Open Processes Create Open Products: "Interface Ecology" as a Metadisciplinary Base for CollageMachine

Contact
ANDRUID KERNE
Creating Media
380 Lafayette Street, Suite 202
New York, New York 10003
USA
andruid@creatingmedia.com

Introduction

Most interactive artifacts are very finite state machines. They represent determinate solutions to closed form problems. However, life is an open-ended series of situations which are not very well formed at all. The more that computational artifacts are integrated with everyday life, the more culturally significant this gap becomes. Equal value in interface ecology traverses this gap – in the process of the developer – by opening the range of methodologies that are invoked. Collage dynamically creates new meanings by combining found objects. Indeterminacy opens the set of possible states in an interactive automata. The decisions to use collage and indeterminacy in CollageMachine followed directly from an equal value, interface ecology process.

Equal Value in Interface Ecology

Interface ecology brings the perspectives of diverse disciplines to bear on the form and function of interfaces. It does this in a non-hierarchical way, according to the principle of equal value. Gertrude Stein developed equal value in consideration of the paintings of Cézanne, as a way of writing in which all words and aspects of what is represented are assigned the same rights, responsibilities, and weights. This conception of value comes from painting, where it refers to the magnitude of brightness.

Likewise, with interface ecology, no discipline dominates; none are considered subordinate. Rather, they are interdependent components, connected by flows of interaction. This "meshwork" ecosystem form supports open-ended inquiry. It enables the development of artifacts, like CollageMachine, that support open-ended processes.

Collage

Collage is work created by combining found objects. In collage, pasted objects function semiotically to introduce new meaning to the work. As with Duchamp's readymades – such as *Fountain* – the new presentation environment of the collage creates a new context for the interpretation of its elements. Additionally, the juxtaposition of elements within a collage further alters their context, and thus their meaning. It forms semiotic relationships between them. Disciplines are a form of information age readymade; a discipline is a urinal. In interface ecology, disciplines are among the found objects which are recombined.

Indeterminacy

Indeterminacy is a means for structuring decision-making during collage-making. It has a long history as a cultural method, predating collage by many millennia. Indeterminacy refers to the utilization of chance procedures, such as random selection operations and random factors that influence the values of parameters. That is, certain creative decisions are expressed in an algorithmic form that relies partially on randomness.

CollageMachine

CollageMachine is a creative Web visualization tool that affords browsing through streaming collage. The program deconstructs Web sites into media elements – images and chunks of text. These media elements continuously stream into a collage. A point and click, drag and drop interface enables the user to rearrange the elements. From this interaction, an agent learns about users' interests. It acts to shape the ongoing development of the collage. The agent model structures the use of indeterminacy in collage making decisions.

Open Ended Browsing

CollageMachine supports an open-ended process of Web browsing, in which the user may start only with a sense of direction. Clear advance goals are not required. On-going feedback with actual media elements enables direction to emerge. Some of the burden for clicking through hypermedia to find interesting material is relieved. This open process is an essential part of browsing. Open-ended browsing is an essential part of what makes up life. Inasmuch as interactive artifacts are integrated with everyday life, they must be conceived in terms of the full range of activities that life encompasses. Through interface ecology, the methods of collage, creative cognition, machine learning, usability, and software engineering are blended in CollageMachine with equal value.

www.mrl.nyu.edu/andruid

One state of a CollageMachine (mrl.nyu.edu/collagemachine): news collage session.
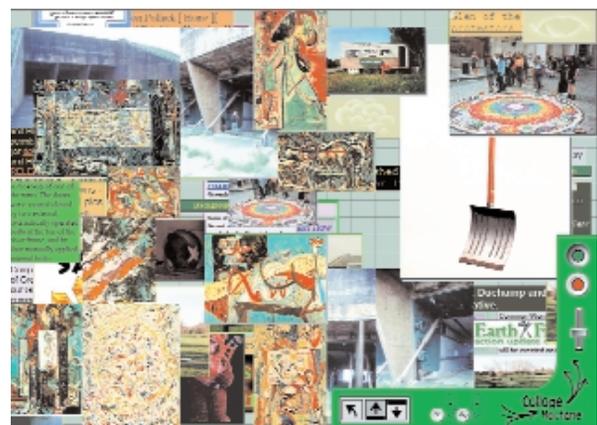
One state of a search's collage session with Greenham Common, Marcel Duchamp.