Cooperating community connections: an essay on a changing political reality

Garth Graham

President of Victoria FreeNet Association, co-founder and member of the Board of Directors, Telecommunities Canada.

garth.graham@telus.net

Community Informatics has declared that the global is a federation of locals. James Quilligan has written an essay to the effect that applying such a definition of global requires a world institution of democratic governance. Some members of the community of community informatics researchers have come to a similar conclusion. This essay outlines an alternative interpretation based on complex adaptive systems theory, and with consequent results for a different definition of the individual, the community and their interdependence. It asks the question – where does the predominance of opinion in community informatics about the changing nature of governance and community reside?

Introduction

In an email to the Community Informatics list, Michael Gurstein pointed to an 'interesting background paper'. (Gurstein, 2014. July 30). He felt it provided 'some very useful conceptual clarification/development' for the Community Informatics Declaration - Internet for the Common Good (CIRN Commons. 2014. April 3). That paper was: James B. Quilligan, Why Distinguish Common Goods from Public Goods? (Quilligan, 2013). I too found it interesting, but for different reasons. I support the Community Informatics Declaration because it defines global as a federation of locals. My reason for that support is based on a specific understanding of how a shift in culture that resulted in creating technologies like the Internet has also created a very different meaning for the word governance.In brief summary, the governance structuring complex adaptive systems, or self-organizing systems like the Internet, is internalized or distributed among the elements that make it up. The parts of the whole system

all contain within themselves simple rules of relationship that govern the structure or patterns of behavior that the whole expresses in the world. It's a question of where you think the rules need to be. We are in transition to a relational understanding of governance and away from the mechanistic and externally imposed understanding of governance inherent in existing political institutions. Given the pervasiveness of the transition, why would we expect the practice of politics to remain unaffected?

The theories underpinning almost every academic discipline are now influenced heavily by relational or evolutionary concepts. To take one example, the role of urbanization in development, Luís Bettencourt has called for the "*re- conceptualizations of cities as complex adaptive systems.*" (Bettencourt, 2013).   He contrasts this with planning practices that viewed cities as a set of problems to be managed. "*This tradition is intellectually inspired by engineering practices and more or less explicitly thinks of the city as a machine. Its problem solving strategies are largely defined by ideas of control theory.*" (Bettencourt, 2013).

Quilligan's paper interests me because I think he sees enough of that transition to react against it. He is defending an understanding of governance as control, and as essentially adversarial, that is fading from view. Obviously, Quilligan's phraseology places him somewhere left of center on the continuum of partisan politics. On beginning to read the essay below you may be inclined to put me somewhere else on that scale. But be patient. The point of this essay is to show how the epistemology that frames a "culture of autonomy" (Castells, 2013) has a form of governance that ignores altogether the classic linear continuum of left, right, and center.

In that culture of autonomy, the Internet is a symptom of a shift in epistemology, not a cause of it. So far, Internet Governance continues to be described as an ecology. The Internet's governance therefore mirrors exactly the Internet's technological significance as a cultural artifact. As a radical practice, it remains the role of community networking to exemplify the transition of governance to complex adaptive systems.

Who's afraid of Eleanor Ostrom?

Quilligan advocates transcendence of the nation state by reference to the transformational alternative of local and democratic commons institutions. At first glance, because he sounded vaguely environmental, I too found his message attractive.   It also seemed to parallel the Community Informatics Declaration's definition of the global as a federation of locals. But Quilligan twice makes a point of contrasting his concept of common goods as different from Eleanor Ostrom's concept of common-pool resources (Ostrom 1990, 2005). And they are not. Because I believe you can't understand Internet Governance without understanding Ostrom, I asked myself, why did he need to set up a false dichotomy? My curiosity caused me to take a deeper look at what he proposes and how it conflicts with my own sense of the changing nature of governance.

In his first reference to Ostrom, in footnote #1, Quilligan says:

> "*Although it's not the focus of this article, the differentiation of common goods from common-pool resources (CPRs) is also important. CPRs generally involve an open access regime where there is no system for managing resources; they are freely*

available for anyone to appropriate because no rights or rules exist for governing them. In a commons, on the other hand, people negotiate their own agreements – both functional and cultural – to manage their shared resources. Common goods thus tend to be managed by informal rules and norms that do not exist in open access regimes like CPRs." (Quilligan, 2013).

