

Lydia Ould Ouali¹, Charles Rich² and Nicolas Sabouret¹

¹ LIMSI-CNRS, UPR 3251, Orsay, France
Université Paris-Sud, Orsay, France
{ouldouali, nicolas.sabouret}@limsi.fr
² Worcester Polytechnic Institute
Worcester, Massachusetts, USA
rich@wpi.edu

Abstract.

1 Introduction

1. Present the evolution of research on conversational agents with social abilities. Diversity of application fields.
2. the crucial impact of social skills on behavior responses, decision making during the dialogue [Strohkorb, leite, warren].
3. Our interest concerns the relation of dominance, and its influence on the strategies adopted during the dialogue.
4. plan of the paper

2 Related works

Papers that get interested in the relation of dominance Psychology Conversational agents [Strohkorb, leite, warren] [1][Lina Zhou]

3 Nature of dominance

3.1 Definition of dominance

Explain that the dominance that we are interested in, is a Dominance is a function of particular relationships (Bernstein, 1981). It is more of a social phenomenon involving inter-individual dynamics than a simple phenomenon descriptive of an individual quality (Omark, 1980). Dominance submission is positioned as one of two superordinate dimensions by which people come to define and understand their interpersonal relationships (Burgoon & Hale, 1984).

3.2 Dominance indicators

Dominance can appear in different manners in dialogue :

Verbal behavior

Non-verbal behavior

Nature of dominance in text based conversation Terminate by explaining that our contribution is to study the impact of dominance in text based dialogue and how it will affect the strategies of negotiation.

4 Contribution

4.1 Model of dialogue

Explain briefly that we construct a model of dialogue that allows to the agent to conduct a cooperative negotiation about preferences during the dialogue. therefore, we have a preference model that the agent keeps in its mental state.

Preference model What is a preference Decision based on preferences

Utterances types

4.2 Utterance choice based on dominance

Use the paper that I wrote about the subtrees for each utterance that take in account in addition to the current mental state, the perception of the dominance, and explain the different cases.

4.3 Implementation

5 Validation

Process of validation with the perception of dominance.

References

1. T. Bickmore, D. Schulman, and L. Yin. Maintaining engagement in long-term interventions with relational agents. *Int. J. of Applied Artificial Intelligence*, 24(6):648–666, 2010.