Colophon

This essay's proposal, outline, and first draft of five thousand words was written entirely in iA Writer, on a first-generation iPad running iOS 5, in landscape orientation, with the on-screen keyboard. (This was convenient, but in the future I think I'd like to use an actual keyboard, and I wish iA Writer had a "typewriter mode," where backspace is strikethrough and you can't cut, forcing you to write onward instead of allowing editing.)

Five proposals were delivered on September 9th, 2011, an outline was delivered a month later on October 3rd, sections were delivered as they were completed, and the completed first draft, sans most footnotes, references and substantial portions of data analysis, was delivered on November 26th.

It was imported into Google Docs for commenting and editing, as the iPad wasn't great for refactoring large sections of text or adding footnotes.

Google Docs corrupted a revision around December 26th and I moved to Apple Pages '09, synchronized with Dropbox, on a 2006 Mac Mini running Snow Leopard. (This was my first extended use of both OS X and Dropbox.) A final draft of seventy-six hundred words, including all footnotes, references, and analysis, was delivered January 1st, 2012. Minor additional edits to statistics, timelines, and headers were made January 29th, 30th and February 1st.

The 2011 community survey was collected using Google Forms and Google Spreadsheets. Data was additionally coded using a combination of formulas and a Python script for import into IBM SPSS 20 for statistical analysis. The summary was generated by Google Forms and Google Spreadsheets. PDFs were generated by Safari 5 on the Mac; in the case of the summary, after substantial hand-editing of the generated HTML in Dashcode. The stated relationship between respondents' home and work was calculated on paper, by hand.

The membership rosters, Twitter email notifications, and JSON dumps of the Twitter timeline were processed using crude, handmade Python scripts, written in Xcode 3.2 and run from Terminal using the default Python 2.6.1 interpreter.

The 2012 community survey is available through Qualtrics, after building and testing versions in each of Google Forms, Wufoo, SurveyMonkey, and FormSite.

The 2012 event response card was written in Apple Pages '09. A Google Spreadsheet and Google Form is available for convenient coding and summarization of collected data.

References

The citations in the essay provide accurate references, but reading the full works would be very helpful to students of community design. Please read them. Don't just say, "Oh, I'll just figure it out as I go," or think "I know how people work," or imagine "This can't be that hard, I'm motivated, I won't burn out, this'll be fun and easy," or believe "This essay tells me everything I need to know." As Shirky writes in "A Group Is Its Own Worst Enemy," "…learning from experience is the worst possible way to learn something. Learning from experience is one up from remembering."

For online documents, links to the source are provided. For books, links are provided to Amazon for purchasing new or used, and Worldcat for library borrowing. For papers, links to Google Scholar are provided. For public domain books and papers, links are provided to Google Scholar and an online copy.

"A Group Is Its Own Worst Enemy," Clay Shirky, last modified July 1, 2003, http://www.shirky.com/writings/group_enemy.html. Shirky really does do an excellent job summarizing a lot of other work here. If you only read one thing, this should be it, but that also means you're doing a terrible job and really should read more. Shirky also cites (and I also read):

W. R. Bion, <u>Experiences in Groups</u> (New York: Basic Books, 1961). This was the research that started it all, based on Bion's study of mental patients. In the course of my reading, I bookmarked pages 18, 25, 62, 63, 65, 67, 89 (oh, such great quotes here), 145, 147, 155, 171, 174, 177, 178, and 188. Amazon: http://www.amazon.com/Experiences-Groups-Papers-W-R-Bion/dp/0415040205. Worldcat: http://www.worldcat.org/search?q=ti%3AExperiences+in+Groups+au%3ABion.

"The Lessons of Lucasfilm's Habitat," Chip Morningstar and F. Randall Farmer, first presented May 1990, http://www.fudco.com/chip/lessons.html. You can skip the "Implementation" and "The Lessons" sections, as they're technical rather than social bits. (Incidentally, Lucasfilm has been in the virtual worlds business for over 25 years now: Habitat launched in 1986; their latest project, Star Wars: The Old Republic, on which I work, launched in 2011.)

