Digital web atlases can incorporate perspectives derived from diverse participants or communities to create and present narratives using qualitative and quantitative information structured around a set of maps as organizational and analytical tools. Development of such an atlas requires a transdisciplinary team to contend with complexity in subject matter, technologies, and project dynamics. Technologies required are potentially as much an obstacle to some potential participants as they may be necessary to the fulfillment of a project’s outreach and communication goals. This paper describes the Cybercartographic Atlas of the Lake Huron Treaty Relationship Process, the open source atlas toolkit used to implement it, and features of the toolkit that are intended to encourage transdisciplinary participation. The discussion explicitly addresses issues related to the iterative processes, at multiple scales, required to develop atlas projects within an academic research setting while using and creating open source software.

Introduction

An atlas, containing an organized selection of maps [Wood 1987], can be an excellent medium for conveying a range of perspectives on the many aspects of a topic, issue or theme. Conventional atlases have historically focused their central themes around particular places or regions, such as cities or towns, provinces or states, nations or continents. The various maps in an atlas may highlight different types of ‘information.’ For example, they may draw attention, through the use of map ordering and the relations established between themes by the atlas narrative, to one or more of the following dimensions that make up a ‘place’: geophysical, weather, navigational, political, cultural, economic, social, or various combinations of these. In recent years, critical approaches to cartography [Wood and Fels 1986; Harley 1989; Pickles 1995; Crampton and Krygier 2005] have considered the political nature of maps and have looked at mapping as a process [Turnbull 2007], both in terms of the design and development of maps and in terms of their use. These approaches have attended to information that historically has been omitted from conventional—often colonial—maps and atlases and have expanded the scope of possible map themes to include all manner of social