

Finding Common Ground: A Theory of Community Inquiry

Bertram C. Bruce, Professor Emeritus
Graduate School of Library & Information Science
University of Illinois
illinois.edu/~chip

Acknowledgements

This presentation is a beneficiary of many years of intellectual/practical work with various community partners as well as work with colleagues in the Community Informatics Initiative at the University of Illinois. It was supported in part by grant number RE-03-07-0007-07 from the (U.S.) Institute of Museum and Library Services.

Finding Common Ground: A Theory of Community Inquiry

Much of current work in information science focuses on collaboration, in areas such as data standards, commons-based peer production, social networks, distributed knowledge creation, community and social informatics, collaborative information seeking, university-community engagement, and information use in work practices. However, the lack of robust theory makes it difficult to compare results, or to examine issues such as the relation between individual and collective inquiry. This talk presents a theory of community inquiry. Building upon the work of Peirce and Dewey, as well as that of contemporary scholars, and drawing from the concrete example of an extended collaboration in the Paseo Boricua community, the theory presents a way of describing and understanding collaboration and the ways in which it involves information creation and use.

Social problems

“an innumerable multitude of men, all equal and alike, incessantly endeavoring to procure the petty and paltry pleasures with which they glut their lives. Each of them, living apart, is as a stranger to the fate of all the rest; his children and his private friends constitute to him the whole of mankind. As for the rest of his fellow citizens, he is close to them, but he does not see them; he touches them, but he does not feel them; he exists only in himself and for himself alone.” --De Toqueville, *Democracy in America*

Mi vida



- A mi me gusta el equipo cruz azul y tambien pachuca porque los dos equipos son de Hidalgo.

Digital storytelling

Middle school

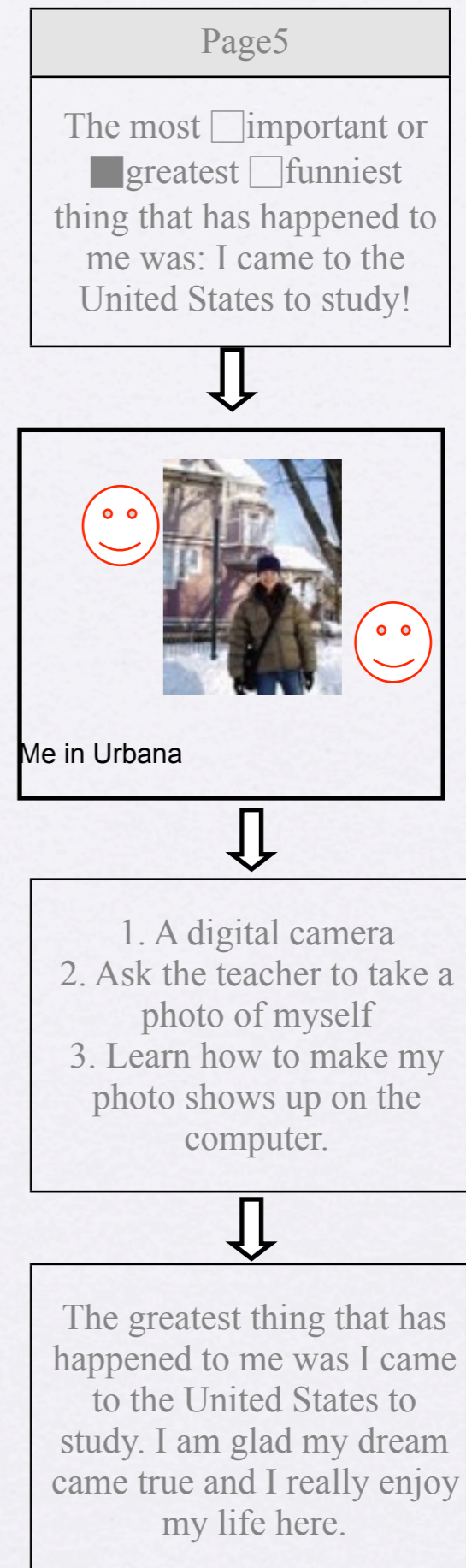
- Art
- Critical literacy
- ©, net safety, podsafes music
- Image & sound





Frida Kahlo

Podcast storyboard



My Culture, My Pride



- I was born in Michoacan, Mexico.
- I love mexican food and everything.
- I would love to go back to my country one day.
- Latin people to love to party.

Mentor learning

- appreciate Hispanic culture & revisit my own
- imagining difficulties for immigrant young people in a new country
- telling my own story... as a self exploration journey
- multiple forms of communication, including visual, gesture, and verbal modes

Community action

- Share podcasts with family & friends, strengthening cultural heritage
- Recruit their friends to join Digital Click summer camp
- Act as leaders in that camp

On November 6th, 2010, Youth Workers, Youth Advocates, Educators, Teachers, Administrators, Youth Mentors, Community Leaders, Activists and Allies are gathering at the **University of Illinois at Chicago to participate in the first annual **Youth Development Summit!****

This years summit is titled, "Join the Revolution: Engaging Youth as Agents of Change."

Outline

- Background: Pragmatism
 1. How is it possible to go from individual to *coordinated inquiry*?
 2. What are the forms of coordinated inquiry?
 3. How does *community inquiry* happen?

