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but crafters of the future by organizing and expressing how to use local/regional resources optimally in ways that sustain any region or community.

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6. Diversity and endogeny in regional development: applying appreciative intelligence

Tojo Thatchenkery and Jessica Heineman-Pieper

INTRODUCTION

Endogenous processes in regional economic development have received renewed attention by regional scientists and regional development policy-makers, due in part to the increasingly apparent contradictions within increasingly globalizing economic development. Globalization is a largely homogenizing force, and so the diversity required for innovation must come from residual uniqueness of local cultures and contexts (Sachs, 1992; Shiva, 2000; Thatchenkery, 2006). Endogenous vibrancy is both threatened by and a requirement for the engines of globalization, which are thus self-limiting (Sachs, 1992). Both as oases of possibility within a globalizing world and as reservoirs of possibility for a post-globalizing future, endogenous vibrancy is indispensable. Most importantly, it is a fundamental value in its own right.

Focusing on human, cultural and organizational dimensions, this chapter examines a case study in how an endogenous ecology spontaneously created cascading entrepreneurial activity (one of infinite possible forms of vibrancy that could be studied, and a popular focus in economic development studies). In particular, the chapter analyzes the endogenous ecology of Silicon Valley in the US, and highlights some of the key cultural, organizational and human factors contributing to the technological innovation, creativity and entrepreneurial impact of the region. Many of these factors can be situated within the framework of 'appreciative intelligence' to provide generative and transferable lessons. At the same time, these lessons apply not at the level of content (replicating structures and systems) but rather at the level of 'being' or fundamental stance. At this level, the message also challenges some deeply held theories and beliefs about what leads to a thriving economy and a thriving society.

DIVERSITY AND ENDOGENY IN EXPLANATORY PARADIGMS

Diversity and endogeny are important not just as the topical focus but also at the level of underlying theoretical orientations and explanatory paradigms. One of the recurring tensions in social science theory and research comes from different views about the nature of social reality (Burrell and Morgan, 1985; Gergen, 1994) between researchers in search of a unitary, 'objective' truth and those who treat social reality as constituted by multiple, often competing perspectives on reality, arising out of the subjective interpretations and sense-making processes of a variety of actors and coalitions. Some would even argue that the interpretation of reality that usually seeks and gains dominance is the one actively promoted by those in power and that the challenge of building an egalitarian social order would be one of creating emancipatory spaces in which suppressed or muted views are allowed room for expression. For example, Zinn's (2003) classic, *A People's History of the United States*, demonstrates the impossibility of providing an 'objective' account of US history and the importance instead of listening to perspectives that are usually elided in dominant narratives. Based on extensive archival data and interviews, Zinn argues for recognizing the salience of multiple histories, and he demonstrates empirically that African American, Native American and European Caucasian settlers' perspectives on and experiences of US history differ dramatically from each other in ways that cannot merely be assimilated one to the other. To speak about US history as if it were a singular, objective representation of facts would be simplistic, distorting and highly political.

These considerations are not limited to history but infuse the sciences as well. In biology, a field that is analogous to economics in its combination of historical and experimental methods with complex systems, Lewontin (1994a, 1994b) has shown how the conceptual resources of the entire field are shaped by 'organizing metaphors', which structure, frame and circumscribe the search for evidence while operating outside of and immune to evidence. Lewontin demonstrates how these organizing metaphors are also laden with values, ideology and politics.

At stake is not just representational correspondence but, much more importantly, what kind of world we contribute to creating (Heineman-Pieper, 2009). Ever since the publication of Kuhn's (1962) *The Structure of Scientific Revolutions*, a growing literature has demonstrated as untenable the earlier views of science as a neutral, value-free window onto the world (Wimsatt, 1976; Galison, 1987; Gergen, 1994; Lewontin, 1994a, 1994b; Rosnow and Rosenthal, 1997). Biological, ecological, psychological, social and cultural realities are open, dynamic and complex systems

(Wimsatt, 2007; Heineman-Pieper, 2009). Moreover, human beings (including researchers) do not stand outside of these systems but rather are participants in them. As a result, how we interact with these systems makes a difference in what we come to know about them (Wimsatt, 1976; Rosnow and Rosenthal, 1997; Heineman-Pieper, 2009), especially when our own human limitations and imperfections are further taken into account (Wimsatt, 2007). In this context, it should not be surprising that researchers and the results they produce are impacted by their interests, values, culture and disciplinary socialization, among other factors (Haraway, 1990; Sachs, 1992; Rahnema and Bawtree, 1997; Gergen and Thatchenkery, 2004). For example, Alvares (1992) has shown how at its very core the concept of 'efficiency' has been defined so as to focus on factors that favor high-temperature industrial production over ambient-temperature natural production while effacing considerations favoring natural, ambient temperatures over industrial production, even though from a long-term systems perspective this choice is leading to far greater and potentially deadly inefficiencies (global warming, destruction of natural ecosystems, dispossession of highly sustainable traditional people and cultures by 'development' projects, etc.; Rahnema and Bawtree, 1997; Gowdy, 2000; Shiva, 2000; Farmer, 2004).

Much of the work in economics and regional science proceeds without reflective attention to the underlying framework assumptions and values that structure the research, while simultaneously reproducing and often even enforcing adherence to the dominant frameworks. The dominant framework assumptions and values that are usually reproduced occur both at the level of the content and at the level of the 'rules of the game' – what counts as doing 'good' research in the field (Gergen and Thatchenkery, 2004; Wimsatt, 2007; Heineman-Pieper, 2009). For example, at the level of the 'rules of the game', readers embedded in positivist methodology have objected to our approach on the grounds that good scientific research should either allow for verification (Hempel, 1965) or refutation/falsification (Popper, 2002). These positivistic requirements on research impose a particular set of values and assumptions that have cascading effects (Heineman-Pieper, 2009) and ignore half a century of scholarship across a variety of fields showing these strictures to be untenable, misleading and distorting (Heineman, 1981; Gergen, 2009). For example, Galison (1987) has shown how Hempelian verification and Popperian falsification are unviable even in experimental particle physics (so how much more in the social sciences!). Galison shows how, in the debate over the existence of neutral current, the 'critical tests' required by verificationist/falsificationist models amounted to a subjective process of social consensus building because the vital distinction between experimental fact

and experimental artifact can be decided neither in advance nor on the basis of logic (ibid.). In biology, and on grounds equally applicable in economics, Lewontin (1994a, 1994b) shows how, contrary to the claims and requirements of verificationism and falsificationism, biologists are never forced to abandon their theories but can always merely revise their range of applicability – and yet these same theories embed values of social and political import. Kohn (1993) provides a parallel example of this in psychology and economics regarding the inexhaustible faith in the value of incentives, despite decades of evidence showing that incentives undermine intrinsic motivation, reduce creativity, destroy relationships and have a variety of other unintended consequences. Kohn shows how for 50 years researchers continue to ignore or dismiss this and other evidence and, determined not to admit to the detrimental effects of incentives per se, continue to search for the 'right' incentive schemes.

