

Understanding observable order for software design: using the tools and techniques of conversation analysis

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Abstract

When designing software for a community of skilled practitioners it is important to understand their requirements for new technological systems. This understanding must inevitably be based upon the ways in which the members of a community themselves organise work activities, communication and collaboration. In the domain of Requirements Engineering we uncover the organisation of work through sociologically-informed methods, particularly ethnomethodology, conversation analysis and interaction analysis.

For this poster, we will present the qualitative methods used to understand conversational data within its *context* of production. Conversation analysis is used to analyse the sequential organisation of talk in order to reveal the ways in which *mutual intelligibility* is achieved amongst the participants of a setting. Through an analysis of reflexively emerging interaction we not only analyse the sounds produced by co-conversationalists as publicly observable/hearable phenomena but also the *language games* that link the rules and meaning of language to its situated use and the mechanics of *embodied interaction* that convey non-verbal or paralinguistic information.

Informed by these qualitative approaches software requirements are identified and proof-of-concept prototypes examined for how well technologies may be aligned with the endogenous organisation of work within a community of practice. Examples of detailed naturalistic studies of work and interaction will be presented in the poster from domains as diverse as clinical medicine, stock market trading and palaeography.