made between the written replies of three students and the later teacher's discourse, when he presents his own answer to the same question.

5.3 The misunderstanding

Across the 24 students participating in the research, three answers have been selected for their similarity. This is where the concepts of Natural Logic are needed, firstly to justify the analyst's decision to consider that these three students share a common meaning, and secondly to describe their contribution to a co-constructed schematization and compare it to the teacher's contribution. Here the written replies to the first item of the questionnaire of Henriette, Cassandra and Ophélie are reproduced and translated into English:

Henriette: "The ball of pétanque because, even if it is attracted by the same force to the ground, its mass being bigger it will fall quicker"[4].

Cassandra: "Both ball will touch the ground at the same time because the force of gravity is the same"[5].

Ophélie: "The balls will touch at the same time the ground.

[4] Original version: "la boule de pétanque car, bien qu'elle soit attirée par la même force vers le sol, sa masse étant plus grande elle tombera plus vite".

[5] Original version: "les deux balles toucheront le sol en même temps car la force de gravité est la même".

Because the same force is exerted on them![6]".

Despite providing a different answer to the problem, these three replies define a class-object that could be common: {same force; force of gravity}. This is the first observation, leading the analyst to take as hypothesis that the three students construct a similar meaning, a similar class-object. In relation to the taught knowledge, there could be a misunderstanding about this class-object. To test this hypothesis, the decision to put {same force} and {same force of gravity} together in a same class-object must be justified, and then compared to any potentially similar class-object in the teacher's discourse or documents.

Henriette uses the class-object {same force} at the second place of the predicate ±attract to the ground (•,•) (French: "±attirer vers le sol (•,•)"), which allows us to consider it is indeed denoting the force of gravity, and not another force. Cassandra uses "force of gravity" to which she later refers as "the same", which can be joined in a common class-object {force of gravity, same [force][7]}. In this way, the more explicit use of the class-object made by Cassandra provides a clue to the analyst in order to interpret Henriette's and Ophélie's replies – an interpretation later tested within the enunciative context. Ophélie uses {same force} at the first place of the predicate ±be exerted on (•, •), the second place ("them") referring to the two balls. This class-object could denote any force exerted on the two balls, yet the most likely interpretation when relating the justification to the answer ("The balls will touch at the same time the ground") is that it denotes the force of gravity. Considering an identical force of friction would not lead to any answer, and the use of the singular makes it unlikely that it is a reference to the sum of forces, which would nevertheless be a coherent alternative with the provided answer.

So far, the analysis only shows that the three students use a common class-object in their replies. A look at the interlocutory dynamics leads us to hypothesize a similar operation of semantisation (operation α) for these pupils, rather than a recall (operation θ) of the students' discourse, as the verbatim presented above are simultaneous written answers to the same question. Operations of semantisation inform the analyst about the understanding of the interlocutors, and more particularly to this analysis, it inform us about the interpretation of a specific question

[6] Original version: "les balles toucheront en même temps le sol. Car la même force est exécutée sur eux !".

[7] The square brackets "[]" are used for unambiguous reconstructed discourse, that remain implicit in the original discourse: In this case, "the" has been replaced by [force] on the hypothese that "the" ("la" in french) takes up "force" (feminin in french) again.

addressed by the teacher (item 1). The students' operation can be written:

α |sameness| → {same force; same force of gravity}

The next step is to check if this particular class-object can be found in the schematization on the teacher's side, and examine if it is identical in his discourse, in order to decide if the logico-discursive operation may be considered a recall (operation θ) of a teacher's class-object. From this analysis the class-object will be considered either an element of the physics that the students learned or, to the contrary, a misunderstanding at a given moment of the conversation.

From the oral discourse recording, and documents at disposal, no identical class-object could be found. Still, similar class-objected are used by the teacher in his discourse and in the documents. On the one hand, the class-object {force of gravity} is obviously often used, yet without any association with {same}. On the other hand, there is a repeating of {same} in the teacher's discourse for this schematization, in particular in his oral discourse, most often as {same time} in "at the same time". It is quite undecidable wherever {same time} and {same force, same force of gravity} are consistent together, as the first one provide the answer to the question (the balls touch the ground at the same time) while the second is about the explanation or justification of this answer.

