Public Opinion Channel for Communities in the Information Age

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Abstract In this paper, we propose as a new challenge a public opinion channel which can provide a novel communication medium for sharing and exchanging opinions in a community. Rather than simply developing a means of investigating public opinion, we aim at an active medium that can facilitate mutual understanding, discussion, and public opinion formation. First, we elaborate the idea of public opinion channels and identify key issues. Second, we describe our first step towards the goal using the talking virtualized egos metaphor. Finally, we discuss a research agenda towards the goal.

Keywords: Community Support System, Agent Mediated Communication, Talking Virtualized Egos.
§1 Introduction

New information and communication technologies have brought about a tremendous potential in the way people interact with each other. It is an engineers' role to establish a methodology of designing and assessing effective information tools for helping people understand each other.

In this paper, we propose as a new challenge a public opinion channel which can provide a novel communication medium for sharing and exchanging opinions in a community. A public opinion channel, as we consider in this paper, is a social information processing system which collects messages from people and feeds edited messages back to the people. The messages communicated through public opinion channels are not limited to pure opinions, but may well be questions people ask, stories people tell, findings people make, jokes people like, wits people have fostered, opinions people raise, and proposals people want to make. At the sentence level, they may be assertions, arguments, counter-arguments, questions, answers, agreements, and so on. We would like to incorporate a facility to summarize this information, and provide people with a handy means of understanding what other people are speaking about.

The role to be played by public opinion channels is to mediate and facilitate communications in communities. Rather than simply building a passive medium, we aim at an active medium that can provide a sound ground for public opinion formation based on mutual understanding through discussion.

Traditionally, those functions have been partly provided by mass media. People usually acquire information about other parts of the society and build an image of the society, by watching TV, listening to radio, reading newspapers and magazines, and so on. It has often been pointed out, however, that conventional mass media have a severe limitation in its ability to cope with rapid technological development and accompanying change in the society, unless basic facilities of information gathering and surveying are significantly improved. People often receive very fragmentary information about state-of-the-art technology as well as life styles of contemporary people in other cultures. Still worse, messages from conventional mass media may be biased. Generally, it is hard to resist or even to recognize the bias if any, for ordinary people have only limited means to examine the correctness of messages they receive from mass media, except applying a few simple heuristics such as cross-checking messages from multiple sources.

The Internet and other recent advances of information and communication technology provide a partial solution to the above problems at a reasonable price. WWW allows people to post their messages on the Internet. Search engines help to locate information source. Bulletin boards provide people with an asynchronous channel for public discussion. Internet relay chats enable people in distant places to participate in conversation. Nevertheless, we consider they are not enough to regard as public opinion channels. People are exposed to overwhelming amount of raw incoherent information.

In order to overcome this difficulty, we aim at a direction similar to internet broadcasting. Messages into public opinion channels are summarized and