Aspects of process theories and process-oriented methodologies in historical and comparative sociology: an introduction

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Aspects of Process Theories and Process-Oriented Methodologies in Historical and Comparative Sociology: An Introduction

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Abstract: *»Aspekte von Prozesstheorien und Prozessorientierter Methodik in der Historischen und Vergleichenden Soziologie: Eine Einleitung«.* The "process" concept is particularly crucial especially for historical and comparative sociology. This paper explains the objective of this HSR Focus; after referring to the term "process-oriented" in related human and social sciences, it necessitates the examining "process-oriented" theories in historical and comparative sociology from the viewpoint of "process-generated data." Finally the paper indicates the duality of "process-oriented" theories as a tentative summary of results.

Keywords: process, theory, process-oriented, process-generated data, historical sociology, comparative sociology, duality, flow.

1.   The Importance of the "Process" Concept

If sociology aspires to be an "angel of history" (Burawoy 2005) that stands before the dead and the living, wreckage and progress (Benjamin 1968), the "process" concept has enormous importance. It is illustrated also by a range of process theories including modernization, rationalization, differentiation, civilization, individualization, democratization, globalization, Europeanization, decolonization, and so on. These theories suggest that this concept is linked especially to historical and comparative sociology. It is imperative for sociologists of these areas to invent, maintain, refine, and reorganize their own "process-oriented methodology."

2.   What Does "Process-Oriented" Mean?

First, we re-examine the term "process-oriented" by referring to similar efforts in related disciplines.

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The term "process-oriented" has recently been gaining importance, especially during the first decade of the century in various human and social science disciplines in addition to the traditional focus on "process" in political science, law, biology, psychology, and philosophy. Even in the natural sciences such as environmental studies (Sanchez 1995; Li et al. 2000; Dettki 2003), it has become popular to use this term.

Moreover, the meaning of the term "process-oriented" is very diverse.

In philosophy, Rescher (1996) used the term "process-oriented" in the "thing/process" contrast.[1] His emphasis on "process" derives from Whitehead (1929) who stated that "the actual world is a process" (ibid., 30) and quotes the sentence "*all things flow*" as an exact expression of the "process" concept (ibid., 295).

There is a sub-discipline named "process-oriented psychology," which was first proposed by Arnold Mindell (1985), who emphasized the importance of the body and its growth. A large number of articles, partly influenced by this idea, have been written that use the term "process-oriented" (e.g., Dörnyei 2000; Tennen et al. 2000; Knight et al. 2001; Cummings et al. 2002). The usages in these articles are also diverse, but what is common to all is the incorporation of various factors including body and time, into models, research, or analyses of some psychological case or phenomena.

In pedagogy, this term is applied, for example, to writing education which emphasizes the process, rather than the outcome of writing. Here, the term is the antonym of "skill-oriented" (Delpit 1988), "knowledge oriented" (Atkinson 2003), "product-oriented" (Suzuki et al. 2009), or "effect-oriented" (Janssen et al. 2010). "Process-oriented" is regarded to be more progressive than "outcome-based" in these studies. On the other hand, "process-oriented" is criticized from the viewpoint of "post-process pedagogy" (Breuch 2002) where the term "process" means "prewriting, writing, and rewriting".

In business sciences, the term "process-oriented" has become particularly popular. It is related to a model (for example, of knowledge management, operations management, e-commerce, and so on) which takes the form of a chain of action categories, such as "access/record/store/distribute" (Remus et al., 2003), "plan/do/act/check" (Clegg 2006) "measure/deliver/understand" (Adomavicius et al. 2005), "plan/source/make/deliver/return" (Lambert 2005), or a chain of factors such as "antecedants/behavior/consequences" (LaVan 2007). In these studies, a "process-oriented" concept confronts concepts such as "market-oriented" (Maier et al. 2002), "resource-oriented" (ibid.) "customer-oriented" (Lambert 2005; Adomavicius et al. 2005), or "goal-oriented" (Ado-

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[1] For example: "The word is too ubiquitous and versatile to be dispensed with even the setting of a process-oriented position with its emphasis on 'thing/process' contrast, particularly so since the word admits a variety of insubstantial applications where things in any literal sense of particulars are not necessarily at issue" (Rescher 1996, xvii).

mavicius et al. 2005). That is, the objective of a "process-oriented" concept is to describe a flowchart of actions or factors focusing factors internal to companies. What animates this description is the need to depict effective algorithms which can enable computer processing (e.g. Aalst 1998; Woolridge et al. 2000).