Issues for community inquiry

- Does community inquiry accord with human nature?
- Can the objectives be achieved more efficiently in other ways?
- Does it always lead to desirable outcomes?
- Who defines the community, and how?
- Whose inquiry and whose community are we talking about?

Pragmatism

Pragmatism as working theory

- Precursor of contemporary work on reflective practice, sociocultural activity, Freirean pedagogy, public health, social work, sociology, geographic information systems,...
- The original is worth mining further
- A practice, rather than a dogma

The corridor

As the young Italian pragmatist Papini has well said, it lies in the midst of our theories, like a corridor in a hotel. Innumerable chambers open out of it. In one you may find a man writing an atheistic volume; in the next some one on his knees praying for faith and strength; in a third a chemist investigating a body's properties. In a fourth a system of idealistic metaphysics is being excogitated; in a fifth the impossibility of metaphysics is being shown. But they all own the corridor, and all must pass through it if they want a practicable way of getting into or out of their respective rooms. --

Pragmatism, William James, 1907

Pragmatism maxim

“Consider what effects, which might conceivably have practical bearings, we conceive the object of our conception to have. Then the whole of our conception of those effects is the whole of our conception of the object.” --Charles Sanders Peirce

Doubt \Rightarrow inquiry

“Doubt is an uneasy and dissatisfied state from which we struggle to free ourselves and pass into the state of belief; while the latter is a calm and satisfactory state. ... The irritation of doubt causes a struggle to attain a state of belief. I shall term this struggle *Inquiry*.” --Peirce

Inquiry

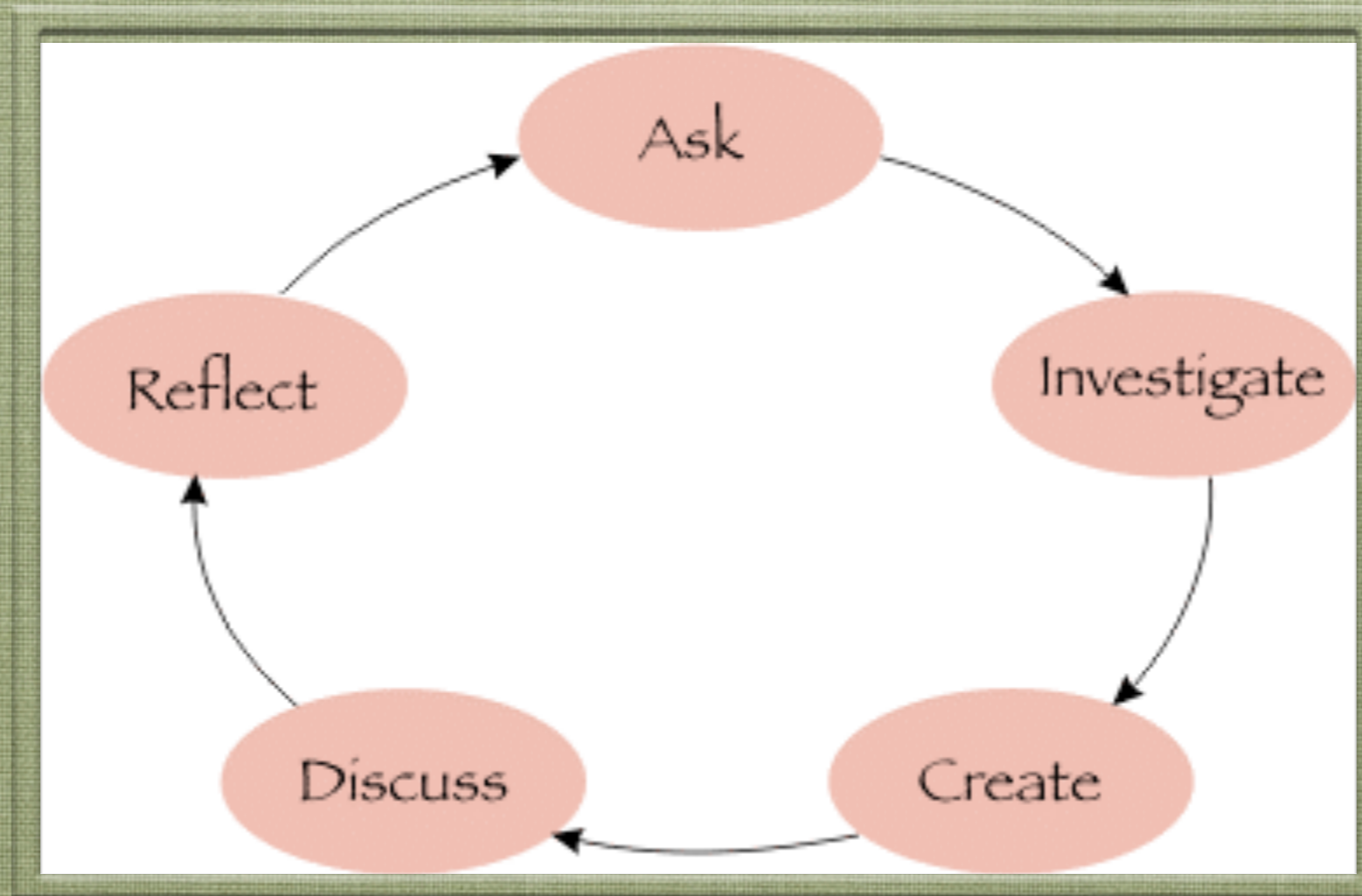
“is the controlled or directed transformation of an indeterminate situation into one that is so determinate in its constituent distinctions and relations as to convert the elements of the original situation into a unified whole.” --*Logic: The Theory of Inquiry*, John Dewey, 1938

