Title: Human-Computer Interaction Evaluation of a Shamanic Interface

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Abstract

Gesture controlled applications provide a way to streamline interaction between human and computer that deviates from traditional interfaces. While benefits are present, the lack of familiarity of users imposed with novel implementations of so-called Natural User Interfaces may however provide hurdles to their adoption, particularly on systems of higher complexity or for those who present physical impairments.
A Shamanic Interface is a proposal for a semantic bridge between Gesture Recognition and execution of application commands. The intent is to support a customized interaction experience based on gestures already existing within the user's culture, rather than simply mimicking the intended commandor imposing a specific metaphor upon the user. Cultural gestures are 'emblems', actions uniquely meaningful within an anthropological context for communicating concepts.
Being a fairly recent proposal, the Shamanic Interface concept requires further validation to assess the viability of its approach in ensuring easier adoption, higher degree of immersion or the facilitation of more advanced interaction. The intent of this work is to test the impact of using a Shamanic Interface along these dimensions, by developing a virtual environment where interaction opportunities arise. User testing procedures will be conducted in controlled test environments. Data obtained from these shall then be analyzed and findings used in evaluating the overall concept.

Keywords: Shamanic Interface, Gestural Commands, Natural Interaction, Human-Computer Interaction

ACM Indexes:
CCS → Human-centered computing → Human computer interaction (HCI) → Interaction techniques → Gestural input
CCS → Human-centered computing → Interaction design → Interaction design process and methods → User centered design

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