Am I bovvered? Fifteen years of Empathic Agents

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ABSTRACT

In 2001, the EU-funded project VICTEC pioneered the concept of an Empathic Agent. This was reported at AAMAS in 2004 in a well-cited paper 'Caring for Agents and Agents that Care: Building Empathic Relations with Synthetic Agents' (Paiva, Dias, Sobral, Aylett, Sobreperez, Woods, Zoll, Hall). It advanced two goals for embodied empathic agents: characters that, by their actions and behaviours, are able to show empathy (or not) for other characters; and characters that, by their appearance, situation, and behaviour, are able to trigger empathic reactions in the user.

In this talk we discuss how far Embodied Empathic Agents - whether graphical or robotic - are succeeding; what we can now do, and what open research questions remain. What are the key theoretical and technological advances already made and which are still needed? What applications are Empathic Agents 'good' for, and how do we know they are? And how do they relate to the broader field of social agents?

CCS Concepts

•**Computing methodologies** → **Cognitive science; Intelligent agents;** *Discourse, dialogue and pragmatics; Cognitive robotics; Theory of mind;* •**Human-centered computing** → *Collaborative interaction;*

Keywords

Empathic agents; social agents; intelligent graphical agents; affective computing; human-robot interaction

Short Bio

Ruth Aylett is a Professor of Computer Science at Heriot-Watt University in Edinburgh, UK. She researches affective and social agents, human-robot interaction and digital story-telling and has more then 250 refereed publications in these areas. She has coordinated three large EU projects developing intelligent graphical agents and has also acted as a PI in the EU LIREC project investigating long-lived robot companions, and the EU EMOTE project, researching empathic robot tutors. She was a founder of the international conference Intelligent Virtual Agents and a member of the Humaine network on affective computing.

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