Continuity of inquiry

“The principle of continuity is the idea of fallibilism objectified. For fallibilism is the doctrine that our knowledge is never absolute but always swims, as it were, in a continuum of uncertainty and of indeterminacy. Now the doctrine of continuity is that all things so swim in continua.” --Peirce

Spiral path of inquiry

- asking questions
- investigating solutions
- creating meaning
- discussing discoveries and experiences, and
- reflecting on new-found knowledge in order to ask new questions



Inquiry cycle

The Four P's of Pragmatism

- Practical dimensions of all inquiry
- Pluralistic nature of the phenomena studied and the tools that are used to study those phenomena
- Participatory role of many individuals with different perspectives in the necessarily interpersonal process of inquiry
- Provisional and flexible character of explanation

From individual to coordinated inquiry

From individual to community?

- Group selection in evolutionary theory
- Steven Levitt & Stephen J. Dubner, *Freakonomics*
- Ronald Coase: two modes of production: (1) employee in firm, (2) individual in market

Commons-based peer production

- Open source software development
- Wikipedia
- OpenStreetMap
- (3) third mode of production --*Coase's Penguin, or Linux and the Nature of the Firm*, Yochai Benkler, 2002

Each situation is unique

The point of Dewey's normative claim is to counter the all-too-common tendency of people lazily to adopt a one-size-fits-all approach to problem solving. Dewey continually stressed the need to inquire afresh into each indeterminate situation so as to avoid the pitfall of wrongly assimilating it to other indeterminate situations that we had faced. --Richard M. Gale

Problem of ineffability

- makes it impossible to articulate and develop common beliefs, values, and goals
- no way to construct the common purpose that might guide coordinated inquiry

Solutions-1

Richard M. Gale: allow the inquirer to symbolically describe situations in a public language

Solutions-2

Frank Kannetzky: lack of linguistic resources for saying what is meant; paraphrase or give analogies & metaphors; ever-expanding language in order to express private meanings

Solutions-3

Susan Leigh Star & James R. Griesemer:

- plastic enough to adapt to local needs & constraints of the several parties employing them
- robust enough to maintain a common identity across sites
- weakly structured in common use, & become strongly structured in individual-site use
- abstract or concrete

Forms of coordinated inquiry

Ties

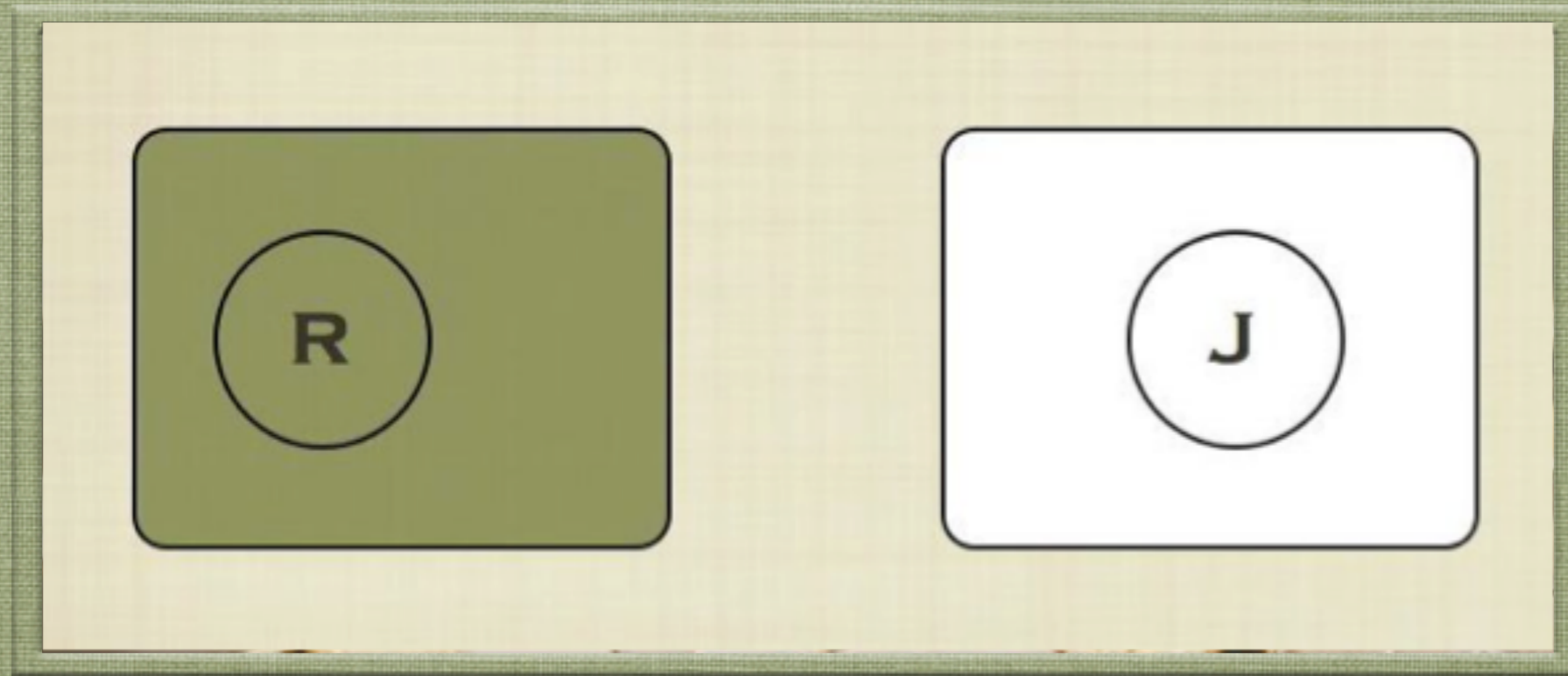
- “real and organic” v. “imaginary and mechanical” associations --*Community and Civil Society*, Ferdinand Tönnies, 2002
- strong-tie network (Gemeinschaft), individuals are bonded through a “unity of will”—that is, their actions are predicated on shared moral attitudes, concepts of appropriate behavior, and sense of responsibility to the network itself
- weak-tie network (Gesellschaft) permits more individual latitude, in that participation is motivated less by strong membership identification than by the personal benefits of association