I have a problem with that footnote. That distinction might be important if it where true, but it's not. The whole point of Eleanor Ostrom's eight design principles of stable local common pool resource management is that CPRs do manage themselves through self-organization. Asserting that common goods and CPRS are different doesn't make it so. It looks to me as if his social charters and Ostrom's design principles are same thing.

For example, I cannot see any difference between Quilligan and Eleanor Ostroms' design principles 7 and 8.   Quilligan says, "*Since every resource domain is unique and so many commons overlap, commons management would be deliberated through local, state, inter-state, regional, and global stakeholder discussions.*" (Quilligan, 2013).   Ostroms' design principles 7 and 8 say, "*(7). Self-determination of the community recognized by higher-level authorities; and (8). In the case of larger common-pool resources, organization in the form of multiple layers of nested enterprises, with small local CPRs at the base level.*" (Ostrom 1990, 2005).

In his second reference to Ostrom, later in the essay, he says:

> *"By the Samuelson/Buchanan/Ostrom definition, non-rivalrous and non-excludable public goods are said to be provided by sovereign governments to the citizens within their jurisdictional borders. But this model is virtually meaningless at the multilateral level where there is no representative authority (either through individual states in association or a global institutional framework) to provide public goods to the citizens of the world." (Quilligan, 2013)*

I don't agree that lumping of Ostrom with Samuelson and Buchanan is correct. He raises an issue that Ostrom doesn't address. While it's true that Ostrom's principle #7 calls for self-determination of the community to be recognized by higher-level authorities, the point of principle #7 is the self-determination. It merely and pragmatically acknowledges that external authoritative recognition of a CPR will suddenly make its presence felt and that it would be of help if it adopted a correct attitude.

Ostrom didn't get a Nobel Prize in economics by genuflecting to the authority of the nation state. You don't need a world government or global institutions to apply the CPR principles. They derive from thousands of cases where effective cooperative utilization of a common resource is in practice. There is no need to postulate some kind of world government or global institution to make them happen. Why does Quilligan feel it necessary to create a straw dog? Why, conceptually, did he need to distance himself from Ostrom?

As complex adaptive systems, Ostrom's CPRs don't sum "up" to anything centralizing, globalizing or collectivizing. They merely distribute functions of self-management internally.

They simply resolve local problems of resource optimization locally, and nothing more. They do this by treating the resource management problem as if it were a complex adaptive system, thus bypassing external authority or "management" altogether. The external imposition of management practices on a complex adaptive system is inherently disruptive of the system's equilibrium. So the system, like a packet-switched network, has to route around it to survive. Ostrom's CPR principles, just like the Internet, are a symptom of a real shift in epistemology.

Quilligan finds his epistemological shift elsewhere. He states, "*The political will to create a democratically restructured economic system cannot be generated until a more realistic epistemology is embraced across the planet.*" (Quilligan, 2013). So I asked myself, what's the basis of his realistic epistemology of resource sovereignty? How is it different from Ostrom's, and who leads the charge for its embrace? On my second look at his essay, I found it to be a pastiche of leftist slogans, appropriating the language of ecology for political ends. He advocates:

- globally representative constitutional governance that goes beyond the state level and acts as a genuine voice of global public opinion.

- recognition of the sovereign rights of world citizens to their commons.

- self-organized and participatory systems of common property, social charters and commons trusts.

- involving resource users in the process of production so that civil society will develop a more dynamic basis for collective action, social solidarity and direct democracy than currently exists.

- transcending the authority of state institutions and recognizing the legitimacy of people's claims as trustees of the world's resources at every level of common property.

You might call that a disintermediation of the middle through collectivization of the ends. He advocates these goals to address a particular nemesis: the practice of governments in allowing elite interests to capture both the public good and the idea of the public. "*In surrendering our deeply personal, subjective power of decision-making to government (which redeploys this power by granting corporations the right to produce and dispense private goods), the idea of an active citizenship with identity and purpose is gravely weakened….*" (Quilligan, 2013).

