

Chapter Twelve

Open Source National Security

The question remains of networked, stateless society is to respond to attacks from outside: attacks from what are conventionally regarded as “foreign” enemies, like military forces or terrorists.

I can't overemphasize how vital it is that we compare apples to apples. That is, our basis of comparison for networked alternatives is not what the state proclaims as its mission, but what the state actually accomplishes.

For example, most of the U.S. government's responses to terrorist attacks have been what security analyst Bruce Schneier calls “security theater.” A large part of the government response to 9/11 was “knee-jerk reactions to the news of the day,” measures that “may enhance our feeling of security, but would actually make us less safe.”¹ The government has reacted to terrorism in ways that are directly counterproductive and make the system more centralized and brittle.

We spend time, money, and energy creating systems that can themselves be attacked easily and, in some cases, that don't even address the real threats. We make poor trade-offs, giving up much in exchange for very little security. We surround ourselves with security countermeasures that give us a feeling of security rather than the reality of security.²

The simple fact of the matter is that even competently organized security policies won't be 100% effective. No matter who's in charge, there will occasionally be people killed by terrorism when preventative measures fail—and all the cries of “don't just stand there” in the world won't change this fact.

Counter-terrorism measures often just shift the risk of attack to less well-defended targets. In fact, as Schneier noted, more stringent TSA passenger screening shifted vulnerability within the airport from on-board passengers to the large, concentrated masses of people waiting in line to be scanned.³

One reason bureaucratic counter-terrorism efforts are so ineffective is that agile networks like Al Qaeda can quickly respond by shifting to a weaker link, while the TSA spends countless bureaucratic labor-hours ponderously grinding out a policy for preventing the previous attack. The TSA bureaucracy seems to largely ignore the possibility that its adversary might take countermeasures or adapt.

In any case, the very fact that nobody *has* carried out such a suicide bombing in an airport processing area—or in a shopping mall, for that matter—is probably an indication that the personnel pool for terror attacks in the U.S is quite limited. In light of such evidence, as well as the half-assed nature of attempted airline attacks since 9/11, it seems likely 9/11 was simply a case of picking low-hanging fruit.

There is no such thing as absolute security. Any attempt to prevent terrorism will involve a tradeoff of some sort, and some options will require tradeoffs that most people simply regard as too costly.⁴ We're unwilling to ban cars and lock ourselves in our homes to eliminate 100% of traffic fatalities. The same principle applies to terror attacks. Regardless of politicians' posturing that “we can't put a price on human life,” in

1 Bruce Schneier, *Beyond Fear: Thinking Sensibly About Security in an Uncertain World* (New York: Copernicus Books, 2003), p. 3.

2 *Ibid.*, p. 14.

3 *Ibid.*, p. 113.

4 *Ibid.*, p. 13.

fact we do just that. There will inevitably be some tacit understanding of the amount of death and destruction we are willing to tolerate rather than bankrupt ourselves for the unattainable goal of absolute security.

I. The State as Cause of the Problem: Blowback.

Leaving aside questions as to whether U.S. entry into WWII itself resulted from a deliberate policy of goading Japan into attacking, or the Korean war resulted from US-backed border skirmishes getting out of hand (I think the answer in both cases is "yes"), most of the enemies the U.S. has fought since WWII have been of its own creation.

To take the Middle East: Starting at present and working our way back, ISIS is an outgrowth of Al Qaeda Iraq networks in American military prisons and of Western aid to Syrian rebels. Al Qaeda Iraq is entirely the result of the U.S. invasion of Iraq, its creation of a total political vacuum there, and its decision to back sectarian representation in the Iraqi successor government. Al Qaeda, the entity which carried out the 9/11 attacks, emerged in Afghanistan as a direct result of the Carter administration's decision to destabilize a Soviet client state there and the Reagan administration's decision to back the fundamentalist guerrillas. Ultimately Wahhabism as a modern major political force results mainly from U.S. support for the house of Saud's unification of the Arabian peninsula back in the 1930s. The 1991 Gulf War resulted from U.S. decisions to install Saddam in power and to back him against the "Great Iranian Menace" in the 1980s, and from signals it sent him in 1990 that it would not react to an invasion of Kuwait. The "Great Iranian Menace" itself resulted from the U.S. overthrow of Mossadegh and its support for the Shah's dictatorship. And the Arab-Israeli conflict, along with a major share of other regional instability, date back to the Balfour Doctrine and the colonial division of the Ottoman Empire in the Sykes-Picot agreement after WWI.