Communities of meaning

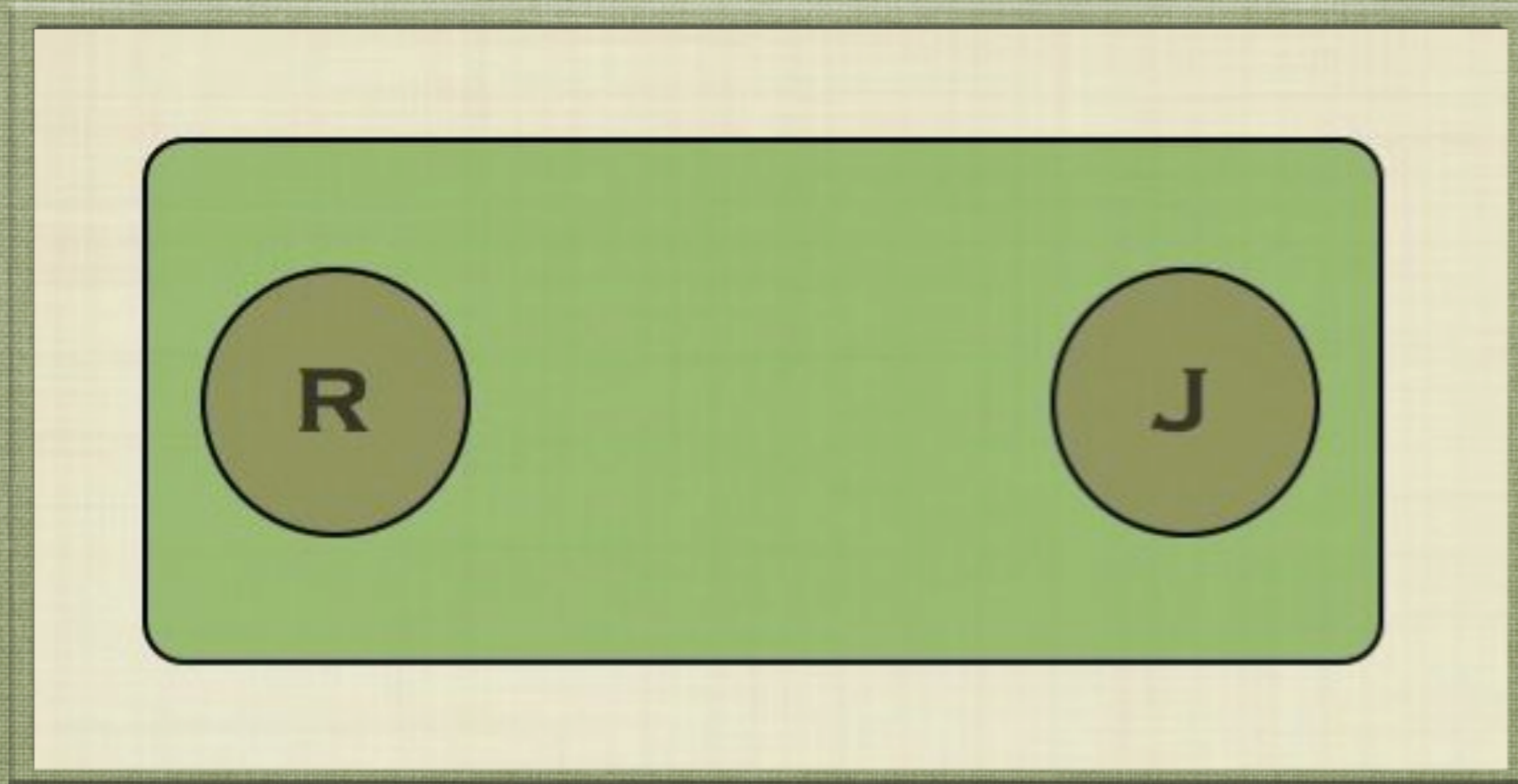
- community constructed around its unique historical, political, sociocultural, aesthetic, & physical characteristics
- depends on interpretation by members
- plays a crucial symbolic role in our sense of belonging
- “people construct community symbolically, making it a resource and repository of meaning, and a referent of their identity.” --Anthony P. Cohen

