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Abstract.

1 Introduction

The notion of dominance as presented in the literature is wide. It includes the dominance as a trait of personality, a social role in the society or a dimension of interpersonal relationship. (Omark,1980) defines the dominance more as social phenomenon that involves inter-individual dynamics rather than a simple description of individual quality. In this study, we present a dominance as interpersonal relationship that affects the behavior of interlocutors in social conversation.

Social dialogue can be presented as process of opinions and preferences exchange about a subject of discussion [1]. This exchange of personal preferences can leads interlocutors to conduct a cooperative negotiation especially if at the end they have to take a decision about a goal to satisfy together. For example, find a restaurant. Prior works already proved that social aspect can have an important impact on the way in which interlocutors develop their strategies of negotiation. This notion constitute our interest of research: we aim to develop a conversational agent that can perceive and understand its relationship with the user which allow him to adapt his strategy of negotiation in the conversation in order to better meet its goals. To this end, we first provide an outline on the social aspect of dominance-submissiveness that we focus on, and we discuss the features of dominant behavior in the context of cooperative negotiation. Then, we propose the objective of this investigation and our hypothesis regarding the effect of dominance in cooperative negotiation, and report our analysis.

2 Features of dominance

There a wide range of research that investigate on the definition of dominance as dimension of interpersonal relationships. This works converge to define the dominance as the power to influence the behavior of others which can be either manifest or latent way. Dominance is manifest when the attempt of dominant person to assert his power and control is accepted by the partner in the conversation. Whereas, dominance is latent where the dominant person is not aware about his position of dominance. Such kind of behaviors can affects positively the interaction. For example, the dominant person leads the conversation and keeps it going, take efficient and quick decisions. In the other hand, this same behavior can be perceived as negative during a conversation. For example, a

dominant person doesn't give enough space to other participant to express his opinions and ideas and be not open to criticism. This type of verbal dominance expression wan be perceived as offensive and unjustified if both participants seek for the position of dominance with divergent opinions.

Features of dominance Many approaches exists to detect and identify dominant behavior in social conversations. In conversation, dominance can appear with verbal or non verbal behavior. Non verbal behaviors include facial expressions such as facial expressions, gazes, posture control and invasive gestures. Verbal indicators includes speaking frequency, number of words used and repeated during the conversation, argumentation, ignoring, interruption and change the subject of discussion.

2.1 Dominance in cooperative negotiation

3 Objective of the investigation

The main objective of this study is to investigate the perception of people about the behavior related to dominance during a negotiation. Indeed, we implemented a conversational agent that car produce a dominant / submissive behavior as described in the section 2.1 during a negotiation. Bernstein (1980) argued that dominance relationships can never be assumed but must be demonstrated in each application. Therefore, we aim to validate the implemented dominant behavior by investigating a perceptual experiment in which participants have to determine the behavior of an agent during a negotiation with another agent.

References

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