In healthcare sciences, the term "process-oriented" is used to describe a flowchart of healthcare processes. Here it is contrasted with "structure-oriented" or "functional" hospitals, which focus on specialized organization structure (e.g. Hwang et al. 2011, Vos et al. 2011).

In political sciences, it is common to use the term to describe political phenomena such as democracy. The notion of process emphasizes a viewpoint of gradual or rapid change and confronts that of stability; e.g. "a hierarchical causal structure" (Gasiorowski 1995), "system" (Thelen 1999; Tilly 2001), or "product" (Carothers 2009).

In sociology of the 1950s, the term "process-oriented" was "defined in terms of the pattern variables pattern variables of Affectivity, Collectivity Orientation, Particularism, Ascription, and Diffuseness" (Olmsted 1954, 742) and was the opposite of "task-oriented" which was "defined in terms of Affective Neutrality, Collectivity Orientation, Universalism, Achievement" (ibid.). This contrast was also expressed as "*gemeinschaftlich*" and "*gesellschaftlich*".

After reviewing these various usages, it can be pointed out that the term "process-oriented" has a common feature in all of them, namely, *a chain of actions or factors including time and body*, rather than a fixed existence ("product," "system," "structure," "thing") or outside factor ("task," "customer," "market," "resource"). As its use in business sciences suggests, this chain of actions or factors enables us to *draw a flowchart of algorithm for computer processing*. As the definitions from philosophy and psychology show, the term derives from *deep knowledge*.

This chain of actions or factors including time and body can be called "theory" in other contexts. For that reason, the efforts to elaborate "theories" are extremely crucial for "process-oriented methodology." These efforts are also required of historical and comparative sociology in order to adapt to current information and knowledge society.

3. Process-Oriented Methodology

Nina Baur and Stefanie Ernst have recently been proclaiming "process-oriented methodology" based on the works of Norbert Elias (Ernst 2010; Baur et al. 2011). Ernst (2010) suggests "process-oriented methods" are relevant in researching labor and organization. She proposes both "process analysis" on the basis of Elias and "mixed method" research based on the Chicago School. Baur et al. (2011) have proposed four stages of this methodology;

(1) explicating the researcher's theoretical and personal perspectivity; (2) reconstructing the figuration's rules and social structure using standardized data; (3) analyzing the individual's placement within, perception of and ability to change the figuration, using open-ended data; and (4) exploring the figuration's sociogenesis, using process-generated data (ibid., 117).

However, Vom Lehn (2011) pointed out that the theoretical basis for "process-oriented methodology" is not yet clear enough.

Previous research has found that there are close relationships between the nature of data and theories in process-oriented methodology and that process-generated data are more important for these process-oriented theories than the research-elicited data on which most sociologists have traditionally relied (Baur 2009). This argument raises question regarding the nature or characteristics of theories that are appropriate for process-generated data. The process-oriented approach has been related to various theories, but it has been unclear which theories fit this type of data. Therefore, we must examine the merits and demerits of these theories from the viewpoint of process-generated data.

In this HSR Focus, we will discuss this relation between "process-oriented data" and theories, focusing on historical and comparative sociology.

4.   Theories Examined

This Focus arises from ISA Forum RC33/WG02 joint session: "Process-oriented Methodology and Theories in Historical and Comparative Sociology" at Buenos Aires in 2012.

