Can Regions Learn?[1]

James W. Harrington, Jr.[2]
University of Washington

While I've given this paper an enigmatic title, it's actually quite straightforward, and I'll begin in a straightforward way, by defining my terms. To a geographer, the word "**region**" implies some geographic area, but its scale is totally dependent on the process under study. My own work always focuses on subnational regions like metropolitan areas – the area across which a resident could conceivably commute to work on a daily basis. I care about this scale because I care about who has access to what jobs – but there's more to this scale, as we'll see.

"**Learning**" is a much more difficult concept, with many meanings. I'm concerned about **effective learning** – the ability to *use* new insights, information, or capabilities. I'll go a little further, to suggest that learning entails un-learning. Everyone beyond a toddler's stage of development has preconceptions about the way the world works and the way to negotiate through the world to meet our needs. Just ask your 9-year-old daughter or grandson – about anything. So in order to learn something, we must (a) become convinced that the new understanding makes more sense or is more useful than our earlier understanding and (b) become able to apply the new understanding. These recognitions are revolutionizing higher education pedagogy – but that's a topic for another paper.

Individual Learning

Knowledge is created when conceptual and empirical insights from different perspectives are combined. These perspectives can be within a subdiscipline, such as applying commonly accepted concepts to a new empirical setting, developing a new theoretical framework and applying it to a well-studied but under-conceptualized process, or using an improved empirical or analytic method to study a process.

Belussi and Gottardi [2000] distinguished (raw) information (what we might call "data," though it certainly may be qualitative), knowledge (both explicit and tacit), and (organizational) competence (which is the ability to deploy knowledge to improve production, marketing, and competitiveness). Michael Polanyi's 1966 book *The Tacit Dimension* first suggested a distinction between explicit knowledge and **tacit knowledge**: **"**that which defies codification or articulation – *either* because the performer herself is not fully conscious of all the 'secrets' of successful performance or because the codes of language are not well enough developed to permit clear explication" [Gertler 2004: 134]. However, these are not empirically separable: "'While tacit knowledge can be possessed by itself, explicit knowledge must rely on being tacitly understood and applied. Hence all knowledge is either tacit or rooted in tacit knowledge. A wholly explicit knowledge is unthinkable'" [Polanyi 1966: 7].

Thus, tacit knowledge is not learned from books, and is not learned through typical "sage on stage" classroom pedagogy such as this lecture! So much of what we learn, and so much of our un-learning, is through interaction with each other, on the job, and in being conscious about our experiences [Wenger 1998].

---

[1] Slightly revised from a presentation for The Monday Club, Seattle, 30 October 2006.
[2] Professor of Geography, Box 353550, Seattle WA 98195.

Organizational Learning

Let's define **organizational knowledge** as the ability for an organization to make use of information to improve its operations. To understand this simple definition, we need to distinguish knowledge from information, and to understand how it is that organizations can have knowledge distinct from the knowledge of individuals within the organization.

Organizations can gain competencies beyond the knowledge of individuals, through the division of labor (see Jessop [2000] for a good treatment of this). As I suggested above, many knowledge advances come as a result of combining insights from far-flung disciplines or experiential backgrounds: biology and physics, marketing and engineering, finance and marketing, line workers and managers. Two major difficulties arise in attempting such combinations: (1) it's tough to develop a common language so that real communication can occur, and (2) it's a challenge to create common motives and goals so that people will make the effort to collaborate.

In addition, the more general process of creating organizational practices and procedures reduces the dependence of the organization on individuals, except insofar as individuals develop tacit ways of working with – or around – each other.

Organizational knowledge comes about when these combinations occur within an organization. The resultant learning and new knowledge cannot be embodied by individuals, and become the assets of the organization [Nonaka and Takeuchi 1995].

However, individuals move among organizations. This movement reduces the ability of intra-organizational groups to interact, since the shared motives, trust, and language that allow learning between individuals take time to build among individuals within the organization. However, movement also *increases* the potential of organizations to learn, since newcomers bring different perspectives that are valuable for the creation of new knowledge.