At the level of content, regional economics has many standard explanatory constructs, ranging from external economies of scale and agglomerations (Marshall, 1890; Hoover, 1948, 1971; Blumenthal, 1955; Krugman, 1991) to industrial clusters (Porter, 1998), to regional competition (Isard, 1949; Begg, 1999; Camagni, 2002), to knowledge spillovers (Henderson, 2007), to high-technology networks (Audretsch and Stephan, 1996), to market structure and firm size (Acs and Audretsch, 1987). This chapter adds an important perspective to the literature by offering a novel way of framing, understanding and supporting endogenous development based on a principle that is incommensurable with a core framework principle in economics and the existing literature on regional economic development, namely: valuing people, communities and activities as ends in themselves rather than as means to other ends (such as making money). Rather than attempting to reconcile or homogenize these divergent frameworks and explanatory strategies we will allow both to stand on their own terms, like the multiple histories of the US (Zinn, 2003). For the benefit of those who nonetheless insist on seeing their familiar categories, we will briefly mention the following points. Alchian's (1950) account of adopted outcomes in regional economies relates only to sufficiency and not optimality of outcomes and thus has no bearing on the case studies that ensue. Other constructs operated in both Route 128 and Silicon Valley (the comparison set for the case study) and thus are not sufficient to explain the special vibrancy of Silicon Valley. Examples of these constructs include: external economies of scale, knowledge spillovers and academic/industry relationships. In the case of the more specific investigations of Acs and Audretsch (1987), the small-firm advantages they show still do not explain why cooperative-culture firms outperformed standard autocratic firms in the region (Baron and Hannan, 2002), and thus only

underline the contribution of the present chapter. The chapter does not claim to provide a comprehensive account of all of the factors involved in the vibrancy of Silicon Valley; however, it does claim to elucidate a very important factor that is systematically overlooked by the intersecting disciplines that constitute regional economics. The chapter further claims that this factor has been overlooked for reasons related to systematic biases in the values, framework assumptions and organizing metaphors through which these disciplines structure, relate to and attempt to explain reality.

CASE STUDY: ECOLOGY OF SILICON VALLEY VERSUS ROUTE 128

High-tech regions, clusters and industrial districts have attracted serious scholarly attention in the last two decades. Porter's (1998) treatment of industrial clusters highlights the importance of the local to the global: 'enduring competitive advantages in a global economy lie increasingly in local things – knowledge, relationships, motivation – that distant rivals cannot match' (p. 78). Even within high-technology clusters in the US, different locales have had very different histories and trajectories. In this vein, many scholars have contrasted Silicon Valley, California, and the older technology corridor on the East Coast near MIT and Harvard in Massachusetts, Route 128.

Numerous studies (Weiss and Delbucq, 1987; Saxenian, 1999, 2006; Delbecq and Weiss, 2000; Florida, 2002, 2003; Lee et al., 2000; Shipley, 2006; Hulsink et al., 2007) have documented organizational, cultural and regional differences between Silicon Valley and the long-standing East Coast high-technology corridor, Route 128. Both of these regions, Silicon Valley and Route 128, are characterized by a concentration of high-technology firms and access to top tier universities (e.g., Stanford, MIT and Harvard). However, Silicon Valley has bypassed the longer-established Route 128 in number of viable firms created as well as in other Western management measures of economic and innovative success. As Saxenian (2006, pp. 27–8) writes:

> The region's technology upstarts proved more adaptive than their older, vertically integrated counterparts in an environment of fast-changing markets and technological advances. In the 1960s and 1970s, Silicon Valley's semiconductor companies outperformed older East Coast corporations like RCA and Sylvania, and in the 1980s the region's personal computer industry outperformed large, established companies including NCR, Honeywell, and Digital Equipment Corporation.

Using data from interviews, questionnaires, lists of associations and custom databases, researchers (Weiss and Delbecq, 1987; Saxenian, 1999, 2006; Delbecq and Weiss, 2000; Florida, 2002) have identified several key factors as contributing to the high levels of IT entrepreneurialism in Silicon Valley as compared with Route 128. Whereas Route 128 was dominated by traditional, highly vertically integrated firms with hierarchical management and control cultures seeking to hoard as much as possible within the walls of their own firms (a zero sum game attitude), in Silicon Valley there was a fluid flow of people and ideas among firms and a relatively flat organization. Some of the early firms, such as Varian Associates, were explicitly founded as an 'association of equals', and the founders stated that 'We did not want to have the hierarchy of a company owning facilities and employing employees' . . . [and] . . . 'We wanted to be a cooperative. We wanted to create a cooperative organization' (Lecuyer, 2007, p. 98). For example, employees switched firms regularly and without penalty in Silicon Valley, whereas such movement was frowned on and often contractually limited in Route 128 firms. Whereas Route 128 took a judgmental attitude towards failures, in Silicon Valley, failures were viewed as just part of a process of getting things right. Saxenian quotes WebEx cofounder Min Zhu: 'The advantage of Silicon Valley is that you can fail and learn and try again. It's the only place where you can screw up once and try again' (Saxenian, 2006, p. 31).

Researchers have also documented key differences in the cultures underlying Route 128 versus Silicon Valley. Whereas Route 128 is traditional, 'stodgy', hierarchical and conformist, in Silicon Valley technological fluency made relative equals of people of diverse ages, nationalities, backgrounds, levels of social skill and various other ancillary characteristics (Delbecq and Weiss, 2000). However, this egalitarianism is not absolute but relative (to Route 128); limitations and exceptions existed within Silicon Valley, such as the persistence of discriminatory limitations in advancement for some groups (Saxenian, 2000).

