

..... Weblogs and Emergent Democracy

Introduction to Emergent Democracy and the relationship with Japan and disruption

In 2001 I joined a movement to try to stop the deployment of the Basic Residents Registry Law network (a national ID system). We worked for several years raising the awareness of the public about the poorly thought through and designed system, fraught as it was with risks and problems. As the launch of the system neared, attention to our cause increased. We proposed a moratorium on the bill to have time to discuss the issues publicly. The week before the launch, we had a majority of public opinion, most of the factions of the ruling party and a great number of the opposition party on our side. It was clear that the people and politicians were concerned and many came out to speak up and sign petitions in our favor. Other than the minister in charge of the project, it appeared that there were very few people, and no one very visibly, supporting the launch of the system. But just as the protest movement felt it had gained a victory, the system was launched as if we did not exist.

I later asked someone involved in government policy why we had not been able to stop the launch with a clear majority of public opinion and the support of most of the important politicians. They told me that it would have caused too much confusion. This is when I realized that Japanese democracy was either broken or had never really worked. I began to investigate corruption and the nature of power in Japan. The more I dug, the more I realized that Japan had never been a true democracy. The current constitution was written for us by the United States after World War II and even the Meiji Restoration was not an uprising of the people. In fact, the people of Japan, although they vote and play the role of the public in a democracy, have never fought for liberty and freedom and have had their democracy bestowed upon them by rulers. The people of Japan have never really been in power and the notion of democracy is somewhat abstract and unreal. The US, in a position of fear of the Russian influence on Japan, decided to take a clearly conservative view on Japanese politics, funding and using the ruling party to stomp out liberals and the left wing. The US left in place the bureaucracy from pre-war Japan and supported a one-party political system that colluded with business as the economy of Japan grew after the war.

In Japan today, we have a system with a dysfunctional judiciary, election system and law making process. It is still mostly a single party system and the corruption and interdependent relationships between vested interests runs so deep that it is mostly incomprehensible, let alone addressable by the public.

I collaborated with fellow "Global Leaders for Tomorrow" members and presented our view of the dire situation of democracy in Japan at the World Economic Forum meeting in Davos in 2003. We continued to rant at the annual Japan dinner in Davos. Most people were sympathetic, although they did not suggest a solution. One evening in Davos, Ms. Sadako Ogata (the former United Nations High Commissioner for Refugees) told me that she thought I was focusing too much on Japan and that I should think about democracy globally rather than being so local and parochial.

I took this advice to heart and realized that Japan had problems, but that so did many democracies. At this time, I had become immersed in the world of weblogs and social software and realized that there was a possibility that the Internet and social software

might hold the key to fixing some of the problems in today's democracies which were able to exist only through the lack of transparency and inability to embrace complexity. I solicited support on my weblog for people interested in discussing this issue.

Several dozen people joined the dialog about the relationship between emergent behavior, the Net and democracy and an online dialog was born. Eventually, I took a first shot at assembling some of the thoughts and wrote the first version of Emergent Democracy. I put the paper on my wiki page and received a great deal of feedback. Since then, various people have edited and contributed to the paper. It has been translated into various languages and continues to evolve. The paper is not the work of an individual, but the work of a community. It is not a thing, but a place. It has also sparked a number of related papers and I believe this process is itself an example of the type of deliberative dialog that the Internet enables. The level of complexity as well as the inclusiveness that this process has been able to embrace is substantial.

Emergent democracy has the ability to disrupt the vested interests and consolidated power of the commercial and political entities that are putting the basis of democracy at risk, fundamentally disabling the ability for democracies to correct themselves. In addition, I believe that fluid open markets and communications amplify fluctuations and disruptions. I believe the emergent behavior of emergent democratic systems have the potential to help manage the chaos and dampen the effects of the amplification.

Introduction ■■■■■■■■■■

Developers and proponents of the Internet have hoped to evolve the network as a platform for intelligent solutions which can help correct the imbalances and inequalities of the world. Today, however, the Internet is a noisy environment with a great deal of power consolidation instead of the level, balanced democratic Internet many envisioned.

In 1993 Howard Rheingold wrote,¹

We temporarily have access to a tool that could bring conviviality and understanding into our lives and might help revitalize the public sphere. The same tool, improperly controlled and wielded, could become an instrument of tyranny. The vision of a citizen-designed, citizen-controlled worldwide communications network is a version of technological utopianism that could be called the vision of "the electronic agora." In the original democracy, Athens, the agora was the marketplace, and more—it was where citizens met to talk, gossip, argue, size each other up, find the weak spots in political ideas by debating about them. But another kind of vision could apply to the use of the Net in the wrong ways, a shadow vision of a less utopian kind of place—the Panopticon.