To counterbalance the power of those elite interests, Quilligan is in search of the active global citizen as a collective abstraction. In essence, his world institute for global governance masks a redefinition of globalization as a process of collectivization writ large. He calls on individuals to assert their sovereign rights to control and use shared local resources. "*People's sovereignty for a commons is legitimated through global citizenship, and this global citizenship is legitimated through the local sovereignty of their commons.*" (Quilligan, 2013).

He then expresses ambivalence about the role of civil society as the "voice" to represent public opinion at the global level. First, he says:

> "*In affirming and upholding the constitutional premises of neoliberalism (including the primacy of individual rights, private property and sovereign borders), most civil society organizations support the embedded division of labor between producers and*

> *consumers and thus the enclosure of the commons. This leaves civil society co-de-pendent on business and government and vulnerable to exploitation. Unable to stand as a true opposition party, civil society faces a huge obstacle in establishing itself as a transformational alternative." (Quilligan, 2013).*

I personally believe that civil society faces an obstacle in establishing itself as a transformational alternative that is insurmountable. This is because business, government and civil society are three parts of the same closed system and are all equally co-dependent. But later Quilligan offers civil society redemption. It can only become the transformative alternative to private/public ownership if it can "learn from commons groups the importance of involving resource users in the process of production." (Quilligan, 2013). By this means, civil society will, "*develop a more dynamic basis for collective action, social solidarity and direct democracy than currently exists*." (Quilligan, 2013).

He says, "*National governments simply do not have the interdependent power or legitimacy – nor are they designed – to protect, manage and distribute resources for the world's people as a whole*." (Quilligan, 2013) Then, as an answer to the problem of legitimacy, he conjures up global resource sovereignty as a means of local collectivization through trusteeships that govern commons resource areas and bioregions. "*To create a new global social contract .... the world's people must organize their local commons, declare their sovereignty as global citizens, and call upon governments to acknowledge the natural rights belonging to all human beings and life-forms across the planet*." (Quilligan, 2013)

It's an economics of sharing that is based, not on political interests or ideology, "*but on how the world and its subsystems actually work, [and that will lead to] globally representative governance*." (Quilligan 2013). And the basis of globally representative governance will be "*a genuine voice of global public opinion*." (Quilligan, 2013).

Other than evoking the world's people themselves, he's never very clear whose voice it is, "beyond the state level," that involves and recognizes and represents "the identity and purpose" of the active global citizen. Some one unspecified is going to manage the commoners who are declaring their sovereign rights. Some one unspecified is going to convene the processes of stakeholder empowerment at every level of governance.

Yes, it's true, and Ostrom would agree, that, "*... the freedom and equality expressed through a commons does not result from privatization, centralized institutions or the top tiers of a social hierarchy*." (Quilligan, 2013). And, yes, it's true this then requires, "*powerful and broadly recognized distinctions between public goods and commons/common goods – the shared resources which people manage by negotiating their own rules through social or customary traditions, norms and practices*." (Quilligan, 2013). And, yes, it's true this then requires, "self-governing systems of co-production." (Quilligan, 2013). But Quilligan sees these as decentralized, by a centralized world institution of representative democracy. Self-governing and complex adaptive systems are NOT decentralized because they have no center. They are distributed. You cannot claim to reinforce their solidarity because solidarity and their functionality have nothing to do with each other.

Exactly what does he propose to recognize the legitimacy of people's declaration of sovereignty for their commons if not a more concentrated level of authority? To say that it's human beings as a collective who are sovereign, not their governments, changes nothing. It just

shifts the balance of power in the assumption that the "cold monsters" (Fawcett, 2014) of government, business and civil society are the only possible constituents of social organization and governance. Perpetuating that assumption doesn't get us to implementing the global as a federation of locals. Perpetuating that assumption doesn't get us to recognize the autonomy of CPRs as the basis of a functional socio-economic structure for the effective allocation of scarce resources in the absence of competition. Perpetuating that assumption doesn't get us to recognizing that the Internet Governance ecology expresses a shift in our understanding both of governance and of the significance of community within it.