In Silicon Valley, and especially in the early days, many people engaged in innovation primarily as a form of self-expression and creativity, with financial gain as merely a secondary benefit. This important and prevalent quality can be seen at cultural, organizational and individual levels. For example, at an organizational level, useful data can be found in Baron and Hannan's (2002) longitudinal study of nearly 200 Silicon Valley start-ups. In addition to collecting a variety of other data, these authors conducted interviews with founders and CEOs in order to excavate the assumptions and mental models that 'guided their thinking about how to organize employment relations and manage personnel' (ibid., p. 10). The authors found the 'notions about how work and employment should be organized

varied along three main dimensions . . . each characterized by three or four fairly distinct options or approaches' (ibid.). The three main dimensions are:

- the basis of employee 'attachment' to the company;
- the criteria for coordinating and regulating employees;
- criteria for selecting employees.

In the first of these, employee attachment, the authors noted three bases envisioned by founders, which they called '*love, work* and *money*' (ibid.; italics original). 'Work' corresponds to founders' recognition that 'the primary motivator for their employees is the desire to work at the technological frontier' (ibid.). 'Love' corresponds to 'creating a strong family-like feeling and an intense emotional bond with the workforce that would inspire superior effort and increase retention' (ibid.). This is a form of social motivation that could be seen as providing a supportive relational context in which the employees' could express themselves freely. It is a culture that values people over money and creates an environment of trust and broader human valuing that can encourage more courageous self-expression. The final form of attachment is 'money' – an exchange relationship of labor for money.

After coding the data into all possible combinations of subtypes across the three main factors, the authors found that firms clustered into five main types or organizational blueprints. Only one of these involved money as a form of attachment, and this blueprint formed only 6 percent of the distribution of organizational types (ibid., p. 13). Moreover, even when the authors controlled for a variety of variables, the money-based blueprint was the most likely to fail of all the blueprints, including a catch-all 'non-type' category blueprint. In addition, although the underlying statistics are not sufficiently presented to clarify the precise meaning of this result, the magnitude of the percentage difference in failure likelihood that the authors report was greater between this worst-performing money-based blueprint and the next worst-performing blueprint than existed between the second-worst performing blueprint and the best-performing blueprint. While it is true that the focus on money to attract and retain employees was only one of three elements within this poorly performing blueprint, the other two qualities in the other two dimensions – selecting employees based on specific skills and a hierarchical form of control – are not independent of the money-based mindset (as suggested by the fact that not all of the possible cells represented by the intersection of the three dimensions were occupied) and are part of the same world-view and gestalt.

The commitment to meaningful activity for its own sake, as a form of

self-expression, rather than to make money can also be seen at a cultural level. Florida (2002) notes some of Silicon Valley's roots in 1960s' counter-culture. Unlike organized labor, which fought for 'powers and rights *within* the framework of the existing economic system' (p. 203; italics original), the counter-culture in northern California 'included a wide spectrum of views on work and economics', including operating outside of it:

> Some in the hippie milieu preferred simply to ignore the world of work, perhaps living by their wits or the generosity of friends or parents. Some sought to rob 'the system', as described how-to-do-it style in Abbie Hoffman's *Steal this Book*. For many the strategy was to grudgingly coexist with the system. Get a job, even a haircut if you must; earn the money you need to do what you have to do, but no more. (Ibid., p. 203)

Freed from the bonds of greedy materialism, the innovators of Silicon Valley were free to focus on following what they most enjoyed, innovating for the love of it, and making things work. Economic and capitalist ideology pretends that people can be driven primarily by a profit motive and then claims that this assertion represents either the base reality of human nature, a useful lubricant for the market mechanism, or else a neutral fact. The success of Silicon Valley offers a counterweight to that view and shows that it matters why we do what we do and that there's no substitute for doing things for their own sakes and treating people as ends in themselves rather than as means (e.g., rather than as in the labor for money model in Baron and Hannan, 2002).

At an individual level, the importance and prevalence in Silicon Valley of people motivated not by money but by love of what they do – work as play or hobby – can be seen both in famous founding stories (e.g., Apple) as well as in stories from the more 'everyday'. For example, Google Desktop came to be because an employee had decided to create that function for himself on his own computer in his spare time. Simultaneously, at an organizational level, Google had structured the work week to give employees a free day every week to pursue their own personal interests – and did not demand that anything 'productive' or 'useful' come of it – in recognition of the fact that employees were intrinsically motivated to create and would do this best when they were given the freedom to follow what they enjoyed, unconstrained by top-down agendas (Elgin, 2005).

Delbecq and Weiss (2000) write that people who would be considered 'misfits' in regions (such as Route 128) that are concerned with 'superficial impressions' such as those based on elegance of expression (versus unfluent English as a second language), elegance of social skills, or elegance of physical appearance (note that many psychology studies have shown the biasing effects in business and other environments of what mainstream

society identifies as canonical 'good looks') are given prime projects to lead and prime resources to command in Silicon Valley. According to Delbecq and Weiss (ibid.), Silicon Valley is much less concerned with superficial impressions than are other parts of the US (such as Route 128):

> In Silicon Valley, it is the quality of ideas, the willingness to creatively problem solve, the ability to arrive at a breakthrough technical solution, which is valued. I have heard senior managers listen with rapt attention in briefings to young talent whose modality of presentation is rough. . . . As one venture capitalist expressed it, 'I don't care how the talent is wrapped' (ibid., p. 40).

Also, these authors report that in Silicon Valley there is an ethos that gains are shared not based on hierarchical position, as in Route 128 firms, but instead based on contribution.

Fleming and Marx (2006) present the concept of 'small worlds', social networks that cut across individual firm boundaries, in explaining how the effective management of innovation in an environment of ongoing knowledge exchanges was a critical factor underlying the success of Silicon Valley. Small worlds, families of interconnected firms, are more likely to be the source of innovation than individual firms (see also O'Brien, 2007).

Saxenian (1999 and 2006) shows how this small worlds phenomenon was also made especially effective by the many highly educated immigrants who came to Silicon Valley. Saxenian (1999, 2000, 2006) shows how these families of interconnected firms went global as a result of the social networks of immigrants/expatriates largely from Asian countries (also reported in Adams, 2005). Saxenian documents the social networks of Indian, Chinese, Taiwanese and other immigrant groups and how these associations, interactions and knowledge-sharing not only substantially advanced the development within Silicon Valley, but also created global technological and business networks beyond what would otherwise have been possible. In both of these contexts, domestic and international, the immigrant communities significantly augmented the overall 'size of the pie'. While Route 128 firms were busy protecting their turf, Silicon Valley firms and individuals, inspired by innovation itself and coming from a mindset of abundance rather than scarcity, shared freely and thereby created a better result at each level from the individual through to the whole.