Other distinctions

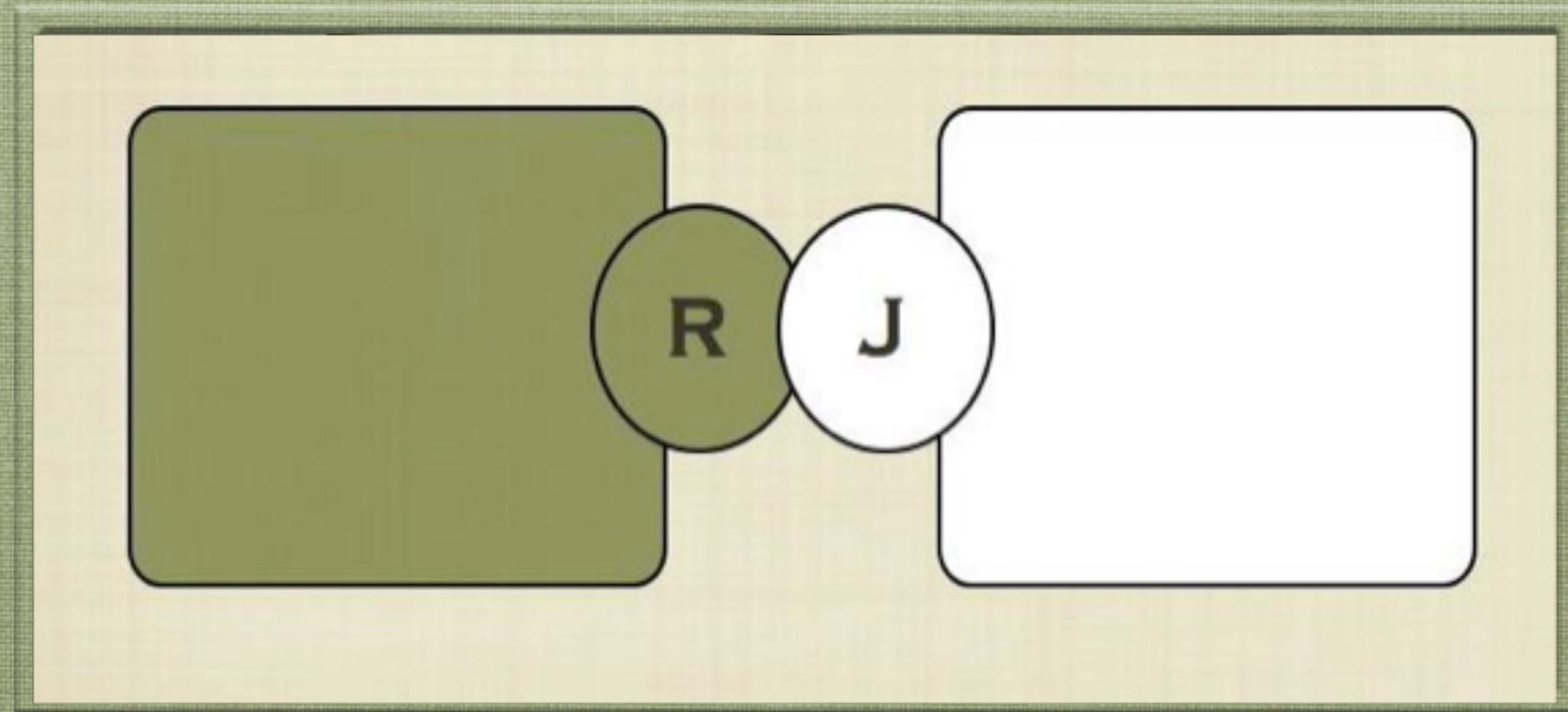
- distributed/centralized and informal/formal --Mark Surman & Katherine Reilly
- task v. practice v. knowledge focus --Margaret Riel & Linda Polin
- Light v heavyweight models of peer production (online knowledge crowds v communities) --Caroline Haythornthwaite