"LambdaMOO Takes a New Direction," The Wizards of LambdaMOO, circa May 1996, http://www.cc.gatech.edu/classes/AY2001/cs6470_fall/LTAND.html.

Shirky also mentions the Plato BBS, the WELL, Communitree and Joi Ito's Emergent Democracy, but did not provide specific references and I did not follow them up.

Bruce W. Tuckman, "Developmental Sequence in Small Groups," Psychological Bulletin 63, 6 (1965). This fundamental early research surveyed fifty papers and produced a cohesive, four-stage theory for group development. Google Scholar: http://scholar.google.com/scholar?cluster=17675771268837701784

A. Paul Hare, <u>Handbook of Small Group Research</u> (New York: Free Press, 1976). While nearly all of the papers referenced in my essay and in the research are behind academic paywalls, this book is an indispensable, comprehensive survey of their results. Each chapter ends in a summary, so you can read that first to see if the chapter contains applicable research. My bookmarks include pages 100, 231, 303 and all of Appendix 2. Amazon: http://www.amazon.com/Handbook-Small-Group-Research-Paul/dp/

002913840X. Worldcat: http://www.worldcat.org/search?q=ti%3Ahandbook+small+group+research+au%3Ahare.

Marvin E. Shaw, Group Dynamics: The Psychology of Small Group Behavior (USA: McGraw-Hill, 1976). This book is a much more digestible counterpart to Hare's overwhelmingly comprehensive survey, based on only hundreds of references. My bookmarks include pages 106, 186, 285 and 403. Amazon: http://www.amazon.com/Group-Dynamics-Mcgraw-Hill-Psychology/dp/007056504X. Worldcat: http://www.worldcat.org/search?q=ti%3AGroup+Dynamics+au%3AShaw.

Etienne Wenger, Communities of Practice (New York: Cambridge University Press, 1998). This was the first book I read in preparation for this essay, and I was really disappointed when it wasn't a magical tome explaining everything I ever wanted to know. It's a fascinating book about how "groups that have to do things" function, which might describe a professional organization that has specific goals, but doesn't describe the meetups and more informal gatherings that makeup the current design community. I'm interested in reading his later works as well, but haven't yet. Amazon: http://www.amazon.com/Communities-Practice-Cognitive-Computational-Perspectives/dp/0521663636. Worldcat: http://www.worldcat.org/search?q=ti%3Acommunities+practice+au%3Awenger.

Derek M. Powazek, Design for Community (Indianapolis: New Riders, 2002). Out of print, but a veritable early bible for building online social systems. Amazon: http://www.amazon.com/Design-Community-Derek-Powazek/dp/0735710759. Worldcat: http://www.worldcat.org/search?q=ti%3ADesign+Community+au%3APowazek. The companion website for the book is long defunct, but the Internet Archive has a copy: http://web.archive.org/web/20070819014829/http://www.designforcommunity.com/.

Peter Block, Community: The Structure of Belonging (San Francisco: Berrett-Koehler, 2008). This book is very theoretical. It champions a non-hierarchal, non-zero-sum sort of

community that might work for interpersonal social communities, but goes against all the other social theory in all these other books, and doesn't reflect the hierarchal nature of our professional lives. While I suspect there are plausible ties to, say, guilds, the apprenticeship system and unions, I haven't really thought much about it yet. I did feel like Xianhang Zhang's Product Design Guild independently implemented some of the things Block talks about. Amazon: http://www.amazon.com/Community-Structure-Belonging-Peter-Block/dp/1605092770. Worldcat: http://www.worldcat.org/search?q=ti%3Acommunity+structure+belonging+au%3Ablock.

"Social Software Sundays #2 - The Evaporative Cooling Effect," Xianhang Zhang, last modified October 10, 2010, http://blog.bumblebeelabs.com/social-software-sundays-2-the-evaporative-cooling-effect/. Based on another essay, Zhang extrapolates the hypothesis substantially, and the concepts are nominally echoed by Wenger's discussions of long-standing group members and outbound trajectories in Communities of Practice.