Across diverse metrics, Saxenian (2000) shows that immigrants, often from Asian countries such as China and India, were a vital part of the Silicon Valley technological and entrepreneurial success. For example, approximately one-quarter of 'Silicon Valley technology firms founded between 1980 and 1998 had Chinese or Indian executives' (p. 252), and this number is likely to be an underestimate because racism powered by and

instituted through restrictions on venture capital required many non-white immigrant founders to choose white American CEOs (Saxenian, 2000). The (likely underestimated) immigrant-founded firms created significant wealth and employment in Silicon Valley, and in 1998 'collectively accounted for more than $168 billion in sales and 58 282 jobs' . . . [and the] . . . 'rate of immigrant entrepreneurship in Silicon Valley has increased significantly over time' (ibid., p. 253).

The experience of immigrants in Silicon Valley points to a serious shortcoming of the culture and place. While it may have been more open than Route 128, Silicon Valley was still a place of advancement limitations and discrimination against the very immigrants who were in large part fueling its success (ibid., p. 251). Saxenian cites a 1991 survey of Asian professionals in Silicon Valley that showed that 'two-thirds of those working in the private sector believed that advancement to managerial positions was limited by race', and this is further supported by the fact that 'Chinese and Indian engineers remain concentrated in professional rather than managerial positions, despite superior educational attainment [to the white Americans occupying equal or higher positions]' (ibid.). Interestingly, 'those surveyed attributed these limitations less to "racial prejudice and stereotypes" than to the perception of an "old boys" network that excludes Asians' . . . [and the] . . . '"lack of role models"' (ibid., p. 25).

At the same time, overt discrimination also existed, as is demonstrated by the requirement of many venture capitalists that non-white immigrant founders choose a white American CEO instead of running the company themselves. For example, Saxenian reports the story of David Lee, who 'left Xerox in 1973 to start Qume after a less experienced outsider was hired as his boss. Lee was able to raise start-up capital from the mainstream venture capital community, but only on the condition that he hire a non-Asian president for his company' (ibid., p. 251).

Despite (or perhaps partly because of) these barriers, immigrants in Silicon Valley created local ecologies within the larger Silicon Valley ecology to support themselves and their compatriots. Immigrant groups and subgroups founded associations that provided both social networks and professional contacts, as well as connecting people with role models and sources of tacit knowledge and experience. For example, David Lee, the founder of Qume described earlier, and a handful of others like him, became 'community leaders and role models for subsequent generations of Chinese entrepreneurs' (ibid., p. 252). Putnam (2000) has shown the importance of these forms of civic engagement in building social capital and community (see also Beugelsdijk, 2003).

While the immigrant experience shows how the social networks were racially divided, indicating that Silicon Valley was not quite as free

of racism as some accounts suggest, all of these accounts point to the importance of social networks as a factor in Silicon Valley entrepreneurship. Audia and Rider (2005) show how the 'garage legend' creates a false impression of entrepreneurs as individual founders, whereas these authors document the importance of organizational ties even in the case of canonical founder stories such as Apple and Hewlett-Packard. Ferrary (2003) explicates one of the many modalities in which social networks are important. He outlines three mechanisms of exchange that underlie the circulation of economic goods:

- the 'arm's length transaction';
- the 'power relationship';
- the 'gift exchange'.

Those correspond to the modalities of the market, the organization and the network, respectively.

The social embeddedness of the actors in Silicon Valley (arising from having worked in the same firm, graduating from the same university or sharing a common ethnicity) resulted in a majority of the exchanges being informal exchanges based on reciprocity and a strong sense of community and modeled on the metaphor of the gift exchange. By this argument, Ferrary (ibid.) would suggest that the social architecture that normally accompanies urbanization forces the actors unwittingly toward more legalistic and formal forms of exchange and may explain the difficulties in mechanistically replicating Silicon Valley's success if the underlying culture of the system is not oriented toward a sense of community (*'gemeinschaftfuhl'*), a feature that is much harder to copy through rational intention.

Another dimension of distinctiveness for the region is the way in which the different strains of the underlying culture and counter-culture themselves in turn created a variety of organizational cultures. As we have seen, Baron and Hannan (2002) contrasted five different blueprints of human resource practices among Silicon Valley companies. These are: the Star (marked by the attitude that 'We recruit only top talent, pay them top wages, and give them the resources and autonomy they need to do their job'), the Commitment (represented by 'I wanted to build the kind of company where people would only leave when they retire'), the Bureaucracy (exemplified by 'We make sure things are documented, have job descriptions for people, project descriptions, and pretty rigorous project management technique'), the Engineering (captured by 'We were very committed. It was a skunk-works mentality and the binding energy was very high') and the Autocracy (implied by 'You work, you get paid'.). They found that firms whose founders practiced the Commitment

blueprint have performed better over the ensuing years compared with ventures based on the other blueprints. The Commitment blueprint highlights a reliance on emotional connections and family-type relationships; Baron and Hannan (ibid.) argue that perhaps given the rarity of such signals in the corporate world, the few companies that send out these signals end up enjoying a competitive advantage that is hard to imitate, particularly because it runs counter to conventional corporate ideology in ways that are humanistic and thus that people readily find valuable. It should perhaps not be surprising that the most successful variant, the Commitment blueprint, is one in which people are treated and valued as people rather than instrumentally.

In short, researchers have identified a number of unique cultural features of the Silicon Valley region that have contributed to its ability to bypass the more traditional high-tech corridor, Route 128. These features include but are not limited to:

- vibrant social networks;
- an underlying counter-culture;
- intense diversity of national background;
- relative (to Route 128 – though still less than it might be) valuing of persons as persons rather than as objects in the production process and sources of income and other 'measurable results' for distant owners;
- willingness to fail without passing judgment, to learn, and to try again;
- relatively flat organizational structures versus hierarchies.

These features will next be considered from the framework of 'appreciative intelligence' (Thatchenkery and Metzker, 2006).

APPRECIATIVE INTELLIGENCE

Howard Gardner (1993) famously demonstrated that, contrary to notions generally believed at the time in the US, intelligence is not unitary. In the US, there has been a long (and unfortunate) tradition of viewing intelligence as springing from an essential, innate and fixed source in individuals, and measurable through standardized IQ tests. The resulting measure, the 'G-factor', was presumed to reflect the quantity of intelligence in any individual. The IQ assumptions and methodology have all been roundly critiqued by a host of scholars (see, e.g., Block and Dworkin, 1976), who have shown that:

- the assumption of an innate fixed 'quantity' of intelligence is entirely unfounded;
- intelligence is highly situated for all of us, such that each of us may show high levels of a particular kind of intelligence in certain kinds of situations or contexts and at certain times and not in others;
- intelligence itself has myriad forms (as demonstrated by Gardner, 1993).

