ANALYSIS OF THE TYPES OF PAUSES IN CSCL CHAT CONVERSATIONS

Sibel DENISLEAM (MOLOMER)¹, Stefan TRAUSAN-MATU²

Abstract. The paper presents a research that is focused on considering the role of pauses in Computer-Supported Collaborative Learning chats. Several goals are pursuit, in the direction of analyzing cognitive and social aspects related to pauses in chats, and to identify criteria based on them for grading students. A classification of pauses in chats is introduced starting from their duration and adjacency pairs. Three chats were manually annotated and statistics were computed. Grading rules for students are proposed based on the types of pauses.

Keywords: Chat, Dialogue analysis, Natural Language Processing, Pause, Computer-Supported Collaborative Learning

1. Introduction

Exchanging information through dialogue is done at an ever accelerated pace in the daily life of this new century. Moreover, the road from simple to complex conversations has been opened in recent years due to the affordance of debates in the Web2.0 (Social Web) collaborative environments such as instant messenger (chat).

Some main factors, which give contour to the exchange of information within the chat collaborative communication are the real time in which the conversation of the participants takes place, the rhythm and pauses in the flow of discussion.

The main element of communication that underlies the chat type technology within the collaborative environment is to ensure the exchange of information between participants, based on the sequence of the utterances that in turn build the communication act [1]. Starting from the general advantages of chat conversations in the direction of encouraging collaboration we can emphasize the advantage of using chat in the educational area, giving to both students and teachers the possibility of a much faster learning and assessment.

Chat conversations are a major ingredient of Computer Supported Collaborative Learning (CSCL). Several systems have been developed for providing analyses of interactions between participants, for example: Polyphony [2], PolyCAFe [3],

¹PhD student, Department of Computer Science, University "Politehnica" of Bucharest, Romania, (d_sybelle@yahoo.com).

²Prof., PhD, Faculty of Automatic Control and Computers, University Politehnica of Bucharest, Senior Researcher, Research Institute for Artificial Intelligence of the Romanian Academy, full member of the Academy of Romanian Scientists (stefan.trausan@cs.pub.ro).