This HSR Focus presents selected contributions of this joint session, which particularly cover the diverse areas in current historical and comparative sociology. That is the macro-level historical sociology of Luciana de Souza Leão, the meso/micro-level historical sociology of Jae Eon Yu, Eduardo Vizer and Helenice Carvalho, the macro-level historical and comparative sociology of Shigeru Tanaka, and the meso/micro-level comparative sociology of Fumiya Onaka

The theories to be examined are as follows:

Table 1:   Theories Treated

No.	Authors	Theories
1	Luciana de Souza Leão	Path-Dependency Theory
2	Jae Eon Yu	Assemblage/Minoritarian Theory
3	Eduardo Vizer et al.	Communication Process Theory
4	Shigeru Tanaka	Nationalization/Symbolic Media Theory
5	Fumiya Onaka	Socio-Cultural Network Theory

Relying on Bendix (2007), Tilly (1984), Skocpol (1984), Mahoney (2000), Thelen (2003) and other comparative-historical sociologists and several economists, Leão introduces and examines the limits and possibilities of the path dependency theory for understanding the history of the Brazilian political economy from 1930 to 2000. The author shows that it has sufficient validity because it helps to explain some of the difficulties encountered in implementing comprehensive state reforms in the 1990s.

After reviewing Elias (1992, 1997), Giddens (1979, 1984), Foucault (1977, 1981), Luhmann (1989, 1995), DeLanda (2006) and other sociologists and philosophers, Yu introduces the assemblage theory of Deleuze and Guattari (1987) and Deleuze (1990, 1994) as a tool for analyzing processes of organizational transformation and social changes especially focusing on the minorities. From this theory, he develops "time-related research" by generating events data in the form of "process-generated data" and applies it to a case-study of the Smile Microcredit Bank of South Korea.

Based on Bourdieu (1996), Foucault (1970), Berger and Luckmann (1986), and other communication theorists, Vizer and Carvalho propose an original three-dimension model of communication processes, with referential, interferential, and auto-referential dimensions. They also create an action research device, called "socioanalysis," for constructing diagnoses and intervention in specific areas in communities and organizations. In this method, researchers invite community members and organizations to participate in constructing a collective diagnosis of problems and intervention options through conversations in which there is continual re-evaluation of the following: a) facts arising from the social action and communication processes in the group, b) implicit or explicit concepts and interpretations in the researchers' minds and practices, and, c) the methodology of intervention and interaction applied by the researchers.

Tanaka proposes his nationalization theory based on Stiglitz (2002) and Schattsneider (1975), which redefines the term "nationalization" according to the concept of globalization. He also suggests the symbolic media theory that integrates the "symbolic media' of Parsons (1949, 1951) as well as Luhmann (1969, 1976, 1981, 1984, 1995, 1997) and the "violence" of Clastre (2010). He considers "the nation-state" as one of such media and describes its nature through the history of Europe and the U.S.

Finally, I examined my own "socio-cultural network" theory based on a "thick comparison" study of three Thai villages by reviewing "process" and "network" concepts in the main works of classical sociologists, such as Auguste Comte (1830, 1854), Herbert Spencer (1851, 1873), Émile Durkheim (1912, 1919, 1922, 1960), Georg Simmel (1900, 1908, 1989), Max Weber (1921, 1922a, 1922b), Norbert Elias (1978, 1987, 1992, 1997), and Talcott Parsons (1949, 1951), and particularly its special relations with Simmel, Weber, and Elias.

5.   Discussion

These process-oriented theories in historical and comparative sociology relate, directly or indirectly, to process-generated data, although some types of theories exhibit special affinity for it. In Table 1, the path-dependency theory and the nationalization/reductive media theory are discussed primarily by process-generated data. The assemblage/minoritarian theory and the communication-process theory relate to the combined use of research-elicited data and process-generated data in action research. The socio-cultural network theory relates to process-generated data though it originally derives from data elicited in field research.

Therefore, the most important point is that process-oriented data are used by historical as well as comparative theories, macro-level as well as meso/micro level theories, and objectivist as well as subjectivist theories. These dualities might metaphorically represent the two wings of the "angel of history," which catch the "storm" (Benjamin 1968), a dynamic flow of air.