Thus, in this part of the chapter we consider a quality that has been ignored in the literature, namely 'appreciative intelligence', or the ability to focus not on problems and shortcomings but on the beauty and potential inherent in any moment, including moments of suffering (e.g., to 'see the mighty oak in the acorn'). This is the type of intelligence that our best school teachers have shown when they saw and brought out more in us than we may even have known at the time that we had. In contrast to intelligence focused on 'problem-solving' – which inevitably thereby everywhere sees problems and solutions – appreciative intelligence is a way of being in the world that always sees the constructive side of persons and situations without being utopian or unrealistic. It is about seeing and taking a stand for our own and each other's best selves. When we take this stand completely and holistically, rather than partially and with limits, it gains enormously in power and authenticity. In other words, if we see an opportunity to make money by exploiting others, the narrowness of our 'appreciative' focus, and especially the lack of appreciative intelligence towards other persons, constitutes a blind spot that will in some way feed back around to impact our own well-being.

One of the most powerful aspects of the appreciative intelligence shown in Silicon Valley is the very fact that it was focused on creating possibilities that were positive intrinsically and in multiple dimensions – in how people organized work together, in the authenticity of their intrinsic enjoyment in creating helpful and useful technologies and in their love of what they did – rather than being focused on competing with others and winning. We have already seen several examples of this, such as the case of Google seeking ideas from anywhere in the organization (rather than just the top) and providing its engineers with a day a week to work on whatever personal pet projects they wish. This practice demonstrates both how the employees were motivated by the love of discovery and problem-solving, such that the day a week to work on their pet projects was a perk of working at Google, and the organizational wisdom of Google that people usually do their best work when they are doing what they most enjoy. In the end, the organization will be enhanced from allowing people to be maximally self-expressive, whether or not that self-expression ever yields financial or

other 'measurable results'. In allowing employees total freedom to choose to engage in what they enjoy on those days and to pursue it for their own personal interest and benefit, Google recognized and refused to be caught in the irony that as soon as people's work is held to the standard of 'measurable results', the freedom to pursue and experiment with what they truly and intrinsically enjoy has been destroyed – along with the profound breakthroughs (such as Google Desktop in the example previously described) that it may – or may not – spawn.

Components and Qualities of Appreciative Intelligence

Appreciative intelligence has three components, and leads to four qualities (Thatchenkery and Metzker, 2006). The three components or elements are:

- reframing;
- appreciating the positive;
- seeing how the future unfolds from the present.

The four qualities that result from appreciative intelligence are:

- persistence;
- conviction that one's actions matter;
- tolerance for uncertainty;
- irrepressible resilience.

The three components are discussed in turn.

Reframing

This is the 'psychological process whereby a person intentionally views or puts into a certain perspective any object, person, context or scenario. One of the most common examples of framing is that of calling a glass "half empty or half full"' (Thatchenkery and Metzker, 2006, p. 6).

We have tremendous choice in how we see situations, ourselves and others: what we pay attention to; what we take to be important; whether we see things as a liability or an opportunity for learning and growth, and so on. Often life appears to us as a 'given' reality, and older traditions in Western social science reinforced that way of seeing (contemporary social sciences and philosophy of science have seriously revised this view, however). In fact, we can always choose how we make meanings out of situations and how we respond, and people exercising their appreciative intelligence do just that. Viktor Frankl (1963, p. 104), a concentration

camp survivor, famously wrote: 'everything can be taken from a man but one thing: the last of the human freedoms – to choose one's attitude in any given set of circumstances, to choose one's own way'.

Appreciating

This second element of appreciative intelligence builds on the first and is the most constructive aspects of a situation in a realistic fashion. We can see the power of this element most forcefully when we think about being on the receiving end of it. If you go well out of your way to do something nice for someone, and they focus only on flaws in the content of how you selected to express this goal, you can see that they are missing the most powerful and generative aspect of the situation – your good intentions. If, instead of focusing on the problems in the execution, they focused on the beauty of your intentions and from there, in a space of alliance, requested a different mode of expressing the intention, the experience and result of the interaction, as well as of downstream results and interactions, would be very different indeed.

In Silicon Valley, this positive valuing was largely present along some dimensions and in some ways, and not in others. For example, relative to Route 128, Silicon Valley often embraced people regardless of the superficial polish and sheen important in most traditional business environments – the pattern quoted earlier of not caring 'how the talent is wrapped'. This valuing sometimes also may have extended to seeking to value employees as persons rather than as means to ends, as is suggested somewhat by the prevalent 'commitment blueprint' of organizations described by Baron and Hannan (2002). At the same time, this valuing was incomplete in that immigrants faced discriminatory limitations in advancement in many firms and from many venture capitalists. Moreover, the valuing was somewhat limited in that, while technical insight may have functioned to create greater equality across people who might have been discriminated against based on other superficial dimensions, this valuing did not extend universally to persons as persons such that people of all sorts and in all professions (janitors, construction workers) were accorded the same levels of social appreciation, support and opening of possibilities, along the lines Paolo Freire sought to establish in his emancipatory educational institutions (Freire, 1996). While much more common than in other parts of the country, this valuing wasn't universal, as the example of PayPal shows, where employment was based on being 'like' the founders along many superficial dimensions including aversion to sports (O'Brien, 2007). At the same time, these exceptions existed in a context in which organizations themselves had diverse cultures and thus, across organizations, the result would have been a valuing of a distribution of characteristics. While less

than holistic, this organization-level distribution still provides greater opportunities for valuing more diverse people (or aspects of people) than other parts of the country were doing at the time. In other words, while far from perfect, Silicon Valley offered greater opportunity and valuing than the other members of its reference class.