Collaborative inquiry: Weak
tie / Different community



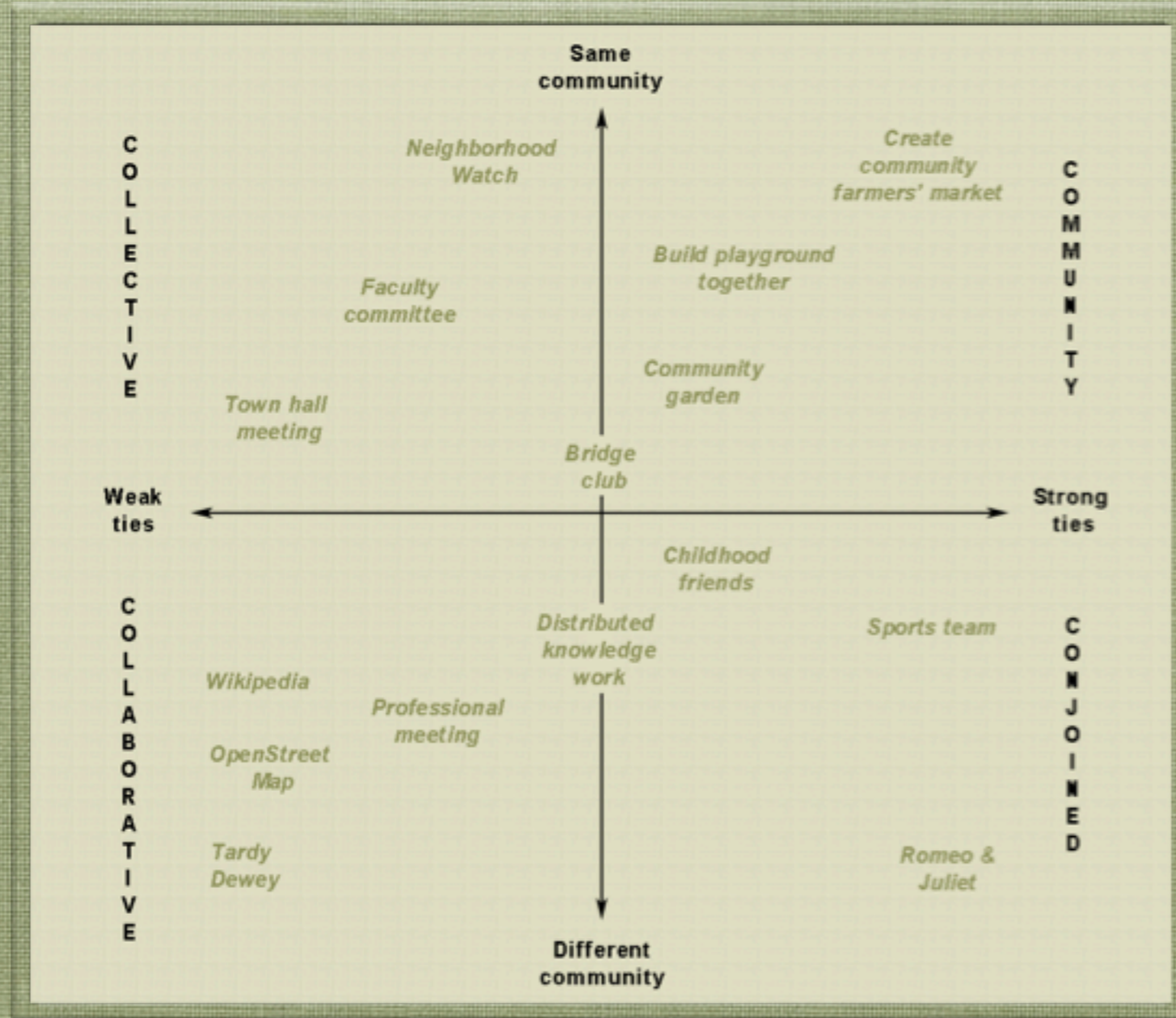
Collective inquiry: Weak tie /
Same community



Conjoined inquiry: Strong tie /
Different community



Community inquiry: Strong
tie / Same community



Types of coordinated inquiry

Community inquiry

Reality & community

“what do we mean by the real? It is a conception which we must first have had when we discovered that there was an unreal, an illusion; that is, when we first corrected ourselves...The real, then, is that which, sooner or later, information and reasoning would finally result in, and which is therefore independent of the vagaries of me and you. Thus, the very origin of the conception of reality shows that this conception essentially involves the notion of a COMMUNITY, without definite limits, and capable of a definite increase of knowledge.” --Charles Sanders Peirce

Community of inquiry

“knowledge is a function of association and communication; it depends upon tradition, upon tools and methods socially transmitted, developed and sanctioned. Faculties of effectual observation, reflection and desire are habits acquired under the influence of the culture and institutions of society, not ready-made inherent powers.” --John Dewey

Cognition as action in the world

- Consciousness is not something that happens within us. It is something we do or make. Better: it is something we achieve. Consciousness is more like dancing than it is like digestion. --*Out of Our Heads*, Alva Noë, 2009
- “The human skin: Philosophy’s last line of defense,” Arthur Bentley, 1954

Action & inquiry

- Hans Joas: creativity of action
- Manuel Zacklad: communities of action
- Richard Sennett: making is thinking

Community inquiry

- Derives from the connection of learning and life
- *Community* emphasizes support for collaborative activity and for creating knowledge that is connected to people's values, history, and lived experiences
- *Inquiry* points to support for open-ended participatory engagement
- *Community inquiry* is thus a learning process that brings theory and action together in an experimental and critical manner

Def: Community inquiry

= inquiry conducted of, for, and by communities as social organisms. The inquiry is *of* the community because it is embedded in community situations, resources, and needs; it is *for* the community because it seeks to solve community problems (indeterminate situations); it is *by* the community, because it is enacted by community members with strong ties.

