The Effect of First- and Third-person POVs on Different Cultural Communication: How Japanese People Understand Social Conversation at Thai Night Flea Markets

Extended Abstracts

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ABSTRACT

Social and communication in culturally different condition is a challenging topic because people from many countries have to live, and communicate together with their own background that affects different perception. Herein, we create a cultural agent in an assistance system that can help people learn conversational and improve communication skills. Interaction with cultural agent from first-and third-person points of view (POVs) is novel method for human agent communication. This experiment was conducted with Japanese, who were asked to observe customer agents and interact with shopkeeper avatar at Thai night market. The behavior of the agent and avatar were designed based on the Hofstede cultural dimension (Thai cultural values). A significant different result showed that most Japanese participants in the third-person POV group understood the Thai culture IDV from our simulation better than those in the first-person POV group. Furthermore, participants from both first- and third-person POV groups gave a similar score for Thai culture in the MAS and UAI.

KEYWORDS

Simulated crowd; different POV; cultural communication; social interaction agent

1 Introduction

Agents such as an animated characters have created much interest in many research fields because they are useful for

presenting human communication, conversation, knowledge representation, and entertainment [1-11]. Different cultural communication is one famous topic. Practice cultural communication with an agent is one solution to help people the difference [12]. In this research, tourism is a target. Hofstede et al. [13] stated that the intercultural communication learning process includes three components: awareness, knowledge, and skills. In order to develop agents to help learners realize these steps, agents and systems need a careful design process. Having awareness enables learners to recognize differences with respect to their own cultural backgrounds. Dresser [14] discussed the fact that one reason for cultural misunderstandings is different points of view (POVs), all parties have their own views about who is right - and, in fact, nobody is wrong, and nobody is right. Misunderstandings occurred because each side perceived and interpreted based on their cultural traditions. To meet this need of cross-cultural understandings, we aim to develop a cultural agent and a simulation system with a suitable environment that can help learners practice cultural communication by increasing their awareness and ability to investigate cultural differences. In this paper, the result of an experiment to determine different awareness effects from cultural communication by first- and third-person POVs is presented.

2 Related Work

Practice a different cultural communication style with an agent can help learner avoid misunderstandings and understand the cultural difference. Culture is a complex form of knowledge [15]. Suitable design can help learner understands the different culture easier. Previously, cultural agents were developed for helping learner to understand other cultures. These systems aim to create a cultural agent's behavior model [1-11], culture-related scenarios [1-10] or powerful interactive devices [10-11]. Generally, users observe conversations from a third-person POV and interact with a cultural agent in a first-person POV. Via these steps, the participant gains only one-to-one conversational experiences from particular situation; however, our purpose is

not to focus on only a particular situation, but also on the cultural value that is not apparent during the interaction. The learner can apply cultural value experiences in a given situation to another similar situation. Furthermore, we found that understanding the cultural differences in a crowd can be difficult if they are seen only from the first-person POV. The third-person POV can provide more information regarding the learner's body posture and the environment surrounding a learner. An enough information helps they can understand and cope with that situation more easily [16-19].

3 Methodology

We want to emphasize cultural awareness from interaction with different cultural agent from both first- and third-person POVs. A 'simulated crowd' [20-23] was introduced as a framework for a cultural learning assistant system. Different perceptions and interpretations from the first- and third-person POV were determined based on the feelings and reasoning after attending a system [24, 25]. In this study, we intend to compare the cultural learning ability and different benefits of cultural learning by first- and third-person POV. We first hypothesize that interaction with a cultural communication agent from first- and third-person POVs may yield different understandings and learning culture based on learner's cultural background.
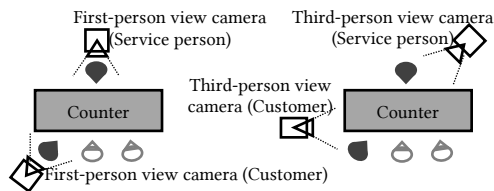
Figure 3: Installed position of camera; (Left) first-person POV, (Right) third-person POV [18]

Previously, only one POV was used in the system; however, a single POV may not cover all the necessary information from all cultural dimensions. The details of the entire situation between the learner and agents will not be illustrated in only first-person POV. Alternatively, the realistic of being in the situation and owner of the behaviors will remain undiscovered from a third-person POV. First- and third-person POVs were installed (see Figure 3) as an option to provide a variety of viewpoints to a learner, because culture is made up of complex knowledge.

4 Experiment and Result

The experiment was designed to find the effects from different POVs that influenced the cultural communication learning process. A communication event for tourism was established: simulated virtual shopping at a night market in Thailand. The agent's behavior model was designed to represent Thai-style communication in a shopping situation. Cultural communication was represented by the verbal, such as "hi," "thanks," and "bye", and nonverbal behaviors, such as a standing position, face

direction, and hand gestures, of the customer agent and the experimenter's shopkeeper avatar. In this experiment, three Hofstede cultural dimensions that related to this scenario were considered, Individualism vs. collectivism (IDV), Masculinity vs. femininity (MAS), and Uncertainty avoidance (UAI). These dimensions were used to describe the characteristics of Thai culture (IDV=20, MAS=34, UAI=64) in the scenario for Japanese to learn Thai culture. A group of people waiting in front of a counter represents a group waiting for same purpose (IDV). A random standing position represents a relaxed waiting style (UAI) and social activities (MAS), reflecting the Thai culture.

Forty-two Japanese were separated into two groups: first- and third-person POV group and attended the same activities to verify the different understandings of cultural communication learning by different first- and third-person POVs. The participants learned the interaction in the practice section deepened on POVs' group; first- or third-person POV. After finishing the practice section, all participants interacted with the shopkeeper in testing section using the first-person POV. After the participants interacted, they were asked to answer a questionnaire to measure their perception, feelings and understanding of Thai cultural communication in our simulation. The questionnaire was designed based on the Hofstede cultural dimensions, (IDV vs. COL), (MAS vs. FEM), and (UAI). Significant differences were found only in the T-test between first- and third-person POV groups for IDV (p=0.037). Average IDV scores of the first- and third-person POV groups are 46.85 and 33.24, respectively. This score of the first-person POV group is close to the Hofstede IDV of Japanese culture, which is 46 [13]; whereas the average score of the third-person POV group, 33.24, lies in the middle between the values of IDV of Thai and Japanese culture, which are 20 and 46, respectively. There were no significant differences in the T-test between first- and third-person POV groups for the MAS and UAI. The average score for the MAS of the first- and third-person POV groups are 33.95 and 33.51, and the average scores UAI of the first- and third-person POV groups are 50.22 and 47.90, respectively. The participants from both groups scored close to the MAS and UAI value of Thai culture, 34 and 64, respectively.

5 Discussion and conclusion

The result indicates that third-person POV group recognize COL culture better than first-person POV group because the average score of the third-person POV group (33) was closer to the Thai IDV value (20) than the first-person POV group (46.85). Our hypothesis was described in section 3, was confirmed by the experiment result. The first-person POV provides a feeling of reality based on the participants' cultural background to make them aware of the changing situation, but it may not provide enough information for the participants to recognize new knowledge without bias. In contrast, the participant who interacts with the agent from the third-person POV can observe all the interaction information from a wide perspective and recognize new knowledge better than first-person POV.

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