Seeing how the future unfolds from the present

This is the third element of appreciative intelligence. Since in fact, as the second element has implied, 'useful, desirable or positive aspects already exist in the current condition of people, situations or things' (Thatchenkery and Metzker, 2006, p. 33), the final element involves attunement to how to nurture and amplify these constructive elements. In short, when people are showing high levels of appreciative intelligence, they:

> see the oak in the acorn. They also go beyond – they plan[t] their acorns and persevere to help them grow. While others may doubt the potential of the acorns, these leaders believe in their own and others' abilities to water and fertilize the plants from sapling to tall oak. They deal with the risk and uncertainty that comes with planting something new and hoping for growth. Finally, they find a way for the oaks to survive and thrive despite unpredictable circumstances or a challenging environment. (Ibid., p. 33)

Relevance to Silicon Valley

How does all of this relate to the Silicon Valley experience? Examples abound along many of the dimensions (reframing, appreciating the positive, seeing the future unfold in the present) and qualities (resilience, persistence, conviction that one's actions matter, and comfort with ambiguity) of appreciative intelligence. For example, we have just encountered elements of a general Silicon Valley culture of allowing everyone to be who they are, regardless of how the more traditional firms might view them as 'misfits', socially inept, counter-establishment, or otherwise failing to have the outer demeanor and sheen that traditional business culture unfortunately trains people to value. In the words of the venture capitalist quoted earlier from Delbecq and Weiss (2000), 'I don't care how the talent is wrapped'. There are, as we have seen, limitations and exceptions to this, such as the fact that at the organizational level, PayPal was fairly intolerant of various dimensions of difference internally, though those dimensions were themselves offbeat – as an early employee described it, 'We're all a little weird' (O'Brien, 2007, p. 106).

Likewise, consider the application of appreciative intelligence to technological problems by the young techies. This was a culture of making things work with whatever materials might be available in the garage

and through social networks (Saxenian, 2000; Audia and Rider, 2005). It also shows a willingness to fail and to persevere in the face of failures. YouTube and Yelp founders 'learned a valuable lesson from PayPal: The first idea isn't always the best. Yelp was a convoluted e-mail referral service before becoming a top review site. YouTube started as a video dating play' (O'Brien, 2007, p. 106).

Google's Marissa Ann Mayer says that Google's innovation relies on its 'fearlessness' – she launches products 'early and often' without fear of failure (Elgin, 2005). Referring to Apple Computer and Madonna, Mayer says 'Nobody remembers the Sex Book or the Newton. Consumers remember your average over time. That philosophy frees you from fear' (ibid., p. 90).

A founder of PayPal had so much confidence in his own actions that he founded a financial transactions company even though when he started, 'Peter Thiel didn't know what a chargeback was.... That's one of the fundamental things of any credit card payment system. Chargebacks almost killed the company' (O'Brien, 2007, p. 106). At PayPal, 'the executive team made up for nonmastery of details with unwavering vision, which inspired the troops' (ibid., p. 106).

Moreover, a can-do approach of getting in and trying things and learning on the fly inspired other employees to found their own businesses. For example, Chad Hurley, CEO of YouTube remembers his PayPal days as an education in business. When he arrived in California with a degree in art from Indiana University of Pennsylvania, building a successful company seemed like something other people did. '"You never think it could happen to you," Hurley says: "But seeing Peter and Max and the guys come up with ideas and seeing how to make things work gave me a lot of insight. You may not have a business degree, but you see how to put the process into effect"' (ibid., p. 106).

We also should not underestimate the fact that appreciative intelligence was frequently applied not individualistically to advance one's own personal gain at the expense of others, but rather collectively, holistically, and in a more communitarian way to appreciating, supporting and valuing the success of others. Rather than a scarcity-based zero-sum-game mindset, Silicon Valley was frequently characterized by a mindset of sharing, abundance and mutual encouragement and support. Founders of one firm would support former employees in founding their own firms – with capital, knowledge-sharing and other resources. This happened within myriad social networks, from the immigrant associations documented by Saxenian (2000), to the organizational support in which employees would be supported by their current and former employers to start companies (Audia and Rider, 2005; O'Brien, 2007).

PayPal founders claim to have supported employees to such an extent that the 'PayPal mafia' now runs $30 billion in businesses (O'Brien, 2007). This even occurred sometimes in cases of separations under contentious and acrimonious circumstances, as in the case of Musk at PayPal, who continued to provide financial support to projects by people from PayPal even after he'd been removed by the board while on a flight to Australia for his first vacation in years (ibid.).

TRANSFERABLE LESSONS

The history of management thought is full of examples in which a meteoric 'success' is identified and everyone rushes to imitate – often even as the original inspiration for the success story is itself being indicted for accounting fraud (e.g., Enron) or going extinct (e.g., Wang Labs). What makes us think that Silicon Valley will not burn itself out and end up worse off than if it had developed more quietly, moderately and sustainably? When we think about transferable lessons we must first make sure we really want what we are seeking to transfer. A second important irony is that Silicon Valley was not the result of deliberate planning. How then can we expect to create by deliberate planning something that itself emerged organically through a confluence of complex and historically contingent factors? What, if any, lessons can be learned from Silicon Valley?

Metcalfe (1998, p. 123), 3Com's founder, pointed out that Silicon Valley is the only place on Earth not trying to figure out how to become Silicon Valley. There we argue that the most important, generative and transferable lessons from Silicon Valley are not at the level of replicating the content or structure of so-called success factors. Instead, the most powerful lessons are to be found at the level of a fundamental stance. In particular, what worked in Silicon Valley was authentically and thoroughly valuing, supporting and inhabiting its own positive uniqueness – not trying to be Route 128, not trying to be Detroit and not trying to connect with its best qualities in order to make money. The example of Silicon Valley forces us to recognize the deepest level of appreciative intelligence: seeing and celebrating the most life-affirming aspects of each community, rather than trying to import a set of 'best practices' from one place to another.

When seen to operate at the level of a fundamental stance, the lessons from Silicon Valley also challenge some deeply held theories and beliefs about what leads to a thriving economy and a thriving society. As we have seen, the culture in Silicon Valley combined intensive and vibrant transnational diversity with a counter-culture that valued technological work and innovation intrinsically rather than instrumentally in terms of

whether or how they would translate into economic gains (Saxenian, 1999, 2000, 2006; Florida, 2002). Of course, the opportunity to make money was not squandered, and it may even have been primary for some firms, but this was relatively rare in the organizational and underlying cultures, and when it did occur in organizations they failed in disproportionately high numbers (Baron and Hannan, 2002). In the core incubating culture spawning the phenomenon of Silicon Valley, money was a secondary rather than a primary driver for large segments of the population.