In Quilligan's socialist worldview, the reason a person will acquiesce to being defined by a global social contract with the new global hyper state is because that state agrees to legitimize that person's sovereignty over their local commons. But the old state, as he correctly points out, never did that. Why would we trust the new one? Every time The People as a collectivizing abstraction get their sovereignty I seem to lose mine. That's a bargain that anyone practiced in the political arts of internetting won't accept. In the world that created the Internet to serve the needs of its political economy and, in parallel, created a self-organizing ecology to govern it, there is no default mode for the abstractions of The People or society. What complex adaptive systems need in order to function is individual autonomy, not collective sovereignty.

Quilligan wants to achieve something at the global level that centralizes representative authority. The CI Declaration, Eleanor Ostrom's Principles of CPR management by what they leave out, and Internet Governance ecology don't do that. The functions that organize them are distributed internally, not externally imposed. They avoid altogether the trap of solving problems of relational organization, or end-to-end connection, by reference to centralizing authority. That is to say they anticipate structures that scale fractally, not linearly. Those structures exactly mirror the distributed structure of the Internet Although I guessing of course, someone like Quilligan who advocates for global constitutional governance and claims to represent global public opinion might want to distance themselves from the absence of a focus for central authority that characterizes the CI Declaration, CPRs, and the ecology of Internet Governance.

The politics of inclusion in a world of networked individuals

I don't think you can get to federating the locals unless you go all the way to saying it's the individual human being who is sovereign. Otherwise you don't get from models with centers to models that are distributed. You are claiming a change in epistemology that isn't really a change. Shifting the process of defining citizenship from the national level to the global level does not reframe the process of external definition. Something other than you still asserts authority to define what you are. Whereas, in distributed systems, you define yourself.

My own conclusion, my own epistemological reality, is that the processes informing normative values has already shifted away from emphasis on external social context and towards a context where the individual, moving from other-directed to inner-directed, controls the relational dimensions of identity. People embrace the Internet because its usefulness is achieved by removing intermediaries, by leaving the "they" that purports to define each of us out of the relational equation. "In the world of networked individuals, it is the person who is the focus: not the family, not the work unit, not the neighbourhood, and not the social group." (Rainie

and Wellman, 2012). Or to put that another way, net neutrality is identity neutrality, and the choice to connect or not with any system of relationship is personal.   The embrace of a changed epistemology, focused on direct choice of the individual on his or her relational interdependencies, has already occurred.

Manual Castells has advanced a synthesis of current data based on *"networking as a prevalent organizational form; individuation as the main orientation of social behavior; and the culture of autonomy as the culture of the network society."* (Castells, 2013). Because I think it fits with the shift to a relational epistemology, I agree with Castells' evocation of the rise of a new culture, the culture of autonomy. There is a potential inherent in the culture of autonomy that individuals recognize and governments don't:

> *"…each person has multiple identities, the salience of which is shaped by one's motivations and circumstances. This idea – which is firmly rooted in neuroscience, psychology, anthropology and sociology – implies that an individual has significant latitude in shaping his or her identities…. Instead of choosing identities that divide us, making it impossible to tackle multiplying global problems, we can shape identities that extend our sense of compassion and moral responsibility." (Snowner).*

For many years, I have been describing, not very successfully, how open systems for the distribution of governance are fundamentally different from closed systems of governance through control. I have pointing out how the majority of voices in the international debate on Internet Governance assume that closed systems of control are inevitable. Whereas, everything about the nature of the Internet as an open system, and every impact the Internet has on changing patterns of social behaviors, should tell us they are not inevitable. They are merely social constructs and therefore subject to change. Quilligan's essay provides me with one more way of pleading my case.   I believe that case extends to traditional political factions contesting power in elected democracies.

Just as I began puzzling over Quilligan's need to reject Ostrom's CPR principles I also began reading Edmund Fawcett's book, Liberalism: the life of an idea. (Fawcett, 2014).   It was Fawcett's summary of the differences in political values that separate socialism, conservatism, and liberalism that pointed me in the direction of a possible answer to my Ostrom question.

