

A Study of Analyzing Interface Metaphor Design Based on the Experientialism Emphasis on the Case Study of the Edutainment Site

Ji-won Song

Dept. of Industrial Design, KAIST

Eunsook Kwon

Dept. of Industrial Design, KAIST

Abstract

This study focuses on the investigation of the cognitive role and characteristics of interface metaphor on the basis of the experientialist's cognitive linguistic theory. By incorporating interface metaphor, a designer can suggest an interface design that is experienced in a way supported by the metaphorical projection of intended structure. An interface metaphor is a powerful tool to design user's experience of system.

Interface metaphors are based on the experiential similarities rather than on the real-world object analogy. In an interface metaphor, metaphorical projection is a set of correspondences between entities in a source domain and entities in a system experience. Interface metaphor design is an interface design for users to understand system experience using by means of projecting familiar and commonly understood experience on the basis of experiential similarities.

To identify the actual effects and characteristics of metaphor in interface design, this study analyzed the Carmen Sandiego site (<http://www.carmensandiego.com>), which suggests educational experience to children through interface metaphor of detective play. The case study processed as subjective analysis based on the analyzing three steps. For analyzing multidimensional experiences of interface metaphor design, this study suggests analyzing tools. From the case study of Carmen Sandiego, the actual effects and characteristics of metaphor in interface design is identified. The site provides intended aspects of experience to users by projecting some patterns of source domain, which has experiential similarities with system experience. Designers of Carmen Sandiego used interface metaphors as powerful tools to design user's experiences.

Keywords

Interface metaphor, experientialism and experiential design

Image Analysis for Designing Viewer Aided Interface

A Study of image data analysis using Web Questionnaire System and PCA (Principal Component Analysis)

Norikazu Morisaki

Graduate School of University of Tsukuba

Akira Harada

University of Tsukuba

Abstract

The art viewer aided interface system was usually produced and designed according to logical information classified by experts (curator or art specialist).

Therefore, the purpose of this research is to analyze viewer's image concerning art works, in order to corroborate the hypothesis to need image investigation of general viewer before making an interface.

The viewer image research has two sections. Firstly, we gathered and selected adjective image words that viewer impress on appreciation. The number of image words was reduced to 46 words by Web questionnaire. Secondly, Gathered evaluation data was analyzed by PCA (Principal Component Analysis).

As a result of the investigation to compare the attributes, on the primary component, called "Interest in art works", there were differences between general viewer and experts. Also differences between image structures exist.

Therefore, before designing a viewer-aided interface, it was possible to verify the necessity to investigate image structures of general viewer.

Keywords

Image, Web, PCA (Principal Component Analysis)