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Chapter V

Weaving Science Webs:
E-Learning and
Virtual Science Centers

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Abstract

Drawing on Bruno Latour, this chapter argues that science and technology need to be replaced into social context dissolving the artificial boundaries between art, culture and science inscribed in institutional activities.

Introduction

Through a series of projects from museums and over online architectures, this chapter explores innovative systems that harvest data across electronic highways, online collaborations between museums and their public, the production of bottom-up narratives that invigorate community knowledge and novel ways to simulate and visualise science discourse.

In these examples science and art work together to produce meaningful narratives, replacing them back into their social context, and dissolving the familiar dichotomy inscribed in the rationalizing project of modernity. Combining the weft and warp of culture and science into interwoven discourses no longer results in our intellectual life being out of kilter as these discourses become one and the same.

Science is feasible when the variables are few and can be enumerated; when their combinations are distinct and clear. We are tending toward the condition of science and aspiring to do it. The artist works out his own formulas; the interest of science lies in the art of making science. *Paul Valéry (1871-1945)*

History, ethnography, art and anthropology museums weave stories around social and cultural narratives and lead us to compare our own narratives with those on display, and in doing so distance ourselves from, or connect with specific threads that bind geographically and temporally distanced cultures. While these kinds of exhibitions serve to reaffirm our own histories and social affiliations, these cultural mappings are not the only kinds of knowledge that inflect the meta-narratives of society. Science museums on the other hand, like their sister institutions, the university-based, science faculties are concerned with the systematized knowledge of the physical or natural world and in doing so purport to display finite knowledge, knowledge that can be demonstrated through controlled experimentation. This separation may be seen as artificial, as all of scientific practice is articulated in social space and their ramifications culturally inflected.

Bruno Latour (1993) re-places science and technology into its social context, blurring the boundaries between nature and science, between human and thing, while dissolving the familiar dichotomy inscribed in the rationalizing project of modernity. The webs woven across science channels, science museums and natural history museums, as well across the Internet all work together to construct the rational and empirical knowledge base of scientific discourse. While scientifically determined projects tend to be seen as distilled from anything as serendipitous as culture, this chapter will argue that they do in fact construct a wealth of culturally invigorated narratives. In an investigation of the social and cultural messages inscribed in these practices and conventions, it becomes clear that these kinds of narratives impact the ways we think about our lives and our environment and serve to transform society no less than the cultural variety.

Weaving Science Webs is divided into four sections. The first section, *Locating Science, Locating Culture,* draws on Bruno Latour's assessment of the "Modern Constitution," and the dichotomy between nature and culture to problematize the practices that artificially separate science from culture. These practices are reflected not only in the traditional articulation of these discourses in schools, (science lessons, art classes, etc.) and over the media, (history channels, science channels, and art magazines, etc.), but are also firmly entrenched in the ways that museums have traditionally located science and culture. Institutional articulations of these discourses are not only represented through separate display strategies in the gallery, they also have become arbitrarily divided into separate physical buildings; the science museum, natural history museum as distinct from the social history museum and the art museum.

The second section, *Interacting with Science*, describes the body "as source of experimental knowledge" (Barry, 1998, p. 99) observing Frank Oppenheimer's significant contribution to the display of science and the pedagogic activities he instituted in the Exploratorium in San Francisco. This section also introduces two specific exhibitions from the Natural History Museum and Science Museum in London that are as much about art as they are of science. The third section moves *Beyond the Museum Walls* to explore how the Internet has extended and enabled museums to move beyond their traditional,

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