Fawcett defines liberalism as a search for an acceptable order of human progress among civic equals without recourse to undue power. He finds that four broad ideas have governed liberal practice: *"acknowledgement of inescapable ethical and material conflict within society, distrust of power, faith in human progress, and respect for people whatever they think and whoever they are."* (Fawcett, 2014). That practice is expected to result in:

- Ethical order without appeal to divine authority, established tradition or parochial custom.

- Social order without legally fixed hierarchies or privileged classes.

- Economic order free of crown or state interference, monopoly privileges, and local obstacles to national markets.

- International order where trade prevailed over war and treaty prevailed over force.

- Political order without absolute authorities or undivided powers that all citizens might understand and accept under lawful arrangements honoring and fostering those hopes.

- Conflict, if tamed and turned to competition in a stable political order, can bear fruit as argument, experiment and exchange.

He then contrasts liberalism with conservatism and socialism as follows:

> *"In the name of stability, conservatism appealed to the fixity of the past, socialism to the fixity of the future. Conservatives, to schematize, believed in the unchallengeable authority of rulers and custom. They thought of human character as largely set and of society's scope for wholesale improvement as small or nonexistent. They took liberal respect for people's chosen enterprises and opinions, especially if they took unfamiliar or disruptive form, as harmful to orthodoxy and social order. Civic respect, to the conservative mind, overindulged human willfulness and private choice. It shortchanged duty, deference, and obedience. Conservatives took society for a harmonious, orderly whole before critical modernity promoted self-seeking disaffection and liberal capitalism sowed discord between classes."*

> *"Socialists believed like liberals that society was divided by conflict. Unlike liberals they thought that conflict would end once its sources in material inequity were overcome. ... The socialist left, second, put its trust in the power of the people, as intuited by popular tribunes, elected, or self-appointed. Like liberalism, socialism had faith in human progress, but unlike liberalism, progress by radical transformation of society rather than in progress by gradual reform within society as it largely was. Some socialists would reach their goal gradually by the ballot, others in a revolutionary leap. All hoped for a post capitalist society of common ownership and material equality. In socialist eyes, last, civic respect for people singly threatened comradeship, class loyalty, and solidarity. As liberals respected in particular people's property, liberalism stood in the way of true progress." (Fawcett, 12-13).*

As an oh so twentieth century kind of guy, I admit to being comfortable with those liberal values and the nature of the order they seek to achieve. You might think, as I did, that liberals embrace individualism and that liberalism therefore serves as a stage on the way to Castells' culture of autonomy. But Fawcett spends a great deal of time describing many varieties of individualism to illustrate why liberals, while standing up for the whole and the part, are not individualists:

> *"Modern society may be pictured with the same dramatic force as crushing the individual and as sacralizing the individual. Modern society we have been told with equal urgency is postindividualist and hyper-individualist. Some social stereotypers have taken atomized modern society to rob people of independence and responsibility. Others have taken disengaged, irresponsible people to rob modern society of cohesion. Perhaps it is best to treat all such political invocation of social stereotypes ruefully as you might the typewriter: useful in its time—even attractive when well designed—but now a museum piece and a disposal problem." (Fawcett, 2014).*

The Community Informatics list, like many other lists, follows a power law. Twenty percent of the participants supply eighty percent of the postings. Some participants among the twenty percent rejected Castell's conclusion that "key research findings on the social effects of the Internet" pointed to a culture of autonomy. Michael Gurstein, for example, found that the Castells essay, "*makes me think of Marshall McLuhan and 'We look at the present through a rear-view mirror. We march backwards into the future.' He seems never to have heard of Mr. Snowden, platform monopolies, or even the various digitized 'Divides'.*" (Gurstein, 2014, September 17).

At first, it appeared to me that their rejection was merely leftist ideological bias. But Fawcett's dismissive rejection of individualism shows that even liberals don't get the transformation of political power that is occurring as the determinants of identity slide ever further towards self-determination.

All of the existing isms are looking backward, in defense of the old mechanistic epistemologies that provide the basis of their structural existence. The left, the right and the center cannot hold and they need each other to survive. Since I am now old enough to experience the painfulness of becoming irrelevant, I can appreciate how fear of change might provoke defensive rhetorical reactions across what used to be the entirety of the political spectrum. What I don't expect are defensive reactions from the community of Community Informatics researchers.