I want to quote at some length some of the writings of Ikujiro Nonaka, who holds the intriguing title "Xerox Professor of Knowledge" at Berkeley's Hass School of Business, as well as a professorship at Tokyo's Hitotsubashi University. Nonaka has become a guru in the field of organizational knowledge development.[3]

> "… the theory of organizational knowledge creation is based on the assumption that individuals and organizations have a potential to grow together through the process of knowledge creation. Organization is a place ('ba') where an individual transcends him/herself through knowledge creation (Nonaka and Konno, 1998; I. Nonaka, R. Toyama and N. Konno, forthcoming). When individuals interact with each other at such a place, one transcends one's own boundary, and, as a result, changes oneself, others and the place itself. Creating knowledge organizationally does not just mean organizational members supplementing each other to overcome an individual's bounded rationality, as is the case in the division of labor in production. In organizational knowledge creation, one plus one could be more than two. It can be also zero, if interactions among individuals work negatively" [3].
>
> 'Ba' (which roughly means 'place') is defined as a shared context in which knowledge is shared, created and utilized.[1] 'Ba' is a place where information is given meaning through interpretation to become knowledge, and new knowledge is created out of existing knowledge through the change of the meanings and the contexts. In other words, 'ba' is a

[3] These quotes are from Nonaka et al. [2000], though they cite other works by Nonaka and colleagues.

shared context in cognition and action. Knowledge cannot be understood without understanding situated cognition and action [8].

The Role of Leadership

Leadership is the practice of identifying common motives and goals, and working to align people's activities toward these goals [Burns 1978].[4] **Leadership development** (as opposed to leader training) entails improving groups' awareness of their process and effectiveness, and improving ability of the group to liaise with other groups to accomplish specific tasks. Leadership development focuses on groups and their constituent members, getting all members to play (varied) leadership roles[5] -- getting each member of the group to take responsibility for the success of the group [Day 2001]. Titular leaders also have important roles to play, to motivate intergroup interaction and reward productive outcomes [Kodama 2006]. "In knowledge creation, 'distributed leadership,' where every member of the organization can be a leader depending on the context, is the key" [Nonaka et al. 2000: 14].

Regional Learning

Finally, I will re-introduce the concept of the region. I'll try not to be terribly abstract, because my interest in regions is actually quite concrete. I care whether the residents of a region can live productively and well. This is a challenge because of the vicissitudes of regional economies: key employers may leave or downsize because of technological change, lack of financing, or just a shift in strategy; the mix of skills and backgrounds now required may relate poorly to the education, experience, or training that individuals have; political systems may not be able to contend with rapid change or with the deterioration of economic fortunes. **What characteristics allow a region to innovate in ways that work in a changed environment?**

Again, what is a region? What characteristics belong to a region? Neither companies, nor capital, nor explicit knowledge "belongs" to a region: they can leave! Even residents can come and go – witness the inmigration of thousands of highly educated specialists to Seattle, which lags far behind other regions in the local production of baccalaureate and advanced degrees. They can leave! What *does* "belong" to a region – what can the residents of a region rely on? What regional characteristics change only very slowly?

One answer is mundane, but important nonetheless. The physical infrastructure of a region – natural features and capital investments – distinguish one region from another, and exist beyond economic cycles.

I want to focus on a more subtle source of regional distinction: the mix of interacting institutions in the region. I would define a region (at whatever scale) as a nexus of institutional practices and norms. Some of these institutions are national, such as national rules or norms for corporate governance, electoral politics, finance, and tax policy. Others are region- and culture-specific, such as expectations about educational attainment (very different in working-class Pittsburgh than in middle-class Seattle) or job mobility (quite different in Silicon Valley versus mainstream corporate America).

---

[4] "Leadership is the reciprocal process of mobilizing, by persons with certain motives and values, various economic, political, and other resources, in a context of competition and conflict, in order to realize goals independently or mutually held by both leaders and followers" [Burns 1978: 425]. Burns [18] distinguishes this from **power**, "the ability to control others' behavior regardless of others' goals or motives."

[5] Viewing "leadership as a social process that engages everyone in the community,… each person is considered a leader, and leadership is conceptualized as an effect rather than a cause" [Day 2001: 583].

Since much of this movement and exchange among organizations and the norms that regulate behavior occurs outside of any hierarchical directive, it is difficult to manage. Successful and dynamic regions rely on official and unofficial networks to maintain beneficial exchange. Also by definition, these networks require *leadership* development, since there cannot be titular leaders of a non-hierarchical process.

Thus, a region can simultaneously be

- a locus of shared communities of cultural and technical practice,
- a container of potential employees and support services familiar with surrounding sectors and actors, and
- a source for smaller firms to ideas far outside the individual entrepreneur's experience [Belussi and Gottardi 2000].

This is the perspective of the vast array of studies and policies for sector-based "clusters," which are all the rage in economic development practice.

But to speak of regional learning, we must posit that there can be a region-specific set of cognitive frameworks, which can be challenged and changed through the interaction of actors and networks within the region – so that institutions and processes change based on their experience and the changing environment – which we can call "learning." In a review of writings on social capital and regional innovativeness, Tura and Harmaakorpi [2005] conclude that the diversity of actors within a regional innovation network is key to the network's innovative capability – because a diversity of fields, frameworks, expertise, and social backgrounds will maximize the range of ideas which the network can effectively exploit.

