Consciously Connected Communities Owen Ambur, February 17, 2018

In <u>The Future of the Mind: The Scientific Quest to Understand, Enhance, and Empower the Mind</u>, Michio Kaku defines consciousness as:

... the process of creating a model of the world using multiple feedback loops ... in order to accomplish a goal ... (p. 43)

In <u>Incognito: The Secret Lives of the Brain</u>, David Eagleman downplays the role of consciousness in determining our behavior, most of which is on autopilot. Indeed, he asserts, "To the extent that consciousness is useful, it is useful in small quantities, and for very particular kinds of tasks." (p. 57) Nevertheless, he acknowledges its responsibility for *very important* tasks – those which distinguish us as human beings:

Conscious parts of the brain train other parts of the neural machinery, *establishing the goals and allocating the resources*... Consciousness is the long-term planner, the CEO of the company, while most of the day-to-day operations are run by all those parts of her brain to which she has no access... *This is what consciousness does: it sets the goals, and the rest of the system learns how to meet them*. (p. 70, emphases added)

While Eagleman references the organization of the brain bequeathed to us by evolution, we routinely establish artificially "intelligent" systems as extensions of our natural capabilities to plan, establish goals, allocate resources, learn from feedback, and improve our performance in the future. Indeed, <u>Wikipedia</u>

<u>notes</u>, "Although humans are part of nature, human activity is often understood as a separate category from other natural phenomena."

As vessels for human activity, organizations save us from continually reinventing social networking wheels while enabling us to work together to accomplish objectives we cannot achieve alone. Ideally, organizations should also be capable of learning, and in competitive markets,

commercial enterprises that fail to do so are doomed to prompt and certain naturally selected extinction. However, many organizations are shielded from competition, insulated from effective feedback, and thus relatively incapable of learning.

Acquisition of knowledge occurred slowly in prehistoric times as the wiring of our brains evolved. Consequently, <u>Dunbar's Number</u> prevailed and tribes of 150 individuals or fewer didn't need to learn anything "unnatural" (artificial) to survive and successfully pass their genes down to us.

Learning ~ the process of acquiring new or modifying existing <u>knowledge</u>, <u>behaviors</u>, <u>skills</u>, <u>values</u>, or <u>preferences</u>.

Options were limited and the definition of success was pretty simple but that began to change with the development of language. Dunbar's Number no longer ruled. Choices proliferated and the importance of learning grew. Unfortunately, however, even today ignorance remains unduly characteristic of governmental organizations, which gain and hold power through politically/emotionally motivated <u>majoritarianism</u>, if not brute physical force.

Gaining power requires superior effort and those who've won the ability to impose their will upon others are disinclined to learn why they should consider relinquishing it. If they've convinced themselves via <u>groupthink</u> that their motives are purer and more noble (devine) than others, they simply lack incentive to contemplate other alternatives. <u>Robyn Dawes has observed</u> that psychotic reasoning is characterized by failure to consider alternatives, and with respect to governance, such failure might be considered to be "prehistoric" or at least pre-<u>cyberage</u>, if not necessarily pre-ice age.

However, for relatively less dictatorially "frozen" governments, the dynamics may be changing in the face of the inexorable advance of knowledge and technology. (See Reconsidering the Higher-Order Legitimacy of French and Raven's <u>Bases of Social Power</u> in the Information Age.) In <u>Your Next</u> <u>Government: From the Nation State to the Stateless Nation</u>, Tom Bell suggests:

The market for governing services ... has begun to enter a period of rapid change. Nation states, legacy monopolists that long dominated the field, now face competition from private cities, self-legislating special economic zones, and other agile new institutions. This quiet revolution, working from the inside out, stands to transform government from the province of lumbering behemoths to a network of *consent-rich communities*. Not another nation state; a stateless nation. (p. xi, emphasis added)

Wikpedia defines <u>community</u> as "a *social unit* (a group of living things) who have something in common" and *organizations* are "*social units* ... structured and managed to meet a need, or *to pursue collective goals*." (emphases added) Organizations are goal-oriented social units. What they have in common are goals.

According to <u>Organizational Theory</u>, rational organizations encompass two primary features: Specificity of Goals and Formalization. Goal specification provides guidelines for completion of tasks along with regulated means of allocating resources. Formalization standardizes organizational behavior. While performance standardization has led workers to reject as unrealistic systems incentivizing work at optimum levels, that may be a needless artifact of dictates imposed hierarchically from above.

Given the choice, why would any rational human being choose *not* to improve her performance and more consistently achieve the results she desires? Moreover, while researchers have argued the primary purpose of our ability to reason is to justify what we've done after-the-fact, only the most cynical theorist would argue we should design our organizations to *accentuate* human weaknesses – as existing social networking services and politically driven organizations tend to do.

While the human mind is perhaps the most wondrous of all creations, it has serious deficiencies. For example, as Daniel L. Schacter observes in <u>The Seven Sins of Memory: How the Mind Forgets and</u> <u>Remembers</u>:

... we tend to think of memories as snapshots from family albums that, if stored properly, could be retrieved in precisely the same condition in which they were put away. But we now know that we do not record our experiences the way a camera records them. Our memories work differently. We extract key elements from our experiences rather than retrieve copies of them. Sometimes in the process of reconstructing we add on feelings, beliefs, or even knowledge we obtained after the experience. In other words, we bias our memories of the past by attributing to them emotions or knowledge we acquired after the event. (p. 9)

Research has shown that reconstituting the truth (colloquially known as lying) <u>taxes our brains</u> and <u>adversely affects our health</u>. So why would we not want to create records of which we can be truly and truthfully proud in the first place, rather than continually rationalizing less than respectable behavior after-the-fact? Why would we not want to build and engage organizations that naturally help us do so?

