Chapter 24
Creating Open–Source Interactive Articles for the Wider Publics

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ABSTRACT

A core form of the international sharing of research and analysis is done through articles, both those presented in live conferences and those published in any number of journals. Interactive articles integrate various elements to the basic text: hyperlinks; immersive simulations; electronic games; data sets; knowledge collections; digital photographs; multimedia; integrated wikis and blogs; and other aspects. These value-added pieces that build exploration, experience, and interactivity, are enabled by current authoring tools and Web servers and open-source contents. Enriched articles often encourage return engagements, and their open-source publishing often leads to greater levels of citations and readership. These enable the design of a work for multiple audiences, with opt-in sections for different levels of readers, for example. Interaction enables opportunities for more reflection, recursiveness, and understanding a topic from multiple angles and different levels of abstraction. Interactive articles tend to appear in open-source (or at least open-access) publications online, which enables access by wider reading publics and machine-searchability and often wider citations.

INTRODUCTION

Many of us have imagined a world where objects are content-rich, interactive, and provide personalized information. But problems abound: Where does the information about the objects reside? How do we get content to said objects? How do you make sure the content is relevant to the consumer…? How do you empower users so that they can decide what content they wish to experience? -Fred Kitson, HP Laboratories, in "Mobile Media: Making it a Reality" in Q Focus (2005, p. 40)

The spirit of the present cyber-age is characterized by interactivity and openness: the power of individual customization and choice-making (of selective experiences) in automated spaces; the crowd-sourcing of information by virtual strangers; the sharing of open-source information and

digital objects; and the co-creation of digital contents released into the public sphere through copyright releases. This interactivity is a method for enriched engagement with the digital contents for more effective learning.

As a basic unit of analysis, an article is a foundational form of academic exchange through which researchers share their learning with others (and build professional legacies). While different academic publications have various editorial stances and visions, most traditional articles consist of the following elements: a title, an abstract or executive summary (or bulleted points to highlight the main points of the article), an introduction, a literature review, the core research, analysis and discussion of the implications of the research, a conclusion, a references list, and an acknowledgments section. These articles are linear and sequential, with a main focus on text. The guidelines tend to be spelled out clearly, with precise word counts, formal phrasing in the writing, and regimented conventions.

In online spaces, such articles may have hyperlinks to various resources. There may be more imagery (diagrams and photos) because of the nominal cost of electronic publishing. Some images tend to be "above the fold" (a print newspaper term which means higher than the midsection of a broadsheet-sized newspaper, in the section that fits into the newspaper vending box viewing window) in order to attract potential reader attention. Such articles often are linked to a unique identifier known as a digital object identifier (DOI). Electronic versions tend to have more elaborate author biographies and links to author websites.

Interactive articles are a kind of third-generation iteration of academic articles. These contain aspects of the Social Web or Web 2.0 features–such as links to wikis, blogs, and social networking sites. More sophisticated authoring tools and editing software enable the integration of image maps, simple games, mnemonic exercises, digital exploratories, interactive timelines, and interactive videos. Such articles are interactive and immersive.

Readers are expected to not only interact with the site but to bring their own insights and talents to interacting with other readers and sharing ideas. Such articles delve into "extreme layering" of reader experiences. Further, such articles now are created to be mobile-friendly ones–to enhance access and consumption of the contents.

This modernist approach enables more competition for modern readers' attention (getting beyond the high barrier of apathy) with an enriched reader experience that is enhanced by interactive multimedia. This also enables the writers to reach out to multiple audiences simultaneously (with both opt-in and opt-out sorts of experiences). This approach is somewhat more edgy. This aligns with some of the new publishing models, such as those that offer rolling deadlines instead of set publishing schedules. Interactive articles are very much a cultural production and an enablement of the confluence of various technologies and social movements.

From a pedagogical perspective, interactive articles enable learning enrichment by encouraging reader reflection and return visits (recursiveness) and a longer article "shelf life." These interactive forms may be applied to e-books and electronic chapters as well. This type of interactive academic writing, though, offers a point of no return to the paper format–which would not be able to mimic the same contents except in a highly abstracted and experientially degraded way.

MAIN FOCUS OF THE CHAPTER

To understand the early moves towards popularizing interactive articles, it may help to see this emergent article form as a culmination of multiple influences. First, Web 2.0 social connectivity has connected individuals with various backgrounds to congregate around shared interests. Various hacker movements have broken down the barriers between the means of production from the "cathedral" to the "bazaar." Readers are expected

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