Triadic Relationship of Icon Design for Semi-Literate Communities

Authors : Peng-Hui Maffee Wan, Klarissa Ting Ting Chang, Rax Suen Chun Lung

Abstract : Icons, or pictorial and graphical objects, are commonly used in Human-Computer Interaction (HCI) fields as the mediator in order to communicate information to users. Yet there has been little studies focusing on a majority of the world's population, semi-literate communities, in terms of the fundamental know-how for designing icons for such population. In this study, two sets of icons belonging in different icon taxonomy, abstract and concrete are designed for a mobile application for semi-literate agricultural communities. In this paper, we propose a triadic relationship of an icon, namely meaning, task and mental image, which inherits the triadic relationship of a sign. User testing with the application and a post-pilot questionnaire are conducted as the experimental approach in two rural villages in India. Icons belonging to concrete taxonomy perform better than abstract icons on the premise that the design of the icon fulfills the underlying rules of the proposed triadic relationship.

Keywords : icon, GUI, mobile app, semi-literate **Conference Title :** ICHCI 2015 : International Conference on Human-Computer Interaction **Conference Location :** Amsterdam, Netherlands **Conference Dates :** May 14-15, 2015