"Group dynamics," Wikipedia contributors, Wikipedia, The Free Encyclopedia, accessed November 25, 2011, http://en.wikipedia.org/w/index.php?title=Group_dynamics&oldid=462256580. The Wikipedia article for this subject includes a reasonable overview through modern times. The works of the first two key theorists it lists, Gustave Le Bon and William McDougall, are now in the public domain and are provided below.

The next five papers, from 1964, 1969, 1977, 1990 and 1997 (with, of course, Shirky 2003) all discuss approximately the same thing: the issues around exploring group phenomena, the need for increased experimental rigor, the need for (and risks of neglecting) fieldwork, and the risks of ignoring relevant work in your own and other sciences.

Michael Sherwood, "Bion's *Experiences in Groups*: A Critical Evaluation," Human Relations 17, 2 (May 1964). While not used in the paper, this offers a rare *philosophical*

criticism of Bion's work and of the early field of group dynamics as a whole. Google Scholar: http://scholar.google.com/scholar?cluster=7392940857670540996

Chris Argyris, "The Incompleteness of Social-Psychological Theory: Examples from Small Group, Cognitive Consistency, and Attribution Research," American Psychologist 24, 10 (1969). Google Scholar: http://scholar.google.com/scholar?cluster=1036674835772111051

Bruce W. Tuckman, "Stages of Small-Group Development Revisited," Group and Organizational Studies 2, 4 (December 1977). Tuckman provided an early theory on how groups form and behave ("forming," "storming," "norming" and "performing"), and ten years later reviewed the progress of the academic literature. Of twenty-two studies, only one attempted to validate his work; many others independently reinvented it. Google Scholar: http://scholar.google.com/scholar?cluster=14314734729937583029.

Edgar H. Schein, "Organizational Culture," American Psychologist 45, 2 (February 1990). Google Scholar: http://scholar.google.com/scholar?cluster=17946237709339356403

Joseph E. McGrath, "Small Group Research, That Once and Future Field: An Interpretation of the Past With an Eye to the Future," Group Dynamics: Theory, Research, and Practice, 1, 1 (March 1997). Google Scholar: http://scholar.google.com/scholar?cluster=3326986101637476227

I recognize that while Shaw and Hare offer a survey of the literature, it's often preferable to read the original studies, but with the unfortunate state of academic publishing, this is hard to do without ready access to a university library. I am fortunate enough to have this through my alumni association, but I cannot republish my copies. I've gone through the references in each book and located online copies of anything originally published before 1923, which would be out of copyright. Works published 1923 through 1963 which did not renew their copyright should also be in the public domain, but I did not research all of these. If you find one of interest in this date range, you can often contact the original

author and request a copy, or I can help you figure out if it should be out of copyright, and get it for you if it is.

Bion references a handful of books and papers. At least three of them are out of copyright and are freely available:

William McDougall, <u>The Group Mind</u> (London: Cambridge University Press, 1927). Google Scholar: http://scholar.google.com/scholar?cluster=7570161838554870596. Google Books: http://books.google.com/books?id=61fp1dEq9G8C&pg=PR3.

Wilfred Trotter, <u>Instincts of the Herd in Peace and War</u> (New York: Macmillan, 1916). Google Scholar: http://scholar.google.com/scholar?cluster=3066680511131618419. Google Books: http://books.google.com/books?id=4L4YAAAAYAAJ&pg=PA3.

Gustave Le Bon, <u>The Crowd: a Study of the Popular Mind</u> (London: Benn, 1947). Google Scholar: http://scholar.google.com/scholar?cluster=1799019298222158617. Google Books: http://books.google.com/books?id=13hQsRIEM5IC&pg=PR3.

Hare references over six thousand books and papers. At least seven are out of copyright and are freely available:

William H. Burnham, "The hygiene of home study," Pedagogical Seminary 12: 213-230 (1905). Google Scholar: http://scholar.google.com/scholar?cluster=6362762476542080016. Google Books: http://books.google.com/books?id=i756AAAAMAAJ&pg=PA213.

