

Abuses in Building and Using ECA Systems

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In our presentation we looked at ethical issues related to ECA from different stand points. At first we looked at the notion of believability: how much an ECA should be believable? How does experiencing an interaction with an ECA differs with the experiencing an interaction with another human or even with watching actors in a film. Another issue we raised is related to the abuse toward users/ECAs by ECAs/users.

In human/machine interaction, users tend to treat intelligent computers, and even more robot and humanoid agents as human (Reeves and Nass, 1996). Nevertheless in a recent study Bartneck (2006) argues that users treat machines as simple machines: a simple example for his argument is that people turn off an application when they do not feel like using it anymore. Agents are bivalent: they looks and behaves like humans in their appearance, their capabilities to perceive, plan and act, to communicate; but they are also virtual entities that “don't get hungry, they don't get afraid.” (Gordon Jordon, reported in NYtimes).

Loyall (1997) defines “a character is considered to be believable if it allows the audience to suspend their disbelief”. In an interactive system, a believable agent may act directly on user's life (eg by selling him an object); the simple fact that the agent is responsive to the user's concern, that she interacts with him, shows him empathy and interest, affords trust and emotional responses in the user. While these capabilities are fundamental for an ECA to have to be a fully interactional partner, it is important to work out the affordances these capabilities bring and how far and for how long believability should be: should an ECA be a copy of a human in look, dialogic and emotional capabilities, in action as well; should the user recall the agent as being a believable agent even after the interaction is over; or should the believability be broken?

Another issue we raised is related to the abuse toward users/ECAs by ECAs/users. In recent workshops (Misuse and Abuse of Interactive Technologies Workshops, De Angeli et al, 2005; 2006) several papers were presented on users being abusers of machines and in particular of ECAs. Several studies reported that users abuse computers through verbal abuse, injury, sexual harassment (De Angeli, 2006; Brahnam, 2006), through physical abuse (Bartneck, 2006). The gender of ECAs has little effect of frequency of insult but sexual comments greatly increased with female embodiment (Brahnam, 2006).

Abuse may happen on user from ECAs as ECAs are powerful mean of persuasion; they are also a source of control and manipulation.

In conclusion we draw the attention that users ought to be aware of the possibility of being manipulated by ECAs and that some form of control in ECA design system should be set up.