Participatory design wiki: Call for participation

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ABSTRACT
This paper announces a new wiki for participatory design (http://meatballsoceity.org/cgi-bin/design). A growing discipline like participatory and cooperative design faces the problem of information management within the discipline. Good information management stabilizes knowledge, speeds research, lowers the barrier to entry for new researchers, increases the exposure of existing researchers, and attracts new researchers to the discipline. Previous attempts to create information resources within the participatory design discipline and the larger HCI discipline face the significant structural challenge of being individual projects, which hampers their growth and stability. Collectively held and collaboratively built information resources like the remarkable Wikipedia point the way to a new model that can lead to sustainable organization of this discipline's collective knowledge. We ask in this paper for your participation on this new participatory design wiki.

Categories and Subject Descriptors
K.7.0 [The Computing Profession; General]

General Terms
Design, Human Factors

Keywords
participatory design, cooperative design, wiki, Wikipedia, virtual communities, annotated bibliography, glossary, encyclopedia

1.INTRODUCTION
Keeping track of publications and resources in a growing field like participatory design is difficult for new or old researchers alike. All researchers face this problem that challenges the growth and strength of the discipline. Good information management stabilizes knowledge, speeds research, lowers the barrier to entry for new researchers, increases the exposure of existing researchers, and attracts new researchers to the discipline. It is in the best interest of researchers in the discipline to pool their collective efforts towards managing the information within the discipline.

Typically, we would create glossaries, encyclopedias, histories, directories, and annotated bibliographies. Traditionally each of these are maintained by willing, charitable individuals for as long as they are interested. But once they lose interest or run out of time, the efforts stall and the resource falls out of date. The process is also subject to mistakes and disagreements that the sole maintainer has the burden of thankfully resolving, further demotivating them and leaving resources vulnerable to mistakes beyond the reach of peer review.

The success of open source software development points the way to a better solution. Rather than have one individual work in isolation, the researchers of the discipline can now collectively maintain their resources collaboratively amongst all of them. If their resources are held commonly amongst all the researchers, these projects can avoid being stalled waiting on the schedule of one person. In particular, if we look at the remarkable success of Wikipedia, we can follow its footsteps towards building a high quality, collective resource.

2.PREVIOUS EFFORTS
Others have in the past built resources to organize the information in the PD area. The most notable are the participatory design bibliographies maintained on the Computer Professionals for Social Responsibility (CPSR) website created for previous Participatory Design Conferences [2, 4, 7]. These bibliographies are not actively maintained. Indeed, there was a five year gap between the last two versions, and the last revision relied heavily on the labour of a teaching assistant to be completed.

Other resources also exist in the wider field of Human Computer Interaction. The Human-Computer Interaction Resource Network (HCIRN) organizes materials in the field of HCI in a combined annotated bibliography, glossary, encyclopedia, event calendar, organization directory, and job bank—cross-referenced by hyperlinks. The materials on the site are copyrighted by their maintainers and require a $40 USD / year subscription fee to access the full proprietary, commercial work. Nonetheless, this resource is very impressive, with detailed encyclopedic articles stitching together bibliographic entries through direct citations activated as hyperlinks. It represents a shining example of how research resources ought to be organized through hypertext.

Perhaps more impressively, in its seventeen years of life, the HCI Bibliography has grown to become an extensive database of tens of thousands of HCI references, all thanks to the tireless efforts of Gary Perlman who has put in hundreds of hours a year into the project [5]. While in no way would one want to take away from this important achievement and contribution, it leaves the discipline vulnerable in relying so heavily on one person. It is difficult for others to share the burden because adding new entries is very cumbersome. In response to "How can I get some items added to the database? How are articles chosen for inclusion?" the FAQ [6] replies frankly, "Thank you for volunteering to do data entry for the

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1 http://www.hcirn.com
2 http://www.hcibib.org
project! The technical specifications for the data are available, but please contact the project before investing a lot of work."

To resolve these difficulties, new approaches need to be developed and matured to carry Perlman's torch. A new approach can also integrate the well structured style of HCIRN with the comprehensiveness of the HCI Bibliography.

3. WIKIPEDIA

The growth of Wikipedia into the world’s largest encyclopedia has impressively demonstrated the power of direct contributions from the public at large. Wikipedia’s predecessor Nupedia had only produced 24 articles in three and a half years by following a traditional editing, peer review, and publication process. Conversely, in under five years, Wikipedia has grown to over a million articles in dozens of languages by following an open, network-oriented process. More than that, Wikipedia is a publicly held artifact, available under the GNU Free Documentation License which allows anyone to take, reproduce, and modify the text provided they make derivatives available under the same license. This protects the project from the collapse of Wikipedia’s parent foundation, the Wiki Media Foundation. These licensing terms have also let others reuse the data for their own purposes in separate projects. If one wanted a 21\textsuperscript{st} century model for creating publicly held information resources, one could hardly do better than looking at Wikipedia for inspiration.