Baron and Hannan (2002) showed that the Commitment blueprint – treating employees as persons rather than instrumentally as means – was the most successful within Silicon Valley. This model had the least likelihood of failure, while the autocratic model, with a central exchange relationship of working for money, had the greatest likelihood of failure. This 'blueprint', along with some of the others focused on work for the joy of it, can be seen as an extension to the organizational level of a counter-culture that refuses to value money as the end and persons as the means, but instead values relationships and authentic activities as valuable in their own terms – rather than instrumentally for their monetary potential. Again, this highlights the fallacy of trying to replicate Silicon Valley in order to create economic wealth: paradoxically, part of what made Silicon Valley economically successful may have been the very fact that many of the original innovators were not motivated because of money but instead as a result of intrinsic enjoyment of the technology and the company created around it.

The Silicon Valley experience also challenges other framework assumptions of Western management. For example, traditional management prizes asymptotic levels of efficiency, and yet one of the most important sources of success in Silicon Valley was the willingness to fail and the acceptance of failure as part of the process. From a traditional management perspective, failure is 'waste', and something that should progressively be eliminated. Not only has the cult of efficiency in Western management been eroding personal lives and the ability of employees to bring their whole selves to bear in the workplace, but also it is, like global capital's destruction of the regional and local, self-defeating.

Traditional management theories also collude with the hierarchical structure of salaries based on power and control within the company. Management ideologies usually rationalize these modes of apportioning wealth with patently false (and irrelevant: Kohn, 1993) claims that pay is related to actual contribution to the organization. These claims have now been dramatically exposed by the US financial meltdown, where CEOs who ruined their companies continued to reap handsome bonus pay immediately before, during and even after their firms received millions of dollars in bailout funds from taxpayers or were bought as a distressed sale (as in

Bank of America buying Merrill Lynch as the latter verged on collapse). Many of the early Silicon Valley firms at least partially and relatively contravened these hierarchical and extorting structures and mindsets by adopting a relatively 'flat' organizational structure and apportionment of gains. Again, however, this structure was rooted in the ecology of the region. When other regions adopt a stance of appreciative intelligence towards their own organizational structures, they will not merely import either the hierarchical or the flat models, but will consider (authentically, and not just based on the narrowly conceived self-interest of the powerful) the kinds of organizational structure that can best support their highest potential. At the same time, in most cases, when the interests of the powerful are not in the driver's seat, the most effective structure is indeed most likely to be a relatively flat one in which everyone has the autonomy, power and, thereby, ability to be their best and contribute fully to the organization.

In identifying the transferable lessons from Silicon Valley, this chapter raises a fundamental paradox: why are we seeking imitations in the first place – and what does that say about what we are choosing to value and the relationship between what we are valuing and what those we're imitating were valuing? Imitations of Silicon Valley abound because economic growth has become the new global obsession, to the point that whole countries are losing sight of invaluable treasures – of social fabric, spiritual depth and resilience, emotional intelligence – in their own backyards. And yet Silicon Valley achieved its economic growth in part precisely because it was not focused on economic growth. It was focused on the joy of innovating for the sake of innovating.

Thus, we have seen many examples of transferable lessons from Silicon Valley, including the caution that the act of seeking transferable lessons may already violate one of the key conditions that was important for Silicon Valley to be Silicon Valley (e.g., that it 'wasn't trying to be Silicon Valley'). And yet, it is only human to find things elsewhere that we want to incorporate into our lives and communities. Under these circumstances, what are some things we should keep in mind?

When we analyze a phenomenon for 'transferable lessons', we create a 'figure-ground' distinction, to use the famous gestalt terminology (e.g., Rubin, 2000), in which we focus on the salient components of the model that got our attention in the first place (the 'figure'), and we tend to de-emphasize or overlook the interdependencies of those aspects with the other aspects of reality that have become part of the 'ground'. Instead, we need to pay attention to the deep ecology impacting the functioning of the whole and parts, both in the original context as well as in the context into which we seek to import. It is also important to consider other collateral,

unintended consequences an import may have on interrelated aspects of the milieu into which we seek to place it. When we look outside and see something we value, how or when might we or might we not want to try to adopt it?

We will illustrate the question of transferrability in Silicon Valley with an analogue that shows kinds of interdependencies and deep ecology that should be considered. Twenty-five years ago Karl Weick (1983) introduced the notion of 'reverse simulation' into management literature. In a typical management or organizational simulation the goal is to test the relationships between variables in the controlled condition of a laboratory or classroom, extract a few principles or theories and propose various ways these lessons learned may be applied to 'real world' organizations. Following fields such as engineering, Weick suggested the opposite: instead of trying to simulate reality, create new realities in the lab and transfer them to the real world. What happens when we create in a laboratory (simulated environment) new forms of organizational processes and structures that differ from what are available in our lives outside, and we would like to incorporate some of those possibilities in our real lives? In such situations, we often look too narrowly at the conditions that made the possibility come alive in the particular context in which it occurred, and we often similarly overlook the conditions in the new context that might alter the meaning or valence of the import in the new environment (Wimsatt, 2007). We should attend not just to the phenomenon and its structure, but also to the nature of the broader relationships and 'being' of the totality of the context that allows a phenomenon to occur as it did (Wimsatt, 1980, 1994, 2007; Thatchenkery et al., 1999). We should also keep in mind a healthy humility about our ability to see and understand these complexities or to anticipate or resolve unintended consequences. Often our 'solution' to our last problem ends up creating many more – and worse – problems.

Consider a deliberately simplified example: after a few days of specially structured group interactions, participants in a group dynamics laboratory learned several key principles of open communication, giving and receiving feedback and influencing others, and so on. Participants learned in the laboratory that when they spoke with authenticity and from their hearts, others listened to them better than when they had related superficially. However, when they tried to apply the learning at work after a few days it did not work, leading them to blame the 'too theoretical academic knowledge' as the root cause. Telling the boss that 'I feel intimidated when you speak to me like that' did not yield the type of open response the participant had received in the group dynamics lab a few days earlier.

How can we apply the lessons learned about open communication to

the real world? If we are to apply the principle of reverse simulation with an understanding of the biases of figure and ground phenomena, we will focus more on the conditions that facilitated the emergence of the learning than on the content of the learning as such (Thatchenkery et al., 1999). For example, a certain level of trust had to develop in the small group lab before a member was willing to give or receive feedback. Therefore, what should really transfer to the outside world is not a technique of giving feedback, but the conditions that allow trust to develop in a group. If sufficient trust had been developed between the boss and the employee, the feedback cited earlier might have been received more positively.