Special References

Contributions within this HSR Focus 38.2:
Aspects of Process-Theories and Process-Oriented Methodology.

Onaka, Fumiya. 2013. Relating Socio-Cultural Network Concepts to Process-Oriented Methodology. *Historical Social Research* 38 (2): 236-251.

Souza Leão, Luciana de. 2013. Bringing Historical Sociology and Path-Dependence Together: A Case Study of the Brazilian Political Economy (1930-2000). *Historical Social Research* 38 (2): 172-196.

Tanaka, Shigerui. 2013 Nationalization, Modernization and Symbolic Media – Towards a Comparative Historical Sociology of the Nation-State. *Historical Social Research* 38 (2): 252-267.

Vizer, Eduardo Andrés, and Helenice Carvalho. 2013. Socioanalysis: A Communicational Research Device for Social Intervention. *Historical Social Research* 38 (2): 218-235.

Yu, Jae Eon. 2013. The Use of Deleuze's Theory of Assemblage for Process-Oriented Methodology. *Historical Social Research* 38 (2): 197-217.

References

Aalst, Wil M. P. van der. 1998. The Application of Petri nets to workflow management. *Journal of Circuits, Systems, and Computers* 8 (21): 1-53.

Adomavicius, Gediminas, and Alexander Tuzhilin. 2005. Personalization Technologies: a process-oriented perspective. *Communication of the ACM* 48 (10): 83-90.

Aldenderfer, Mark S., and Roger K. Bashfield. 1984. Cluster Analysis, Newbury Park, CA: Sage.

Atkinson, Dwight. 2003. L2 writing in the post-process era: Introduction. *Journal of Second Language Writing* 12: 3-15.

Baur, Nina. 2008. Taking Perspectivity Seriously. A Suggestion of a Conceptual Framework for Linking Theory and Methods in Longitudinal and Comparative Research. *Historical Social Research* 33 (4): 191-213.

Baur, Nina. 2008. Was kann die Soziologie methodisch von der Geschichtswissenschaft lernen? *Historical Social Research* 33 (3): 217-248.

Baur, Nina. 2009. Measurement and selection bias in longitudinal data: a framework for re-opening the discussion on data quality and generalizability of social bookkeeping data. *Historical Social Research* 34 (3): 9-50.

Baur, Nina, ed. 2009. Social Bookkeeping Data: Data Quality and Data Management. Special Issue. *Historical Social Research* 34 (3).

Baur, Nina. 2009. Problems of Linking Theory and Data in Historical Sociology and Longitudinal Research. *Historical Social Research* 34 (1): 7-21.

Baur, Nina, ed. 2009. Linking Theory and Data: Process-Generated and Longitudinal Data for Analysing Long-Term Social Processes. Special Issue. *Historical Social Research* 34 (1).

Baur, Nina, and Stefanie Ernst. 2011. Towards a process-oriented methodology: modern social science research methods and Norbert Elias's figurational sociology. In *Norbert Elias and Figurational Research: Processual Thinking in Sociology,* ed. Norman Gabriel and Stephen Mennell, 117-39. Oxford: Wiley-Blackwell.

Baur, Nina. 2013. *Verlaufsmusteranalyse. Entwurf einer prozessorientierten Methodologie*, 2nd ed. Wiesbaden: VS-Verlag für Sozialwissenschaften.

Bendix, Reinhard. 2007. Nation-building and Citizenship: Studies of Our Changing Social Order. USA: Transaction Publishers.

Benjamin, Walter. 1968. *Illuminations: Essays and Reflections*. Ed. Hannah Arendt. New York: Harcourt Brace Jovanovich.

Berger, Peter, and Luckmann Thomas. 1986. *La construcción social de la realidad. Introducción*. Buenos Aires: Amorrortu.