Obviously Quilligan, in appropriating the language of common ownership and solidarity, fits on the left end of the linear political spectrum. But political references to "the whole and the part" reveal that socialism, conservatism and liberalism are all framing their values in the context of a mechanistic epistemology. On fractal scales, which are self-similar, whole and parts are mirrors of each other. It's early days to see what the relational epistemology of the culture of autonomy will do to frame political action, but it won't be the forms of politics we have come to expect.

I am happy with reframing one of the foundational principles of community development in the context of a fractal scale. People want to talk. Let them. Complex adaptive systems are a way for all of the world to exist in dialogue. Let every voice speak, because we cannot know in advance which voice will be the difference that makes a difference. I am happy that John Perry Barlow's restatement of the Golden Rule works in the context of the Culture of Autonomy, "Only connect. Never separate." (Barlow, 1995).

For example, I don't believe we'll be able to fix representative democracy because we are on the road to replacing it with something else. Other than noting the politics of identity has already changed, I don't know what that something else will be. But I do know that the mind of the autonomous individual doesn't live there anymore. The best evidence for a shift in politics shows up at the level of small-scale municipal (i.e. local) government where interaction is more face-to-face. The most trusted politicians, and therefore electable by those who still vote, are those who practice a politics of inclusion. As much as the system lets them, they ignore partisan competition. In the face of enormous pressures to be adversarial in the opening movement, they only connect. They never separate.

Community: the in of being-in-common

To define politics by reference to the left, the right, and the center is to apply an absolute linear scale in a relational world gone fractal. Like Quilligan, I have a faith that we are moving into a world beyond nation states. I just do not agree that, to achieve it, the practice of politics has to remain the same except for becoming global.

Because of the shift in the epistemology of governance, people can see that representative democracy is just as capable of totalizing as any other ism. It can no longer be assumed that advancing global representative democracy as an answer to global challenges will be automatically accepted at face value. Surely a global centralized governance of any model will embody a greater threat of concentrated power than any nation state. The order that structures a post nation state world does not appear to the autonomous individual to automatically require the emergence of a supranational authority. They know it is dangerous to replace the nation state with the concentrated power of a global hyper state.

I believe that a modern individual, experienced with the practices of end-to-end connective choice that the Internet provides by design, will not put up with the centralization of authority implied by Quilligan's global constitution, no matter how democratically representative it pretends to be. Both humanity's embrace of the Internet, and the panic of nation states in the face of it, are evidence to me that we are facing a different social construct of society, a real shift in epistemology that has already occurred, without really being conscious of it. Society is being re-configured as a fractal composite of communities. But the relational epistemology driving that re-configuration has also altered our expectations of what a community actually does. The way a community does things has also changed.

Community emerges and evolves from the achievement of a dynamic or "rough" consensus among participating autonomous individuals. That way of doing things, of running the code of consensus, evolves through practice, thus altering the patterns of behavior of both autonomous individuals acting in concert and the communities they express in the world through their action.

The dynamics of this relationship are dependent on the autonomy of choice in connection and continuing participation. Without choice, there is no trust that the reciprocity that reinforces community will be present. If the individual's individuality is absorbed into the collective then the iterative dynamics of community dissolve. Calls for comradeship, solidarity and working class loyalty are now perceived for what they are – a threat to that essential social dynamics. Internet users, in utilizing the material technologies of the culture of autonomy, have already thrown off the chains of management and leadership.

Communities, mirroring structural organization as fractal, are complex adaptive systems. In complex adaptive systems, initial conditions don't predict outcomes, and anything that can happen, will. Their inherent nature renders anticipation useless. Complex adaptive systems adjust situational individual responses to emergent experiences such that the system stays in balance with the context that defines it. There is no way of standing outside the system to anticipate where it might go and attempting to control its direction through a priori rules.