Consequences: digital storytelling example

- Boundary objects to coordinate inquiry
- Collaborative inquiry: Weak tie / Different community
- Community inquiry
 - of: ?
 - by: ✓
 - for: ✓

Consequences: Education

- of => learning connected to life; inquiry in relation to lived experience
- by => participatory nature of all inquiry; expanding ties & community
- for => understanding the relationship between knowledge and the ends to which it is applied; finding answers to real questions in the world around us; social and moral responsibility

Consequences: Information science

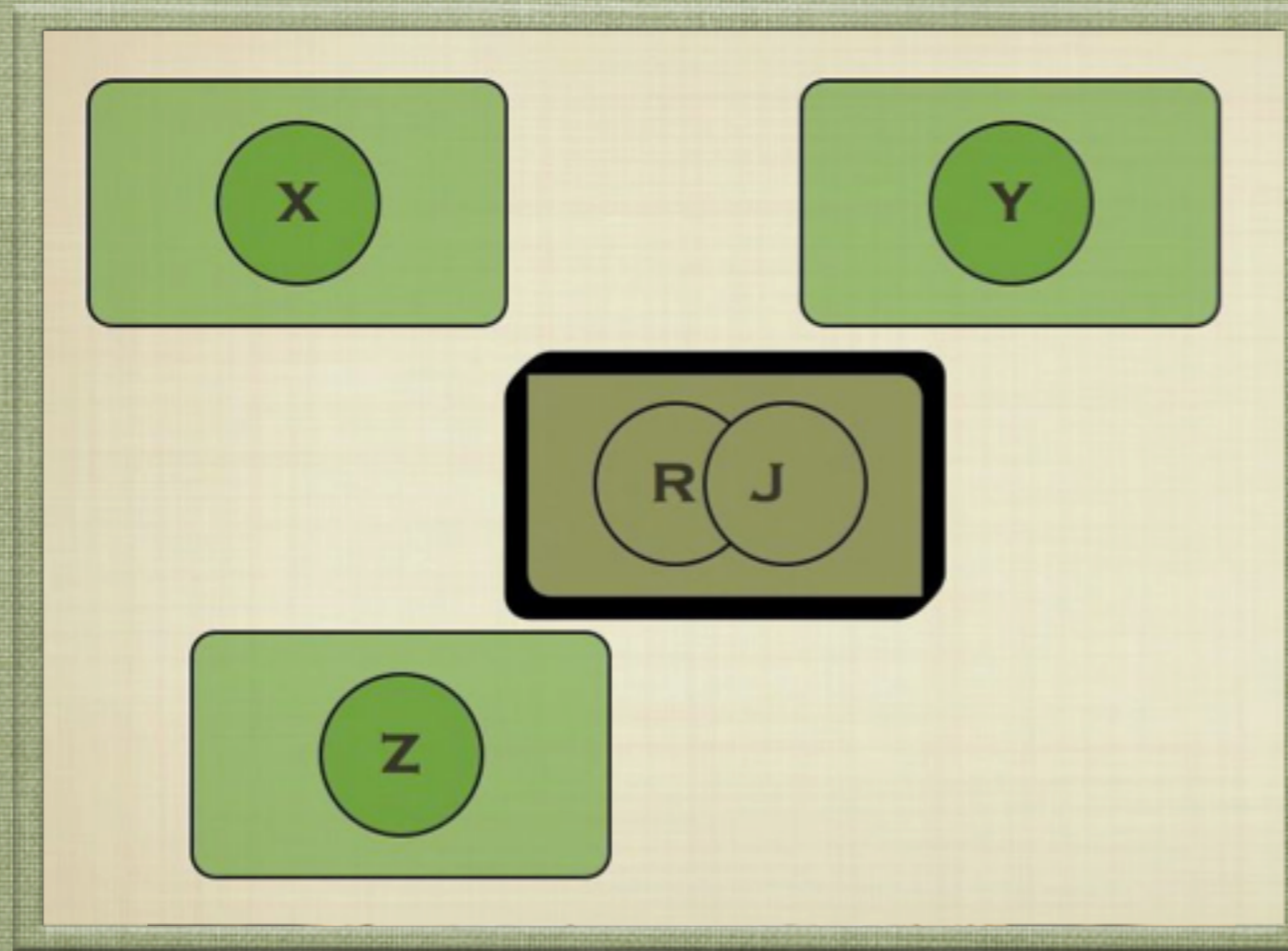
- framework for understanding distributed knowledge work
- Peirce's theory of consequences; uncertainty is based on use
- consider usefulness, not truth --Wolfgang Lenski, Michael Richter
- emphasis on changing nature of knowledge and knowers (cf: *Knowing and the Known*, Dewey & Bentley, 1949)

Consequences: Philosophy

- Process for moving from individual to coordinated inquiry
- Taxonomy of coordinated inquiry; comparing different cases
- Definition of community inquiry as an end-in-view

Provisional: Notes on communities

- communities of meaning: we may each perceive different communities
- heterarchical: overlapping, inconsistent
- dynamic nature: we can change or even create communities
- consequences can be positive or negative
- embedded in power relations
- shaped, but not entirely determined by geography



