Trusting Politicians' Words (for Persuasive NLP)

Marco Guerini, Carlo Strapparava, and Oliviero Stock
FBK-irst, I-38050, Povo, Trento, ITALY
{guerini, strappa, stock}@itc.it

Abstract. This paper presents resources and lexical strategies for persuasive natural language processing. After the introduction of a specifically tagged corpus of political speeches, some forms of affective language processing in persuasive communication and prospects for application scenarios are provided. In particular *Valentino*, a prototype for valence shifting of existing texts, is described.

1   Introduction

In order to automatically produce and analyze persuasive communication, specific resources and methodologies are needed. For persuasive NLP we built a resource called CORPS that contains political speeches tagged with audience reactions. A key role in persuasive communication is played by affects: we have focused on lexical choice and we present here a tool for modifying existing textual expressions towards more positively or negatively valenced versions, as an element of a persuasive system.

The paper is structured as follows: Section 2 gives an overview of key concepts connected to persuasion and briefly describes the state of the art in related areas. Section 3 describes the resources we built for statistical acquisition of persuasive expressions. Finally, Section 4 describes how this approach can be used for various persuasive NLP tasks, while Section 5 presents the *Valentino* prototype, built upon the resources we presented.

2   Persuasion, affect and NLP

According to Perelman and Olbrechts-Tyteca [1], persuasion is a skill that human beings use - in communication - in order to make their partners perform certain actions or collaborate in various activities. Here below we introduce some related key concepts.

Argumentation and Persuasion. In AI the main approaches focus on the argumentative aspects of persuasion. Still, argumentation is considered as a process that involves "rational elements", while persuasion includes also elements like emotions. In our view, a better distinction can be drawn considering their different foci of attention: while the former focuses on message correctness (its being a valid argument) the latter is concerned with its effectiveness.