A community does have a collective memory but it's not the sum of its parts. Memory is distributed throughout all its members, and individuality is not submerged. That memory is ex-

pressed by the way in which each member acts differently in the world as a result of being differently informed by his or her participation. The relationship of community collective action and individual autonomous action is dynamic, symbiotic and synergetic. Individuals are autonomous in their behavior, but influenced by their experience, and their experience includes the many communities they inhabit. They are not and cannot be mobilized into a mass abstraction. They do not submerge their identity into a common good. In the culture of autonomy, The People no longer exists.

The autonomous individual, acting consciously or unconsciously in social networks as the next fractal iteration of complex adaptive systems beyond the boundary of the self, is practicing a relational epistemology rather than a mechanistic one. They know that to search for cause and effect, for objectivity, for the absolute in the context of complex adaptive systems is to follow a false path. So that they can learn from practice and experience, they constantly seek to change the context, not to preserve it.

The meaning of an act in the world is at the discretion of an actor, precisely because the actor, the self, the person, is not centered either. As a complex adaptive and self-organizing bio-physical system, the functional capacities that emerge as the person are distributed, and therefore even the person is perpetually unfinished. The only time a person's embodiment achieves a static state is in death. The forces of cultures, tribes, communities, states that do try to finish me and thou, to commoditize us, to objectify us, are correctly viewed as a threat to our autonomous existence.

Complex adaptive systems reward the autonomous and responsible application of critical intelligence. Their efficacy and resilience isn't a matter of submerging autonomy into interdependencies or into something larger than yourself. It's the dynamic interaction of both. The pursuit of comradeship, solidarity and working class loyalty under the banner of a "true opposition party" is the enemy of that interaction. Those values obviate the continuous critical analysis and open choice that responsible action requires.

All of society's existing political institutions are the product of a social construct that is being called into question. The threat to those institutions of changes in the relationship of identity and community is both deeply felt and incomprehensible. They are in full panic mode and crushing each other in their haste to exit a smoke-filled room. As it becomes clearer that the Internet is a social construct of the culture of autonomy and a symptom of a change in the relation of the individual to society, the focus of their predator gaze will shift.

Trust in governments, including those governed through representative democracy, is gone. In the seas of uncertainty, the idea of government in the mind of the autonomous networked individual is no longer the rock that supports the status quo. It's just one more wave in the sea. Even trust in the rule of law is gone. Political tactics that play to distrust and fear have short-term utility but, in the longer term, merely accelerate the growth of individual uncertainty. The left's demands for solidarity and Quilligan's call for a true oppositional party are both appeals for separation.

Big data doesn't write our lives. It merely records them. World government does not legitimize our responsibility to the communities we inhabit. We inform and are informed by the

communities we inhabit. In the governance of complex adaptive systems, the winning strategy remains grounded in the individual. Connect (or cooperate), until the other defects, and then compete until the other connects. And, yes, all that does is restate the golden rule in systems terms.

Quilligan's ambivalence towards civil society's role in the emergence of a true oppositional party is consistent with his rejection of Ostrom. When civil society corrects it's thinking it can join the party. But Ostrom's principles of common pool resource management don't require a party to make them operational. It's Ostrom who speaks to a shift in epistemology, not Quilligan.

Yes, in the name of security of the state if not the individual, governments are desperately and successfully attempting to control their portion of the Internet. And, yes, in the name of private interests and superseding national structures of governance, transnational corporations are creating "platforms" as proprietary walled gardens. And, yes, civil society is quite capable of assuming the mantle of social justice and democracy in a rush towards the same centralizing totalizing control that is being sought by nation states and corporations. We aren't going to be saved by civil society either. In the context of a conventional framing of power and politics, yes, those forces are at play.

Anticipating those trends, Jonathan Zittrain forecast that, "*The future is not one of generative PCs attached to a generative network. It is instead one of sterile appliances tethered to a network of control*." (Zittrain, 2008). But, in the context of effective responses to systemic global problems like climate change, responses that play towards sustainability and resilience, if we don't consciously practice complex adaptive systems thinking then, to paraphrase Yeats, ecologies fall apart, the centres cannot hold. The fabric that internetworks the world's interdependencies is one of complex adaptive systems, of which the Internet is merely one.