Bourdieu, Pierre. 1996. Journalisme et éthique: actes du colloque fond. du centre de recherche de l'ecole supérieure de journalisme (Lille). *Les Cahiers du Journalisme* 1: 10-7.

Breuch, Lee-Ann, and M. Kastman. 2002. Post-Process "Pedagogy": A Philosophical Exercise. *JAC* 22 (1): 119-50.

Burawoy, Michael. 2005. For Public Sociology. *American Sociological Review* 70 (1): 4-28.

Carothers, Thomas. 2009. Democracy assistance: political vs. developmental? *Journal of Democracy* 20: 5-19.

Clastres, Pierre. 2010. *Archaeology of Violence*. Paris: Semiotext.

Clegg, Ben. 2006. Business process orientated holonic (PrOH) modelling. *Business Process Management Journal* 12 (4): 410-32.

Comte, M. Auguste. 1830. *Cours de philosophie positive*. Paris: Bachelier.

Comte, M. Auguste. 1854. *Système de politique positive: ou, Traité de sociologie, instituant la religion de l'humanité*. Tome Quadrième et dernier.

Corbin, Juliet W., and Anselm L. Strauss. 2008. *Basics of Qualitative Research*. London: Sage.

Cummings, E. Mark, and Patrick T. Davies. 2002. Effects of marital conflict on children: Recent advances and emerging themes in process-oriented research. *Journal of Child Psychology and Psychiatry* 43 (1): 31-63.

DeLanda, Manuel. 2006. *A New Philosophy of Society: Assemblage Theory and Social Complexity*. London: Continuum.

Deleuze, Gilles. 1990. *The Logic of Sense*. Trans. M. Lester and C. Stivale. London: Athlone.

Deleuze, Gilles. 1994. *Difference and Repetition*. Trans. P. Patton. London: Athlone.

Deleuze, Gilles, and Felix Guattari. 1987. A Thousand Plateaus: Capitalism and Schizophrenia. Trans. B. Massumi. London: Athlone.

Delpit, Lisa D. 1988. The Silenced Dialogue: Power and Pedagogy in Educating Other People's Children. *Harvard Educational Review* 58 (3): 280-98.

Dettki, Holger, Ronny Löfstrand, and Lars Edenius. 2003. Modeling habitat suitability for moose in coastal northern Sweden: empirical vs process-oriented approaches. *Ambio* 32 (8): 549-56.

Dörnyei, Zoltán. 2000. Motivation in action: Towards a process-oriented conceptualisation of student motivation. *British Journal of Educational Psychology* 70: 519-38.

Durkheim, Émile. 1912. *Les formes élémentaire de la vie religieuse: le système totémique en Australie*. Paris: F. Alcan.

Durkheim, Émile. 1919. *Les règles de la méthode sociologique*, 7th ed. Paris: F. Alcan.

Durkheim, Émile. 1922. *De la division du travail social*. Paris: F. Alcan.

Durkheim, Émile. 1960. *Le suicide: eí ude de sociologie, Nouv. éd.* Paris: Presses universitaires de France in Paris.

Elias, Norbert. 1978. *Was ist Soziologie?* München: Juventa.

Elias, Norbert. 1987. *Gesellschaft der Individuen*. Frankfurt/M.: Suhrkamp.

Elias, Norbert. 1992. *Über den Prozess der Zivilisation, Vol. 1. Wandlungen des Verhaltens in den weltlichen Oberschichten des Abendlandes*. Frankfurt/M.: Suhrkamp.

Elias, Norbert. 1997. *Über den Prozess der Zivilisation, Vol. 2. Wandlungen der Gesellschaft. Entwurf zu einer Theorie der Zivilisation.* Frankfurt/M.: Suhrkamp.

Ernst, Stefanie. 2010. *Prozessorientierte Methoden in der Arbeits- und Organisationsforschung: Eine Einführung*. Wiesbaden: VS Verlag.

Foucault, Michel. 1970. *Nietzsche, Freud, Marx.* Barcelona: Anagrama.

Foucault, Michel. 1977. *Discipline and Punish: The Birth of the Prison.* London: Allen Lane, Penguin Books.