Rheingold has been called naïve,² but it is clear that the Internet has become a global agora, or gathering place. Effective global conversation and debate is just beginning. We are on the verge of an awakening of the Internet, an awakening that may facilitate the emergence of a new democratic political model (Rheingold's revitalization of the public sphere). However it could also enable the corporations and governments of the world to control, monitor and influence their constituents, leaving the individual at the mercy of and under constant scrutiny by those in power (an electronic, global Panopticon).

We must influence the development and use of these tools and technologies to support democracy, or they will be turned against us by corporations, totalitarian regimes and terrorists. To do so, we must begin to understand the process and implications neces-

sary for an Emergent Democracy. This new political model must support the basic characteristics of democracy and reverse the erosion of democratic principles that has occurred with the concentration of power within corporations and governments. New technologies can enable the emergence of a functional, more direct democratic system which can effectively manage complex issues. Viable technologies for direct democracy will support, change or replace existing representative democracies. By direct democracy, we don't mean simple majority rule, but a system that evolves away from the broadcast style of managed consensus to a democratic style of collective consensus derived from "many-to-many" conversations.

Democracy ■■■■■■■■

The dictionary defines democracy as "government by the people in which the supreme power is vested in the people and exercised directly by them or by their elected agents under a free electoral system."

A functional democracy is governed by the majority, while protecting the rights of minorities. To achieve this balance, a democracy relies on a competition of ideas, which, in turn, requires freedom of speech and the ability to criticize those in power without fear of retribution. In an effective representative democracy, power must also be distributed to several points of authority to enable checks and balances and reconcile competing interests.

Competition of ideas ■■■■■■■■

Democracy is itself an incomplete and emergent political system, and must, by its nature, adapt to new ideas and evolving social standards. A competition of ideas is essential for a democracy to embrace the diversity of its citizens and protect the rights of the minority, while allowing the consensus of the majority to rule.

This foundation was considered so fundamental to the success of democracy that the First Amendment to the United States Constitution enumerates three rights specifically to preserve the competition of ideas: the freedoms of speech, of the press, and of peaceable assembly.

Emerging Limits on Debate ■■■■■■■■

The competition of ideas requires critical debate that is widely heard, and open to a diverse set of participants. Although we have many tools for conducting such debate, increasingly there are barriers to our engaging in it at all.

Even though ideas are not, in theory, subject to copyright, trademark or patent protection, increasingly draconian intellectual property legislation in practice limits the scope and meaning of fair use and the flow of innovation, thereby having the same effect as if ideas were property owned and controlled by corporations. This includes the code inside computers and networks, which controls the transmission or reproduction of information. It includes spectrum allocation, determining whether it is shared by individuals or allocated to large corporations broadcasting protected intellectual property.³ The effect of these laws is broad, especially given the chilling effect of the fear of lawsuits.

The Role of Media ■■■■■■■■

The competition of ideas has evolved as technology has advanced. For example, the printing press made it possible to provide more information to the masses and eventually provided the people with a voice through journalism and the press. Arguably, this has been replaced by the voice of mass media operated by large corporations. As a result, there is less diversity and more internalization of the competition of ideas.

Weblogs are web sites that include links and personal commentary published in reverse chronological order. Often called “blogs” for short, weblogs have become a standard for online micropublishing and communication, thanks to the development of several simple content management systems that support the weblog format.⁴

The balance between what's relevant and what's not relevant is culturally biased and difficult to sustain. We need mechanisms to check filters for corruption and weighted perspectives. A variety of checks and balances and a diversity of methods and media can provide the perspectives we need for a balanced view of current events.

Emergence ■■■■■■■■■■

Emergence is a term relevant to the study of complex systems. Emergence is what you have when the relatively simple interactions of relatively simple parts of a system yield complex results over time. Emergent behaviors are behaviors that are not directed by systems of command and control, but emerge from subtle, complex interactions. Common examples are flocks of ducks or other birds that act in concert but with no specific leader, or colonies of ants that establish routes for collecting food based on group experience reinforced by pheromones.

Can citizens self-organize to deliberate on, and to address, complex issues democratically, without any one citizen required to know and comprehend the whole? This is the essence of emergence, the way that ant colonies can “think” and cellular DNA can evolve complex human bodies. If information technology could provide tools for citizens in a democracy to participate and interact in a way that facilitates self-organization and emergent understanding, we can evolve a form of emergent democracy that would resolve complexity and scalability issues associated with democratic governance.