4. WIKIS

Wikis have been around for 11 years, and are used for many different purposes from a personal information manager to project management to collaborative travel guides to an encyclopedia. The original wiki, WikiWikiWeb\textsuperscript{4}, was created specifically to organize the knowledge of a dedicated group of software engineers in a pattern language [1], a structured method of describing best practices and good design solutions to common problems in a given domain. Unsurprisingly, wikis remain most useful for structuring the knowledge of a group of people.

While not an enforced standard, the WikiQualityStandard [3] provides a simple, direct definition of what features a wiki must possess in order to call itself a wiki. To briefly summarize, wikis are typically dynamic websites where participants are presented pages that consist of a page title, the page text, navigation, and functions. Key functions include:

- **Edit** the text of the page. This presents the entire text of the page to the participant who can edit it as he or she needs.
- **History** of all the revisions made to the page.
- **Recent changes** lists the log of all the edits made to the entire wiki. Because Recent Changes provides an overview of what is happening on the wiki, on most wikis it becomes the focus of attention.

Links are made from literal phrases in the text. In particular, the literal phrases correspond identically to the page titles. Links are bidirectional, meaning not only can you follow references to a page, but you can find pages that refer to a page (i.e. citations).

Finally, there are a few structurally significant pages. The homepage acts like the front matter of the wiki. The homepage is often used to create a top-down structure (e.g. a table of contents). Each contributor typically creates a namepage for themselves (the page title is their real name), where they can organize their own use of the wiki as well as receive and respond to messages from others.

5. PARTICIPATORY DESIGN WIKI

To address the difficulty of maintaining the participatory design bibliographies, we have created a new service, a wiki devoted to cooperative, participatory, ethnomethodological, and user-driven design, available from:

http://meatballsociety.org/cgi-bin/design

Like Wikipedia, it is open to all researchers to contribute to, and it is publicly held under the Creative Commons Attribute Share Alike 2.5\textsuperscript{5} license.

This wiki has already incorporated the previous annotated bibliography maintained by Clement and Furness (2004). Extensive work has already begun to organize the information in a similar style to HCIRN. In particular, it contains an annotated bibliography, glossary, timeline, project descriptions, biographies, and encyclopedia articles cross-referenced by hyperlinks.

The basic element of the wiki are references. Each reference has its own page, identified by its APA citation style. For instance, an article by John Doe and Jane Roe written in 2006 would be cited on the wiki as Doe, Roe, 2006. These pages are open for people to collect their summaries, impressions, criticisms, comments, and other annotations.

Beyond the annotated references, some authors may elect to describe a given concept, history, project, or researcher (in a biography). These descriptions reside on their own pages with names corresponding to the name of what is being described (i.e. the project name, the researcher’s name, the concept’s name). When citations to the literature are necessary, one merely has to use an APA-style citation to link to the appropriate annotated bibliographic entry.

This format has the advantage of being simple yet powerful. On one hand, since published articles are the main vehicles for the ongoing conversation in the discipline, the annotated bibliographic articles serve to keep up with the conversation. On the other hand, over time, some ideas become settled. As they become settled, the wiki makes it easy to keep track of which journal articles refer to a given idea and summarize the debate on pages devoted to those ideas.

These summaries can then be referred to by other summaries since they are also pages on the wiki. In this way, new more complicated ideas can be built from earlier, stabilized ideas.

6. MEATBALL

The wiki is hosted by Meatball\textsuperscript{6}, a collective of leaders within the public wiki movement. Meatball has over six years of experience in helping and managing public, volunteer-led and volunteer-driven wiki projects. Like participatory design, Meatball has been a forerunner in supporting the people and participants of online forums. Meatball will maintain the wiki backend as part of its

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\textsuperscript{3} http://www.wikipedia.org
\textsuperscript{4} http://c2.com/cgi/wiki
\textsuperscript{5} http://creativecommons.org/licenses/by-sa/2.5/
\textsuperscript{6} http://usemod.com/cgi-bin/mh.pl
public mission. Nonetheless, under the Creative Commons license, anyone will be free to take the bibliography for their own purposes at any time.

7. CALL FOR PARTICIPATION
The more people that use this resource, the more effective, powerful, and useful it becomes. If researchers simply create and annotate bibliographic entries while reading the literature, we will collectively benefit from each other’s readings, insights, and work. Even simple notes are more useful than silence.

Ask your students to contribute annotated bibliographic entries as part of their coursework. They will benefit from public exposure of their work, and they will benefit in their own work from familiarity of this resource.

Finally, please contribute design ideas to develop the underlying software further so that it can be used effectively for other academic fields that you may also participate in.

8. ACKNOWLEDGMENTS
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9. REFERENCES