There is another repeated use of {same} in the teacher's discourse, about {g}. {g} denotes the specific constant acceleration of the falling objects at the surface of the Earth, when the only force taken in consideration is gravitation. It results from the calculation where the force of gravity ("F_G") is divided by the mass ("m") in the second law of Newton (F = m a). "F" is the force of gravitation, while "a" is the acceleration. The specific resulting from the calculation of $a = F_G/m$, is a constant on the surface of the Earth, named "g"[8] by the teacher. The teacher repeatedly associate {same} with {g} in his discourse. One of the main resources document for students states: "the acceleration is the same for all bodies falling freely, in a given place"[9].

Now, the analysis allows us to present, side-by-side, the class-object used by the three students and the corresponding class-object used in the teacher's discourse. The discrepancy between the two class-object can be considered a misunderstanding, because on the communicative level of analysis both class-objects are used for the same interlocutory

[8] It is a common practice in physics to designate a constant variable with a small letter.

[9] Original: "l'accélération est la même pour tous les corps en chute libre, en un lieu donné".

function (i.e. to answer the first question of the questionnaire), and yet both class-objects are differently defined on the semiotic level of analysis, which supports the hypothesis that these three students have interpreted the taught knowledge differently from the teacher. The correspondence between the two objects of discourse is established from the analysis of the situation of interlocution and the conversational dynamics – at the communicative level – showing that both the class-object found in the students' discourse and the class-object found in the teacher's discourse are denoting "something being constant" and using this primitive notion |constant| for justifying the answer to the question. The difference between the two objects of discourse is hypothesized from the method of analysis of logico-discursive objects and operations developed in Natural Logic, and can be written:

Teacher's operation: α |constant| → {same g; same acceleration for all bodies falling freely}.

Corresponding students' operation: α |constant| → {same force; force of gravity}.

The two class-object presented here describe the misunderstanding between the teacher and Henriette, Cassandra and Ophélie at a given moment of the teaching and learning communicative process. It provides us with a precise description of what the misunderstanding is about, in reference to the taught knowledge. It could be used for the teacher's professional knowledge as a common pitfall when communicating the constant value of {g; acceleration for all bodies falling freely}. For the students, the description of the misunderstanding could be used to overcome an oversimplified explanation, that does not distinguish between "g" and "G", between the acceleration of objects falling freely at the surface of the Earth and the gravitational force.

6. Conclusion et perspectives

For studying misunderstanding in learning and teaching, the first concern is not to establish a typology. Indeed, before investigating wherever the misunderstanding of "g" is *mishearing*, *misinterpreting* or any other type, the challenge is to identify the discrepancies in the interpretation made by the interlocutors throughout the conversation, and to describe such discrepancies in a way that can be related to teaching and learning. This is the task for which Natural Logic can be useful. The precise description of a class-object made with Natural Logic within a co-constructed schematization, delimited pragmatically as the traditional

"question and reply" communication in school, describes a misunderstanding between the teacher and some of his students, which remained unnoticed.

The second challenge stressed earlier in the paper, i.e. which degree of mutual understanding can be considered minimal in order to decide whether there is a misunderstanding or not, find no general answer from the example presented here. In this example, it is in relation to the knowledge taught by the teacher and to what is generally considered acceptable in newtonian physics that I decided to consider that the difference between the class-object found in the discourse of the three students and the corresponding class-object in the discourse of the teacher were sufficiently different in this situation. The minimal mutual understanding depends on the type of communication, on the context and expectations of the interlocutors, as Linell (1995) pointed out. The expectation on mutual understanding in a class of physics at College are rather high, and can be partly reconstructed from the expected performance of students and the evaluation practices.

The example presented in this paper cannot pretend to provide a *definition* of misunderstanding. Yet, it presents an operational approach to study misunderstanding articulating the cognitive, the discursive and the conversational dynamics. In this example, the misunderstanding is operationalized as a discrepancy that is *important enough* in the particular situation of interlocution under study, and which appears in the use of logico-discursive objects and/or logico-discursive operations produced for the same interlocutory function by several interlocutors co-constructing a shared schematization.

The example presented is in several ways specific to the learning and teaching communication, notably for the high expectations on mutual understanding, yet it may be adapted to investigate misunderstanding unnoticed in the discourse of the interlocutors in other domains of communication, such as in the c*ontemporary public discourse*, the theme of this Communalis conference.

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