In summary

People who view the world through the lenses of ecology, complex adaptive systems, and evolutionary theory understand that governance occurs through self-organization rather than control. They live in a culture of autonomy and their artifacts and practices, like the Internet, reflect that culture's epistemological nature. James B. Quilligan's paper, "Why Distinguish Common Goods from Public Goods?" is an example of a reactionary response to the emergence of that point of view.

The degree of Quilligan's reaction is made visible by his need to distinguish Eleanor Ostrom's common pool resources as different from his idea of common goods. Quilligan's common goods require the institutionalization of a centralizing global authority whereas Ostrom's management of common pool resources emerges through local self-organization. Quilligan opposes the power of the nation state and seeks to reform civil society's role within it. Whereas Ostrom ignores them both, while pointing to alternative and distributed means of social ecological organization.

None of the traditional political factions contesting power in elected democracies, socialism, conservatism, or liberalism, are succeeding in adapting to the culture of autonomy or to its

focus on individual self-determination of identity. They are also ignoring how the changed behaviour of autonomous individuals alters the emergence and practices of communities as complex adaptive systems.

For me, it's not so much a question of reconciliation within existing frameworks as it is a question of reframing the question. I'd like to think that's what Community Informatics did when it declared the global was a federation of locals - because, of course, from a complex adaptive systems view, so is everything else. I am all too well aware that nation states and corporations don't see it that way. But it remains an open question for me as to whether the CI declaration of the global as a federation of locals intends a complex adaptive systems point of view.

References

Barlow, John Perry. (1995). It's poor workman who blames his tools. *Wired Scenarios*. http://archive.wired.com/wired/scenarios/workman.html

Bettencourt, Luís M. A. (2013). *The kind of problem a city is: new perspectives on the nature of cities from complex systems theory*. Santa Fe Institute Working Paper. http://www.santafe.edu/media/workingpapers/13-03-008.pdf

Castells, Manuel. (2013). The Impact of the Internet on society: a global perspective. In: *Change: 19 Key Essays on How the Internet Is Changing Our Lives*, OpenMind. https://www.bbvaopenmind.com/wp-content/uploads/2014/03/BBVA-OpenMind-Internet-Manuel-Castells-The-Impact-of-the-Internet-on-Society-A-Global-Perspective.pdf

Community Informatics Research Network (CIRN) Commons. *An Internet for the Common Good - Engagement, Empowerment, and Justice for All*. (2014, April 3). http://cirn.wikispaces.com/An+Internet+for+the+Common+Good+-+Engagement%2C+Empowerment%2C+and+Justice+for+All

Fawcett, Edmund. (2014). *Liberalism: the life of an idea*. Princeton University Press.

Gurstein, Michael. (2014, July 30). *Discussion group on Community Informatics, list archive*. Retrieved December 28, 2015. http://vancouvercommunity.net/lists/arc/ciresearchers/2014-07/msg00127.html

Gurstein, Michael. (2014, September 17). *Subject: [ciresearchers] FW: New Paper from Manuel Castells*. Discussion group on Community Informatics, list archive. http://vancouvercommunity.net/lists/arc/ciresearchers/2014-09/msg00082.html

Ostrom, Elinor. (1990). *Governing the Commons: the evolution of institutions for collective action*. Cambridge University Press, 90.

Ostrom, Elinor. (2005). *Understanding Institutional Diversity*. Princeton University Press, 259.

Quilligan, James B. (2013). Why Distinguish Common Goods from Public Goods? In: Boiler and Heilfrich (eds), *The Wealth of the Commons: a world beyond market & state*. The Commons Strategy Group. http://wealthofthecommons.org/essay/why-distinguish-common-goods-public-goods

Rainie, Lee and Wellman, Barry. (2012). *Networked: the new social operating system*. MIT Press.

Snower, Dennis J. (2014). How can we build a more compassionate society? *World Economic Forum*, September 22, 2014. http://forumblog.org/2014/09/homo-economicus-rationality-society-transformation/?utm_content=buffer86e2c&utm_medium=social&utm_source=facebook.com&utm_campaign=buffer

Zittrain, Jonathan L. (2008). *The Future of the Internet -- And How to Stop It*. Yale University Press & Penguin UK. http://nrs.harvard.edu/urn-3:HUL.InstRepos:4455262