In complex systems the role of the leader is not about determining direction and controlling followers. The leader maintains integrity, mediates the will of the many, influencing and communicating with peers and with other leaders.⁵ The leader becomes more a facilitator (or hub), and custodian of the process, than a power figure. She is the catalyst or manager of critical debate, or the representative of a group engaged in critical debate.⁶ The leader is often the messenger delivering the consensus of a community to another layer or group. As leadership becomes necessary to manage the development of an opinion or idea about a complex issue, information technology can enable quick and ad hoc leader selection and representation of consensus opinion in a larger debate.

Weblogs and emergence ■■■■■■■■■■

In *Emergence*, Steven Johnson writes:

The technologies behind the Internet—everything from micro-processors in each Web server to the open-ended protocols that govern the data itself—have been brilliantly engineered to handle dramatic increases in scale, but they are indifferent, if not down-right hostile, to the task of creating higher-level order. There is, of course, a neurological equivalent of the Web's ratio of growth to order, but it's nothing you'd want to emulate. It's called a brain tumor.

Emergence was written in 2001. A change has taken place on the Internet since 2000. Weblogs, which we have defined as personal web sites with serial content posted in reverse chronological order, have begun to grow in number and influence. Weblogs exhibit a growing ability to manage a variety of tasks, and emergent behavior is evident because of changes in the way weblogs are managed.

Johnson's explanation for the inability of web pages to self-organize is,

Self-organizing systems use feedback to bootstrap themselves into a more orderly structure. And given the Web's feedback-intolerant, one-way linking, there's no way for the network to learn as it grows, which is why it's now so dependent on search engines to rein in its natural chaos.

He also describes how, in the example of the ants, the many simple, local, random interactions of the ants helped them exhibit emergent behavior.

Weblogs are different from traditional web pages in several ways. Weblogs involve the use of content management tools, which make it much easier to add entries, with a resulting increase in the number and frequency of items posted. The posts are generally small items with a variety of information types—e.g. text, photographs, audio, and video referred to as micro-content.⁷ Weblog culture encourages bloggers (people who run weblogs) to comment on entries in other weblogs and link to the source. Some systems have a protocol that supports interactive linking: i.e. when a blogger posts an item with a link to another weblog, a link to his new item is created on that weblog. In addition to HTML content, weblogs often generate XML⁸ files based on a standard protocol for syndication called RSS,⁹ which allows computers to receive updates to weblogs through special clients' aggregating syndicated content—such as Feedreader 10 for Windows and *NetNewsWire*¹¹ for the Macintosh. These news aggregators constantly scan the users' favorite weblogs for new posts.

When new entries are posted to a weblog, a notification may also be sent to services such as weblogs.com,¹² which keep track of weblog updates in near real-time. This information is also used by a variety of new services to generate meta-information about weblogs. These new information sites include Blogdex,¹³ which scans weblogs for quoted articles and ranks them according to the number of weblog references, and Technorati,¹⁴ which ranks weblogs by tracking inbound and outbound links to specific weblogs and/or weblog posts.

Technorati's results in particular look like diagrams of small-world networks.¹⁵ Weblog links are governed by much the same rules. They represent a scale-free network of weblogs where friends generally link to friends, but some weblogs serve as hubs with many more connections, including links to whole other clusters of weblogs, and to other content within the Internet. (It would be interesting to see how the pattern of weblog links looks relative to linking patterns in the web overall. Are weblogs an organizing structure of the web, or merely another cluster within the web?)

In this way, the structure of weblogs addresses the problem that Johnson raised when he suggested that the Web is not self-organizing. Through the feedback and two-way linking we have described, weblogs show emergent self-organization.

The Power Law |||||

In a widely distributed and linked paper, Clay Shirky argues that weblogs are exhibiting a sort of order now because the community is still small. As the community increases in size, he contends, this order will fragment, as it did for online communities in the past, such as Usenet news groups, mailing lists and bulletin boards. In his paper, "Power Laws, Weblogs, and Inequality,"¹⁶ Shirky points out that an analysis of inbound links for weblogs shows a standard power law distribution. The power law distribution is a distribution where the value of any unit is 1/n of its ranking. The second place weblog has 1/2 of the inbound links of the top ranking weblog, the third place weblog has 1/3 of the inbound links and so on.

This power law distribution can be counterintuitive. Shirky argues that the top-ranking weblogs will eventually become mass media, while the weblogs at the bottom of the curve will have difficulty gaining any attention. As a result, these weblogs will appear as nothing more than local conversations with friends. He suggests that it will be increasingly difficult to displace the high-ranking sites, and his power law distribution data for weblogs supports his claims.

