

The force of standards and guidelines in Web accessibility work

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ABSTRACT

A variety of approaches are taken to address pervasive and persistently occurring barriers to accessibility and inclusion online. W3C Web accessibility guidelines and standards are their infrastructural nexus. This raises the question of what force guidelines and standards have in the work practices of Web developers and designers, who may use these standards and guidelines to a variety of ends.

General Terms

Design, Standardization.

Keywords

Web accessibility, Web adaptability, Inclusive Design.

1. INTRODUCTION

The Web has evolved from an infrastructure oriented around the retrieval of static documents to a platform that supports and mediates social engagement, collaboration, and user contribution of content [10]. Alongside this evolution, a host of barriers to inclusion online have either remained or emerged; so have a variety of strategies to mitigate or eliminate these barriers, encompassing legal, technical, and design-oriented approaches. W3C standards and guidelines are the surface upon which divergent approaches to inclusion connect. There is a difference between a formal standard and its implementation [12], highlighting the analytical importance of context of use and interpretation. A study in-process of Web developers' practices is described.

2. LITERATURE REVIEW

Web accessibility generally refers to the technical approaches used during Web design to make a Website more accessible to users (e.g. disabled people, the elderly) and user agents (e.g. Web browsers, adaptive technologies, and mobile phones) [17]. The World Wide Web Consortium's Web Accessibility Initiative (WAI) provides the Internet's most prominent accessibility regime and prescribes various guidelines and standards that Web content, authoring tool, and user agent developers can use [17]. As a technical standards organization, its guidelines and standards retain a technical orientation [9,5].

According to the WAI notion of accessibility, most Websites are inaccessible [17]. Much research (e.g. [7, 18]) documents WAI implementation gaps.

At the same time, a solely technical approach to Web accessibility – i.e. one based on strict conformance with WAI guidelines and standards – has been criticized by numerous scholars and practitioners. On the theoretical side, the WAI has been critiqued for its foundation in a “universal” design, rule-based, “one size fits all” model of accessibility and new models of Web accessibility and adaptability have been proposed [10,15]. For example, in Inclusive Design approaches, a core problematic is the task of designing for diversity, personalization, and context [10,15].

In practice, a number of online initiatives have emerged that tackle barriers to inclusion online by harnessing social computing strategies, user generated content, distributed peer production, and social networking. These initiatives may constitute a challenge to key aspects of the WAI model. The assumption that Website owners should have autonomy over content and markup is troubled in a social networking/collaborative context where users generate their own markup and content [1,10]. The Fluid Project's (see <http://fluidproject.org>) user interface components relinquish control of presentation in favor of applying the preferences of users [17]. Its architecture implements ISO 24751, a metadata standard for expressing individual preferences and accessing personalized resources [17]. More generally, the orientation of design and development towards facilitating *participation* in online culture contrasts with the Web Accessibility Initiative model based on accessing an interface “to” a resource [8].

3. THE SIGNIFICANCE OF STANDARDS

Compliance - to one degree or another - with WAI guidelines and standards is a component of all of the above-mentioned approaches to Web accessibility [10]. Bowker and Star's [2] observation that information systems inherit the base inertia of the infrastructures they are installed upon raises the question of what torque these guidelines and standards have in the work practice of designers and developers.

My research is premised on two inter-related assumptions. Firstly, access problematics (e.g. accessibility, adaptability, inclusive design) that have emerged throughout the Web's evolution should not be seen in strictly technological terms because technology itself embodies social relations [6]. It is informed by scholarship that resists “digital divide” debates framed in merely technical terms [4] and individualizing, medicalized accounts of disability [12,15,16].

Secondly, WAI standards and guidelines, as central IT infrastructures that predicate a wide variety of Web design approaches, are socio-technical phenomena [2,13] and must be examined as such. WAI standards and guidelines are central artifacts shaping everyday work practice concerned with access to the Web. In their ongoing repetition they link together an ecology of heterogeneous interests and concerns, as key reference points for industry vendors, law and policy makers, disability rights advocates, and wider discourses about the role and nature of the Web itself.

4. RESEARCH GOALS

To investigate the force of WAI standards and guidelines, my research engages practitioners involved with a range of approaches to Web accessibility. The following research questions are explored:

- [1] How is a concept of accessibility explained to designers and developers in the Web Accessibility Initiative? -- texts in question are its key standards: WCAG (Web Content Accessibility Guidelines) & ARIA (Accessible Rich Internet Applications); unit of analysis is the documents themselves.
- [2] How are its standards implicated in the work practices/work flows of Web developers and designers?
- [3] How are these standards bound up (if at all) with their conceptualizations of access?

Using qualitative data collected from semi-structured interviews, the work practices and standards documents of Web designers and developers will be used as a basis for developing a grounded theory/situational analysis [3] of how accessibility guidelines and standards are implicated overall in development approaches. Key issues are: In what ways are standards and guidelines are seen as relevant (e.g. in terms of making accessibility work noticeable and comparable) and what work goes into facilitating and maintaining them? In the minds of developers and designers, what are the politics of these artifacts: In other words, how are broader social questions about access bound up (if at all) with the use of W3C accessibility infrastructures? Where do users fit in? And what are the non-quantifiable aspects of work in the nebulous task of designing for diverse audiences?

5. CONCLUSION

This study examines how the WAI is implicated in the practices of a variety of practitioners. Interviews are occurring between December 2009 and February 2010. My iConference 2010 poster elaborates on my research design and early results of my study.

6. ACKNOWLEDGMENTS

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