William H. Burnham, "The group as a stimulus to mental activity," Science 31: 761-767 (1910). Google Scholar: http://scholar.google.com/scholar?cluster=10640075316736985894. Science: http://www.sciencemag.org/content/31/803/761.full.pdf.

Charles H. Cooley, <u>Human Nature and the Social Order</u> (New York: Scribner, 1902). Google Scholar: http://scholar.google.com/scholar?cluster=414563706544298392. Google Books: http://books.google.com/books?id=BG9Qj4pQrXEC&pg=PP3.

Charles H. Cooley, <u>Social Organization</u> (New York: Scribner, 1909). Google Scholar: http://scholar.google.com/scholar?cluster=13743351033169533683. Google Books: http://books.google.com/books?id=j-MtAAAAIAAJ&pg=PR3.

Henry T. Moore, "The comparative influence of majority and expert opinion," American Journal of Psychology 32: 16-20 (1921). Google Scholar: http://scholar.google.com/scholar?cluster=5642600797499433115. JSTOR: http://www.jstor.org/stable/10.2307/1413472.

Henry T. Moore, "Further data concerning sex differences," Journal of Abnormal and Social Psychology 17: 210-214 (1922). Google Scholar: http://scholar.google.com/scholar?cluster=16920223028139169740. Google Docs: https://docs.google.com/open?id=1-DlM8rxQFE9-ZFkw_a7MD0-A0xlp5QwsfnNlstpitWoYsuC_VVJcBrfOUG33.

Georg Simmel, "The number of members as determining the sociological form of the group," American Journal of Sociology 8: 1-46 (1902). Google Scholar: http://scholar.google.com/scholar?cluster=8282333830417401493. JSTOR: http://www.jstor.org/stable/10.2307/2762037.

At least three of the works referenced by Shaw are out of copyright and freely available:

Floyd H. Allport, "The influence of the group upon association and thought," Journal of Experimental Psychology, 3, 159-192 (1920). Google Scholar: http://scholar.google.com/scholar?cluster=1970024833685205018. Google Books: http://books.google.com/books?id=WYO3AAAAIAAJ&pg=PA159.

Harold E. Burtt, "Sex differences in the effect of discussion," Journal of Experimental Psychology, 3, 390-395 (1920). Google Scholar: http://scholar.google.com/scholar?cluster=982311568877711879. Google Books: http://books.google.com/books?id=WYO3AAAAIAAJ&pg=PA390.

Norman Triplett, "The dynamogenic factors in pacemaking and competition," American Journal of Psychology, 9, 507-533 (1897). Google Scholar: http://scholar.google.com/scholar?cluster=3037963790927345095. JSTOR: http://www.jstor.org/stable/1412188.

Wenger references many works, at least two of which are out of copyright and are freely available:

John Dewey, Human Nature and Conduct: An Introduction to Social Psychology (London: Allen and Unwin, 1922). Google Scholar: http://scholar.google.com/scholar?cluster=5778599093930338563. Google Books: http://books.google.com/books?id=X_0MAAAAIAAJ&pg=PR1.

Emile Durkheim, The Division of Labor in Society (New York: Free Press, 1893). Wenger references a 1984 translation (the original is in French), but a survey of the work, including translated excerpts, from 1915 is available. Google Scholar: http://scholar.google.com/scholar?cluster=7312896367985965752. Google Books: http://books.google.com/books?id=HAYOAQAAIAAJ&pg=PA3.

Finally, I came across this book while researching the rest of the above list, and it looked interesting and relevant:

R. M. MacIver, Community, a Sociological Study: Being an Attempt to Set Out the Nature and Fundamental Laws of Social Life (London: MacMillan, 1920). Google Scholar: http://scholar.google.com/scholar?cluster=182832748672155740. Google Books: http://books.google.com/books?id=tgYFGTqE-FkC&pg=PR3.