Envisioning a more enlightened future, Jason Lind posits an <u>Ideal Organizational Theory</u> in which "people will behave the way they always have but their behavior will be optimized and collectively more intelligent." Consistent with Bell's focus on consent, Jason asserts:

When dealing with complex problems it is impossible to prove to all actors which direction is correct. Actors can often only agree to the process for making decisions and not the decisions themselves. *Formal organization structure* therefore *should not go beyond what is agreeable to the actors involved*. (emphases added)

Acknowledging that interaction must be moderated by laws protecting minorities from majoritarian mandates, Jason, argues such laws should be as limited as possible and change only under rare circumstances. Moreover, he asserts theory dictates, "actors and sets of actors cannot be directed centrally: only through <u>self-organization</u> will the system be fully optimal." Thus, the marketplace must allow self-organization to transpire without impedance.

Jason notes three types of dynamics play roles in avoiding market failures – <u>monopoly</u>, <u>oligopoly</u>, and free agency. Groups must not be allowed to gain monopolistic control over others – as political elites commonly do through government agencies – but they may organize themselves as oligopolies to facilitate collaborative action. However, by definition, individual actors are monopolies unto themselves and interaction among them as consumers must be unfettered in a free and open marketplace. In that event, Jason asserts not only will the marketplace behave as if intelligent but it will actually *be* intelligent in reality and results.

Artificial Intelligence = Finite interaction is optimized through oligopolistic competition, whereas non-finite processes are optimized by the free marketplace. Formal organizational group structure therefore must be oligopolistic, but their interaction must be free. The individual is a monopoly. Q.E.D ~ Jason Lind Jason's argument is consistent with <u>James Surowiecki's assertion</u> that crowd wisdom requires independence of thought. Similarly, in *Organizational Behavior*, Schermerhorn, Hunt & Osborn have noted that, while co-acting groups perform well on simple tasks, interacting groups perform complex tasks more effectively. (p. 350) Co-acting groups work independently, with centralized coordination. Interacting groups work closely together in decentralized networks. (p. 345)

Whereas co-acting groups need little direction because their task are simple, explicit guidance is impossible for interacting groups because the nature of their tasks defy prescription. They must work out the details for themselves, but as co-learning communities, the faster and better they are able to share lessons learned from failures, the more rapidly and certainly they can achieve their objectives.

New communication technologies are changing the nature of work but one of the risks associated with such tools is information overload. (p. 347) Indeed, in *Communication for Business and the Professions*, Andrews & Baird have argued organizations are generally plagued with too much communication, rather than too little. (p. 8) Moreover, those working on complex tasks are often either treated as co-acting groups and over-controlled or they are not supplied with the tools to work effectively together via decentralized networks. (More information on organizational communications and group development is available <u>here</u>.)

To work effectively together, interacting groups need networking services that address the underlying requirements for business-quality interaction.

- First and foremost among those requirements are
 - o clarification of the longer-term goals, and
 - specification of the near-term objectives, in terms of measurable performance indicators.
- Second, such information must be effectively shared in an open, standard, <u>machine-readable</u> <u>format</u>, like Strategy Markup Language (<u>StratML</u>, ISO 17469-1 & ANSI/AIIM 22:2017).
- Third, leveraging such machine-readable data, value-added intermediary services must make it easy for potential performance partners to discover each other based upon common and complementary objectives and to work efficiently together to achieve them.
- Fourth, such intermediaries must also enable stakeholders to provide input and feedback on objectives of interest to them, thereby enabling establishment of a virtuous cycle of lifelong learning throughout the full lifecycle of each organization.

With reference to governmental organizations, among the buzz words currently in vogue is the term *smart city*. Hope of progress is now being vested in cities because many people have given up not only on Uncle Sam but also State governments. Cities may be more capable of learning and innovation than larger, more distantly located governmental bureaucracies – particularly to the degree that diversity as well as local conditions and knowledge are important. <u>Wikipedia defines</u> a smart city as "an urban area that uses … electronic data collection sensors to supply information … used to manage assets and resources efficiently."

<u>Intelligent Agent</u> ~ an autonomous entity which observes through sensors and acts upon an environment using actuators ... and directs its activity towards achieving goals.

The infrastructure required to support the collection and sharing of such data has been described as a smart city's "<u>brain</u>" or "backbone". While having a backbone is good, unless it is connected to a strategic planning process, such infrastructure is mindless and incapable of effective, goal-oriented learning. That may be fine for co-action on clear, well-justified objectives that are relevant at any point in time. However, unless such systems are linked to dynamic strategic plans, they will ossify, leading to misallocation of resources, irrational, politically motivated <u>honoring of sunk costs</u>, and sub-optimization of performance.

On the other hand, if the quiet revolution identified by Bell is sustained, it may not take long for smarter, more *conscious* communities to <u>truly connect</u> – not only their backbones but also their brains – and thereby self-organize around common and complementary objectives.

Pertinent questions include:

- when the necessary intermediary services will emerge to enable individuals to more consciously connect;
- how long incumbent, emotionally driven, politically motivated powers-that-be may be allowed to continue to -
 - o rationalize their existence,
 - o fail to embrace dynamic, goal-oriented organizations, and
 - \circ $\;$ thereby stand in the way of conscious, community-based progress; and
- the magnitude of the opportunity costs associated with such needlessly ir<u>rational ignorance</u>.

See also If I Only Had a Brain: Evolving a Prefrontal Core-Text for the Internet