Foucault, Michel. 1981. *The History of Sexuality,* vol.1. London: Penguin Books.

Gasiorowski, Mark J. 1995. Economic Crisis and Political Regime Change: An Event History Analysis. *The American Political Science Review* 89 (4): 882-97.

Giddens, Anthony. 1979. *Central Problems in Social Theory: Action Structure and Contradiction in Social Analysis*. London: Macmillan.

Giddens, Anthony. 1984. *The Constitution of Society*. Cambridge: Polity.

Glaser, Barney G., and Anselm L. Strauss. 1999 (1967). *The Discovery of Grounded Theory*. New Brunswick, NJ: Aldine.

Janssen, Jeroen, Femke Kirschner, Gilbert Erkens, Paul A. Kirschner, and Fred Paas. 2010. Making the Black Box of Collaborative Learning Transparent: Combining Process-oriented and Cognitive Load Approaches. *Educational Psychology Review* 22: 139-54.

Knight, Raymond A., and Steven M. Silverstein. 2001. A Process-Oriented Approach for Averting Confounds Resulting From General Performance Deficiencies in Schizophrenia. *Journal of Abnormal Psychology* 110 (1): 15-30.

Lambert, Douglas M., and Sebastián J. García-Dastugue. 2005. An Evaluation of process-oriented supply chain management frameworks. *Journal of Business Logistics* 26 (1): 25-51.

Lehn, Dirk vom. 2011. Rezension: Stefanie Ernst (2010), Prozesstheoretische Methoden in der Arbeits- und Organisationsforschung: Eine Einführung. Wiesbaden: VS Verlag. *Forum: Qualitative Sozialforschung* 12: 1 <http://www.qualitative-research.net/index.php/ fqs/article/view/1590/3097> (accessed April 4, 2013).

Li, Changsheng, John Aber, Florian Stange, Klaus Butterbach-Babl, and Hans Papen. 2000. A process-oriented model of N2O and NO emissions from forest soils: 1. Model development. *Journal of Geophysical Research* 105 (D4): 4369-84.

Luhmann, Niklas. 1969. *Legitimation durch Verfahren*. Neuwied am Rhein: Luchterhand.

Luhmann, Niklas. 1976. Generalized Media and the Problem of Contingency. In *Explorations in General Theory in Social Science: Essays in Honor of Talcott Parsons*, eds. Jan J. Loubser, Rainer C. Baum, Andrew Effrat and Victor M. Lidz, 507–32. New York: Free Press.

Luhmann, Niklas. 1981. *Politische Theorie im Wohlfahrtsstaat*. München: Olzog

Luhmann, Niklas. 1984. *Soziale Systeme: Grundriß einer allgemeinen Theorie*. Frankfurt/M.: Suhrkamp.

Luhmann, Niklas. 1989. *Ecological Communication*. Cambridge: Polity Press.

Luhmann, Niklas. 1995. Social Systems. Stanford: Stanford University Press.

Luhmann, Niklas.1997. *Die Gesellschaft der Gesellschaft*. Frankfurt/M.: Suhrkamp.

Mahoney, James. 2000. Path dependence in historical sociology. Theory and Society 29: 507-48.

Maier, Ronald, and Ulrich Remus. 2002. Defining Process-oriented Knowledge Management Strategies. Knowledge and Process Management 9 (2): 103-18.

Mindell, Arnold. 1985. River's way: The process science of the dreambody: information and channels in dream and bodywork, psychology and physics. Taoism and alchemy. London: Routledge & Kegan Paul.

Olmsted, Michael S. 1954. Orientation and role in the small group. American Sociological Review 19 (6): 741-51.

Parsons, Talcott. 1949. The Structure of Social Action: A Study in Social Theory with Special Reference to a Group of Recent European Writers, 2nd ed. Glencoe, IL: The Free Press.

Parsons, Talcott. 1951. The Social System. Glencoe, IL: The Free Press.