Shirky's analysis may be missing important factors, however. Weblogs form a scale-free network where some nodes are hubs, i.e. more heavily linked than others, and this does suggest a power law distribution. However there may be dynamism that the power law doesn't capture. Subnetworks of weblogs may become linked, for instance, as during the Iraqi war, when warbloggers (a subset or subnetwork of bloggers supporting the war) debated with antiwar bloggers, thereby forming links between the two networks. This has resonance with the concept of emergent communities of interest espoused by Valdis Krebs, which demonstrates how subnetworks may be linked through affinity points.¹⁷

Mayfield's Ecosystem ■■■■■■■■■■

Ross Mayfield, CEO of the social software company SocialText, proposed an alternative view of the political economy of weblogs. Mayfield points out that not all links have equal value. He explains that there are three different types of networks developing among weblogs: creative, social, and political networks.

A creative network is a flat network of a production-oriented group of close associates with deep trust and dense inter-linking. It is said that 12 people is the optimum number for holding a dinner conversation or a tight team.¹⁸

A social network is the traditional weblog form. The Law of 150¹⁹ is a theory that people can maintain an average of 150 personal relationships. The Law of 150 is a bell-shaped distribution where some weblogs receive more attention than others, but the distribution fairly represents the quality of the weblogs.

A political network follows Shirky's power law and is similar to a representative democracy where weblogs receive links from thousands of other weblogs. Each link may be thought of as a vote. The weblogs at the top of this power curve have a great deal of influence.

The Strength of Weak Ties ■■■■■■■■■■

In *The Strength of Weak Ties*, Mark Granovetter²⁰ describes the value of weak ties in networks. Strong ties are your family, friends and other people you have strong bonds to. Weak ties are relationships that transcend local relationship boundaries both socially and geographically. A study by Granovetter demonstrates that people are more likely to find employment through their weak ties than their strong ties.

It is the ability to operate in all three of Mayfield's clusters, and to transcend boundaries between them that make weblogs so potentially powerful. A single weblog and even a single entry in a weblog can have an operational purpose, a social purpose, and an impact on the political network. Recall that emergence seems predicated on many mechanisms of communication between elements. For instance, when I blog something about Emergent Democracy, I may be speaking creatively to the small group of researchers working on this paper, socially to a larger group of friends who are thinking along with me and trying to get a handle on the concept; and on a political level I'm speaking to readers I don't know, but who I'm hoping to influence with my talk about a new kind of politics.

Many bloggers create their weblogs in order to communicate with their strong-tie peers, linking to and communicating within this small group at the creative level. At some point,

someone in the peer group will discover some piece of information or point of view that resonates with the next, social level. Then a larger number of social acquaintances will pick up those entries that they believe may be interesting to others in their individual social networks. In this way, a small group focusing on a very specific topic can trigger a weak-tie connection carrying useful information to the next level. If this information resonates with even more bloggers, the attention given the source will increase rapidly. The individual or group who created the original comment or post will also continue to participate in the conversation, since they can be aware, through technorati or blogdex, of all of the links to the original piece of information as they propagate.

Weblogs create a positive feedback system, and with tools for analysis like technorati, we can identify the importance of information at the political level by tracking its movement across the weak ties between networks and network levels.

Noise in the system is suppressed, and signal amplified. Peers read the operational chatter at Mayfield's creative network layer. At the social network layer, bloggers scan the weblogs of their 150 acquaintances and pass the information they deem significant up to the political networks. The political networks have a variety of local maxima that represent yet another layer. Because of the six degrees phenomenon, it requires very few links before a globally significant item has made it to the top of the power curve. This allows a great deal of specialization and diversity to exist at the creative layer without causing disruptive noise at the political layer.

Conclusion |||

We have explored the concepts of democracy and emergence, how they are related, and how practical applications of the two concepts are supported by social technologies. The authors feel that the emergent democracy provides an effective next step toward a more participatory form of government that leverages the substantial advances in communications technology that we've seen over the last century. Traditional forms of representative democracy can barely manage the scale, complexity and speed of the issues in the world today. Representatives of sovereign nations negotiating with each other in global dialog are limited in their ability to solve global issues. The monolithic media and their increasingly simplistic representation of the world cannot provide the competition of ideas necessary to reach informed, viable consensus. The community of developers building social software and other tools for communication should be encouraged to consider their potential positive effect on the democratic process as well as the risk of enabling emergent terrorism, mob rule and a surveillance society.

Finally, we must explore the way this new form of democratic dialog translates into action, and how it interacts with the existing political system. We can bootstrap emergent democracy using existing and evolving tools and create concrete examples of emergent democracy, such as intentional blog communities, ad hoc advocacy coalitions, and activist networks. These examples will create the foundation for understanding how emergent democracy can be integrated into society generally.

abridged for publication



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