So, **for a region to "learn," it must contain and *maintain* interconnected communities.** To break this down, there need to be **more than one significant community**, each with autonomous power and resources, and each with substantive connections outside the region to gain information, practice, and power. Communities have to be **maintained**. How do we maintain communities of which we are a part? We recognize members, we acquire and use resources, we renew membership and build linkages among members, and we develop loyalty among members through some sort of democratic process (i.e, members need to feel their voices are heard). **Interconnection** requires significant points of contact and communication among communities, sustained in order to develop shared meanings.

The Role of Leadership

In a wonderfully titled dissertation "Why the Garden Club Couldn't Save Youngstown," Sean Safford [2004] undertakes an extremely detailed analysis of the leadership networks among the major commercial and civic organizations in Allentown, Pennsylvania and Youngstown, Ohio. His purpose is to understand the dramatically different outcomes of these two regions' economic troubles in the early 1980s. By 1983, half of the steelworkers in each region were unemployed. By 2000, what industrial employment still existed in Youngstown was heavily concentrated in the declining sectors of steel, autos, cement, textiles, and apparel (81% of manufacturing revenues). In Allentown, these sectors accounted for only 28% of manufacturing in 2000, in the face of sharp increased in electronics and instrument manufacturing, and high-order services such as finance and insurance. The economic turning points included:

- the employee purchase of the Youngstown Works and the attempts of economic leaders to shore up steelmaking through Federal subsidies and an ill-fated canal, versus

- Republic Steel's establishment of a research center near Allentown, improvement of Interstate 78, and the successful lobbying to have a major site of the Ben Franklin Partnership locate at Lehigh University in Allentown.

However, Safford's original research was into the relationships among the boards of major organizations in these two regions. In Youngstown, "close coupling of economic and civic networks meant that when the economic network foundered it brought the civic network down with it. Remaining actors were left disconnected from each other and key constituencies therefore went on to pursue separate, contradictory and narrowly self-interested plans of action" [3]. In Allentown, relatively few individuals served key roles in both economic and civic organizations. There were, however, points of interconnection on the boards of the two largest universities and of the Boy Scouts. "The availability of the civic network in Allentown provided actors there with an alternative frame…and new ways of interacting" [4] in the face of the collapse of the traditional economic sectors.

Concluding Questions

This is the point at which I want to hear from you. I've been looking forward to presenting these ideas in this setting for two reasons, which I will leave as questions.

- First, what experiences have each of you had that suggest successful routes toward creating a regional culture of innovativeness?
- Second, can we envision a setting in which we can foster interaction among disparate networks, and perhaps even create knowledge by bring differing approaches to bear on an issue?

References

Belussi, F. and Gottardi, G. 2000. Models of localised technological change. Ch. 1 in *Evolutionary Patterns of Local Industrial Systems: Towards a Cognitive Approach to the Industrial District*, ed. by Fiorenza Belussi and Giorgio Gottardi. Aldershot, England: Ashgate. Burns, J.M. 1979. *Leadership*. New York: HarperCollins.

Day, D.V. 2001. Leadership development: a review in context. *Leadership Quarterly* 11(4): 581-613.

Gertler, M.S. 2004. *Manufacturing Culture: The Institutional Geography of Industrial Practice.* Oxford: Oxford University Press.

Jessop, B. 2000. The state and the contradictions of the knowledge-driven economy. Ch. 5 in *Knowledge, Space, Economy*, ed. by J.R.Bryson, P.W.Daniels, N.Henry, and J.Pollard. London: Routledge.

Kodama, Fumio. 1991. *Analyzing Japanese High Technologies: The Techno-Paradigm Shift*. London: Pinter.

Nonaka, I. and H. Takeuchi (1995), *The Knowledge-creating Company*. Oxford University Press: New York.

Nonaka, I., R. Toyama, and A. Nagata. 2000. A firm as a knowledge-creating entity: a new perspective on the theory of the firm. *Industrial and Corporate Change* 9: 1-20.

Polanyi, M. 1966. *The Tacit Dimension*. Garden City, NJ: Doubleday.

Safford, S. 2004. Why the Garden Club couldn't save Youngstown: multiple networks and adaptation to economic crises. London School of Economics.

Tura, T. and V. Harmaakorpi. 2005. Social capital in building regional innovative capability. *Regional Studies* 39(8): 1111-25.

Wenger, E. 1998. *Communities of Practice: Learning, Meaning, and Identity*. New York: Cambridge University Press.