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Interpreting conversations in pathological contexts

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Schizophrenia is well-known among mental illnesses for the severity of the thought disorders it involves, and for their widespread and spectacular manifestations: from deviant social behavior to delusion, not to mention affective and sensitive distortions. The goal of our interdisciplinary work is to (i) analyze linguistic troubles in conversational contexts in which one of the speakers is schizophrenic, (ii) construe how the concept of rationality and logicality may apply to them, and (iii) propose a formal representation about this specific manifestation. Our data are chosen in transcriptions of real conversations between a psychologist and a schizophrenic patient. Data collection and selection relied on theoretical hypotheses from psychiatry and psychopathology. Confronted with such a pathological conversation, any ordinary speaker intuitively feels that there are some incoherencies and discontinuities. Since speech incongruities raise the issue of the nature of rationality and its connections with logicality, the interpretative part of our research is naturally related to fields such as philosophy, philosophy of mind and philosophy of logic. The initial corpus was picked up from conversations with thirty patients and revealed specific linguistic discontinuities for the paranoid schizophrenic sub-class on which excerpts we focused on. The formal framework used in this research is that of Segmented Discourse Representation Theory (SDRT) [1]. SDRT combines two levels of analysis in order to account for the interpretive process at work in conversations: semantic content and conversational pragmatics. The first is analyzed via SDRS inspired by the DRS which is a syntactic construction updated by conversational flow [3]. Conversation also implies pragmatic relations between speech acts, the complexity of which gives rise to a hierarchical structure first described in linguistics in the 1980s [2]. The assumption we make is that schizophrenics do not always conform to the rules that prevail in this double construction, which explains the phenomenon of conversational failure. Even if we focus on SDRT, we assume that propositions are DRSs. However, we also introduce themes, which should be supported by the DRSs. Themes are coherent sets of DRSs. We assume that a DRS cannot simultaneously belong to two different themes, unless one is included in the other one. Exchanges are excerpts from larger exchanges, whose starting point is a particular semantically vacuous node which can be used to link to a new proposition in the pragmatic representation. Analyses of excerpts lead us to highlight two transgressions of the standard SDRT rules: breaks of the right frontier and rises through the structure without any acceptable low fence (inconsistency of representation). For the second phenomenon, it is common to identify items that are used both to close a part and to open a new one. But the schizophrenic sometimes does not respect this dual effect and creates an incomplete representation that is not interpretable in a usual way.

The main result of the research is that pathological uses of language play with formal hypotheses which validate them. In the other side, the formal semantics-pragmatic representation focuses on a specific use of language by a given pathology. Our empirical research leads us to an epistemological reflection about the dual role of interpretation in formal analyses of conversations (vs. monologues). Indeed, in order to analyze pathological conversations two kinds of interpretations were to be taken into consideration: (1) the basic level of the interpretation by the speakers themselves, who must interpret the successive building speech acts, and (2) the theoretical level, where the scientists have to select the relevant data and provide an explanation. However, the analyses were made according to theoretical choices closely related to interpretive perspectives of the speakers. The elementary level shows a duality of views (the schizophrenic's one, and the psychologist'one), which expresses a differential sensitivity to incongruities. Accounting for this duality led us to a distinction between two representations of conversations, each of them depending on what counts as a priority: pragmatic correction for ordinary speakers, and logicity for extraordinary speakers. The speakers' rationality thus appears as strongly dependent of the interpretative perspective.

1 References

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