Remus, Ulrich, and Stephan Schub. 2003. A blueprint for the implementation of process-oriented knowledge management. Knowledge and Process Management 10 (4): 237-53.

Rescher, Nicholas. 1996. Process Metaphysics: An Introduction to Process Philosophy. New York: SUNY Press.

Sanchez, Pedro A. 1995. Science in Agroforestry. Agroforestry Systems 30: 5-55.

Schattschneider, Elmer E. 1975. The Semisovereign People: A Realist's View of Democracy in America. Ill: Wadsworth Pub. Co.

Simmel, Georg. 1900. Philosophie des Geldes. Leipzig: Duncker und Humblot.

Simmel, Georg. 1908. Soziologie: Untersuchungen über die Formen der Vergesellschaftung. Leipzig: Duncker und Humblot.

Simmel, Georg. 1989. Über sociale Differenzierung. Georg Simmel Gesammelte Aufsätze 2, 109-296. Frankfurt/M.: Suhrkamp.

Skocpol, Theda. 1984. Vision and Method in Historical Sociology. Cambridge: Cambridge University Press.

Snjiders, Tom A. B., and Roel J. Bosker. 1999. Multilevel Analysis. London: Sage.

Spencer, Herbert. 1851. Social Statics or, The Conditions Essential to Human Happiness Specified and the First of Them Developed. London: J. Chapman.

Spencer, Herbert. 1873. The Study of Sociology. London: Henry S. King.

Stiglitz, Joseph. 2002. Globalization and Its Discontents. London: Allen Lane.

Suzuki, Chizuko, Yoko Watanabe, Shota Yohsihara, Kyutae Jung, and Kyungsuk Chang. 2009. Sustaining Internet-Based Collaborative Learning. International Journal of Pedagogies and Learning 5 (2): 20-33.

Tennen, Howard, Glenn Affleck, Stephen Armeli, and Margaret Anne Carney. 2000. A Daily Process Approach to Coping: Linking Theory, Research, and Practice. American Psychologist 55 (6): 626-36.

Thelen, Kathleen. 1999. Historical institutionalism in comparative politics. Annual Review of Political Science 2: 369-404.

Thelen, Kathleen. 2003. How Institutions Evolve – Insights from comparative historical analysis. In Comparative Historical Analysis in the Social Sciences, ed. James Mahoney and Dietrich Rueschemeyer. Cambridge: Cambridge University Press.

Tilly, Charles. 1984. Big Structures, Large Processes, Huge Comparisons. New York: Russel Sage Foundation.

Tilly, Charles. 2001. Mechanisms in political processes. Annual Review of Political Science 4: 21-41.

LaVan, Helen and W. Marty Martin. 2008. Bullying in the U.S. Workplace: Normative and Process-Oriented Ethical Approaches. Journal of Business Ethics 83: 147-65.

Vos, Leti, Sarah E. Chalmers, Michel L. A. Dückers, Peter P. Groenewegen, Cordula Wagner, and Godefridus G. van Merode. 2011. Towards an organization-wide process-oriented organization of care. Implementation Science. 6 (8).

Weber, Max. 1891. Die römische Agrargeschichte in ihrer Bedeutung für das Staatsund Privatrecht. Stuttgart: F. Enke.

Weber, Max. 1921. Gesammelte Aufsätze zur Religionssoziologie. Tübingen: J. C. B. Mohr.

Weber, Max. 1922a. Gesammelte Aufsätze zur Wissenschaftslehre. Tübingen: J. C. B. Mohr.

Weber, Max. 1922b. Wirtschaft und Gesellschaft: Grundriß der verstehenden Soziologie. Tübingen: J. C. B. Mohr.

Whitehead, Alfred North. 1929. Process and Reality: An Essay in Cosmology. London: Cambridge University Press.

Woolridge, Michael, Nicholas R. Jennings, and David Kinny. 2000. The Gaia Methodology for Agent-Oriented Analysis and Design. Autonomous Agents and Multi-Agent Systems 3: 285-312.