Behara et al. (2008) have applied Weick's notion of reverse simulation in an organizational context. While designing and implementing two distinct product delivery processes for a large financial services company in the Organizational Learning Laboratory at George Mason University, which one of the authors had founded, a new methodology called Empathic Knowledge Management was developed. It used the appreciative inquiry framework (Cooperrider and Srivastva, 1987) and utilized tacit knowledge of participants for process redesign in a learning laboratory environment. The focus in the lab was to create conditions that would allow staff from dispersed units in the organization to come together and share knowledge so that the process redesign time could be cut by half. Once a prototype loan processing tool was designed in record time in the Organizational Learning Lab, the focus was not on applying the new tool in the rest of the organization, but on figuring out how to create and maintain in their financial services organization the unique learning climate that had flourished in the laboratory during their three weeks of stay. In any such endeavor, it is important to keep in mind not just the similarities but also the differences between the original and transferred context at every level from content to process to the 'being' of the facilitators, participants and organizational actors and cultures. It is also important to remember that, since human and social systems are far more interdependent and complex than we will be able to theorize in our (necessarily) simplified views and models of them, whatever we think we 'know' is but a small and fallible veneer on what we don't know.

When other regions see value in what Silicon Valley has done, they need to look not just at the superficial level of success factors or salient characteristics, but also at:

- the deeper context of Silicon Valley that allowed those characteristics to blossom;
- the deeper contexts in their own region that are and are not resonant with what they are valuing from Silicon Valley;

- what additional collateral, cascading effects might result from importing and valuing the Silicon Valley model within their own community and how that fits or doesn't fit with the endogenous values and vibrancy of their own community.

Perhaps a region that has not become highly commercialized can recognize, celebrate and support the contexts and cultures in which people can continue to express themselves and be motivated intrinsically as opposed to extrinsically (e.g., in which people engage in activities fundamentally as ends in themselves vs. instrumentally as means to other ends such as making money; Kohn, 1993). Perhaps a city's residents can reframe and examine their unique strengths and regional advantages to come up with new services and innovation that will further support the community? What does it look like to reframe the fear of failure into embracing failures as learning opportunities?

Appreciative intelligence and the embeddedness of human social and cultural realities suggest that the real message and transferable lessons from Silicon Valley are the following:

1. Each locale should appreciate, value and embrace its own unique character and beauty, and be fully, thoroughly and elegantly itself rather than trying to imitate models plucked from a distant and foreign ecology.
2. That when communities see aspects of life they appreciate in other places, they should be circumspect and reflective in why and how they may adopt these elements and what cascading unintended effects adoption might have.
3. Value is not unitary but has many and diverse forms, and thus economic riches are not necessarily even the ideal or goal for a community to seek.

While the venture capitalist John Doerr may announce to the world that Silicon Valley represents 'the largest legal creation of wealth in the history of the planet', we must not forget that it is only one form of wealth that he is noticing. If we extend our conception of wealth, making it more diversified and pluralistic to include other forms of wealth such as spiritual and relational wealth, there are a number of Silicon Valleys in the world that we are not celebrating. It is only in our modern Western discourse that the creation of material and technical wealth has become an obsession held out for all humanity to replicate, and that the pursuit of its accumulation and concomitant concentration in certain regions appears to be a goal worth replicating (Sachs, 1992; Escobar, 1995). Moreover, a

focus on materialist wealth accumulation may in fact even be incompatible with, and at the expense of, authentic relational and spiritual wealth, since it usually involves treating ourselves and each other instrumentally as means, rather than as ends.

Amid the scholarship extolling the success of Silicon Valley, a few dissenting voices also can be heard. Rogers and Larsen (1984) in their book *Silicon Valley Fever* have raised fundamental questions about the social and business conditions of that environment, lamenting the veneration of the workaholic high-tech achiever lifestyle, the stinginess of the region in supporting the arts, the 'dark side' of life in the less affluent South County and a variety of other downsides that are often overlooked or taken to be unimportant when we extol a model for its successful outcomes. Florida and Kenney (1990) also caution us against embracing Silicon Valley as an unmixed blessing, reminding us that neither Silicon Valley nor Route 128 have been able to rectify the fissures that have become increasingly apparent in the US economy and social structures, and that our infatuation with Silicon Valley stems from the fact that their image of free-wheeling, high-technology entrepreneurship and quick-shooting venture capital fits in nicely with the free enterprise ideology. If there ever was an 'Eden of Cooperation' these authors suggest it has degenerated into a fiery pit of destructive cut-throat competition when confronted with huge potential sums unleashing equal levels of greed. When other regions look to Silicon Valley for inspiration to promote economic and technological breakthroughs, policy-makers must look not merely at the success but also at the degree to which the spread of a highly mobile venture capital mindset might erode age-old traditions and cultural norms that have constituted the wealth of these societies. By teaching us to seek happiness in an ever-receding horizon of material externals, rapid economic growth may indeed cause more human unhappiness than the stable, sustainable lifestyles usually disparaged as 'stagnant'. In depicting the Silicon Valley as an attractive model worth emulating, Gary Hamel's description in his award-winning article in the *Harvard Business Review* unintentionally captures this paradox – simultaneously great and terrible, depending on one's vantage point – of Silicon Valley culture:

> The Valley is the distilled essence of entrepreneurial energy. Its ethos is simple: If it's not new, it's not cool; if it's not cool, it's not worth doing. If you don't own shares, you're getting screwed. If you've been in the same job for more than two years, your career is over. If you haven't been through an IPO, you're a virgin. This is where a $2 million house is a teardown. This is where a Porsche is just one more compact car and sushi's just another fast food. Never has so much wealth been created in so little time by so few people. If the Valley's residents pause to think about it for even a nanosecond, they know they're as blessed as those who lived in Italy during the Renaissance. Like the Florentines and Venetians, they're building a new age – an age of virtual presence, of globally interconnected communities, of frictionless commerce, of instantly accessible knowledge and stunningly seductive media. (Hamel, 1999)

In sum, through applying appreciative intelligence we can discern that what made Silicon Valley the poster child for economic development 'best practices' manuals and the envy of the world was its own deep authenticity and celebration of itself. The paradox of Silicon Valley is that attempts by other regions to emulate it are therefore fraught with challenges and lead to problematic choices. As suggested by, among other examples, the reverse simulation illustration above, rather than trying to be another Silicon Valley, regions should look deep within, find the many different forms of value in which they are rich, and celebrate their own unique constellation of strengths and possibilities for realizing a better world.

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