Expanding ties & community

Bibliography

- Allen, Danielle S. *Talking to Strangers: Anxieties of Citizenship Since Brown v. Board of Education*. Chicago: University of Chicago Press, 2004.
- Barber, Benjamin. *Strong Democracy*, 4th printing. Berkeley: University of California Press, 1984.
- Benkler, Yochai. "Coase's Penguin, or, Linux and the Nature of the Firm." *The Yale Law Journal* 112, no. 3 (2002).
- Bruce, Bertram C. "From Hull House to Paseo Boricua: The Theory and Practice of Community Inquiry." In *Philosophy of Pragmatism (II): Salient Inquiries*, edited by Bogdan Dicher & Adrian Ludușan, 181–198. Cluj-Napoca, Romania: Editura Fundației pentru Studii Europene, 2008. <http://hdl.handle.net/2142/13166>
- Clapp, Elsie R. *Community Schools in Action*. New York: Viking, 1939.
- Cohen, Anthony P. *The Symbolic Construction of Community*. London: Tavistock, 1985.
- De Toqueville, Alexis. *Democracy in America*. Translated by Henry Reeve, vol. 4, 1899. http://xroads.virginia.edu/~HYPER/DETOC/ch4_06.htm.
- Dewey, John. *How We Think: A Restatement of the Relation of Reflective Thinking to the Educative Process*. Boston, MA: DC Heath and Company, 1933.
- . *The Public and Its Problems*. New York: Holt, 1927.
- . *Logic: The Theory of Inquiry*. In *John Dewey: The Later Works, 1925–1953*, edited by J. A. Boydston, 1–527. Carbondale, IL: SIU Press, 1938/1991.
- Feinberg, Walter. "Critical Pragmatist and the Reconnection of Science and Values in Educational Research." Lecture series, Fudan University (December 2009).
- Gale, Richard M. "The Problem of Ineffability in Dewey's Theory of Inquiry." *Southern Journal of Philosophy* 44, no. 1 (Spring 2006): 75–90.

- Garton, Laura, Caroline Haythornthwaite, and Barry Wellman. "Studying Online Social Networks." *Journal of Computer-Mediated Communication* 3, no. 1 (1997). <http://jcmc.indiana.edu/vol3/issue1/garton.html>.
- Hansen, David, ed. *Ethical Visions of Education: Philosophies in Practice*. New York: Teachers College Press, 2007.
- Haythornthwaite, Caroline and Barry Wellman. "Work, Friendship and Media Use for Information Exchange in a Networked Organization." *Journal of the American Society for Information Science* 46, no. 12 (1998): 1101–1114.
- Holland, Dorothy, Donald M. Nonini, Catherine Lutz, Lesley Bartlett, and Marla Frederick-McGlathery. *Local Democracy Under Siege: Activism, Public Interests, and Private Politics*. New York: NYU Press, 2007.
- Joas, Hans. *The Creativity of Action*. Chicago, IL: University of Chicago Press, 1997.
- Kanfer, A., B. Bruce, C. Haythornthwaite, N. Burbules, J. Wade, G. Bowker, and J. Porac. "Modeling Distributed Knowledge Processes in Next Generation Multidisciplinary Alliances." *Information Systems Frontiers* 2, no. 3–4 (2000): 317–331.
- Kannetzky, Frank. "The Principle of Expressibility and Private Language." *Acta Philosophica Fennica* 69 (2001), 191–212.
- Levitt, Steven and Stephen J. Dubner. *Freakonomics: A Rogue Economist Explores the Hidden Side of Everything*. New York: William Morrow, 2005.
- Peirce, Charles Sanders. *Collected Papers of Charles Sanders Peirce*. Vols. 1–6, edited by Charles Hartshorne and Paul Weiss, vols. 7–8, edited Arthur W. Burks. Cambridge, MA: Harvard University Press, 1931/1958.
- . "How to Make Our Ideas Clear," in *The Essential Peirce*. Vol.1, edited by N. Houser and C. Kloesel, 124–141. Bloomington: Indiana University Press, 1878/1992.

- Riel, Margaret and Linda Polin. "Online Learning Communities: Common Ground and Critical Differences in Designing Technical Environments." In *Designing for Virtual Communities in the Service of Learning*, edited by Sasha R. Barab, Rob Kling and James H. Gray, 16–50. Cambridge: Cambridge University Press, 2004.
- Ritzo, Chris, Chaebong Nam and Bertram C. Bruce. "Building a Strong Web: Connecting Information Spaces Across Communities." *Library Trends* 58 (Summer 2009): 82–94.
- Sarason, Seymour B. *The Psychological Sense of Community: Prospects for a Community Psychology*. San Francisco: Jossey-Bass, 1974.
- Searle, John. *Speech Acts: An Essay in the Philosophy of Language*. London: Cambridge University Press, 1969.
- Sennett, Richard. *Craftsmanship*. New Haven, CT: Yale University Press, 2008.
- Star, S. L., and J. R. Griesemer. "Institutional Ecology: 'Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology 1907–39." *Social Studies of Science* 19 (1989): 387–420.
- Surman, Mark and Katherine Reilly. *Appropriating the Internet for Social Change: Towards the Strategic Use of Networked Technologies by Transnational Civil Society Organizations*. Brooklyn, NY: Social Science Research Council, 2003.
- Tönnies, Ferdinand. *Tönnies: Community and Civil Society*. Edited by José Harris, translated by Margaret Hollis. Cambridge, UK: Cambridge University Press, 2001.
- Zacklad, M. "Communities of Action: A Cognitive and Social Approach to the Design of CSCW Systems." In *Proceedings of the 2003 International ACM SIGGROU Conference on Supporting Group Work*, edited by M. Pendergast, K. Schmidt, C. Simone & M. Tremaine, 190–197. New York: ACM, 2003.