In other words, every problem the United States has faced in the Middle East for the past 60 years or more has resulted from U.S. intervention, and its interventions to "solve" those problems has in every case made things worse.

What's more, in a general sense the very act of being a global empire creates a kind of "public choice" incentive for terrorism. When an empire maintains garrisons in half the countries in the world and claims a "national security interest" in deciding the winners and losers in regional territorial disputes as well as internal civil wars and political contests, influencing American domestic politics becomes an important source of leverage for local political actors for obvious reasons. In the alternate history novel *Fatherland*, by Robert Harris, the German Reich expanded to the Volga and created German colonies all over the Ukraine and European Russia. Quite predictably, it made sense for native partisans to begin sending parcel bombs to offices in Berlin as a "message to the German people" about the costs of empire.

Libertarians, when talking about the welfare state, sometimes say that government is great at breaking your legs and then giving you crutches. The same principle applies to the national security state.

If the vast majority of a state's so-called "defense" efforts actually involve force projection on the other side of the globe against states barely capable of projecting force a few hundred miles outside their own borders, and most actual attacks on the territory of the U.S. itself are blowback from such foreign operations, it follows that most so-called "national security" is a manufactured problem.

II. Meta-Organization

There is a substantial body of literature on how a stateless society would conduct an organized defense against large-scale foreign attacks: how it would fund defense of an entire contiguous territory without recourse to a coercive taxing authority, how it would overcome the free rider problem, etc. We will not rehash this literature and the questions it deals with, in its own right, in this chapter. Our primary concern is with

institutions for collective defense as such in a stateless society, only to the extent that network technology creates new synergies with such institutions as envisioned in traditional literature, or that new technologies enable networked individuals and small groups to perform functions that previously required a state.

The classical anarchist literature of the nineteenth century, as well as of the communist and syndicalist anarchisms of the twentieth, has treated social defense as a function of federated communities. In contrast, most "anarcho-capitalist" (and a major share of market anarchist) literature on the organization of defense in a stateless society tends to focus almost exclusively on the "protection services agency" or "security firm" as the primary unit of defense.

I believe the latter's disproportionate focus on the organization of security as a commercial business, via the cash nexus, is a blind spot.⁵ Most conventional libertarian portrayals of an ideal free market society, and particularly the usual an-cap version of the conceptual framework of individual self-ownership and non-aggression, implicitly assume an atomized society of individuals living (at most) in nuclear families, with fee-simple ownership of a house and quarter-acre lot, and with most essentials of daily living purchased via the cash nexus from for-profit business firms.

But the libertarian concepts of self-ownership and nonaggression are entirely consistent with a wide variety of voluntary social frameworks, while the practical application of those concepts would vary widely.

Imagine a society on the neolithic pattern, shared by most of the world before the rise of the centralized territorial state, where most ultimate land ownership was vested in village communes, even though there might be a great deal of individual possession. The evidence is overwhelming that the form of social organization dimly reflected in the Russian *mir*, the English open field system, the communal village tenure in India under the so-called "Asiatic mode of production," and the Jubilee system in Israel under the judges, was the typical neolithic pattern before the rise of the state. Or imagine a society like the free towns that Kropotkin described in the late Middle Ages, where people organized social safety net functions through the guild or other convivial associations. Now, it might be permissible for an individual family to sever its aliquot share of land from the peasant commune, and choose not to participate in the cooperative organization of seasonal labor like spring plowing, haying or the harvest. It might be possible, in an anarchist society, to stay outside the guild and take her chances on unemployment or sickness. But in a society where membership in such social units was universally regarded as the best form of insurance, such a person would likely be regarded as eccentric, like the individualist peasants in anarchist Spain who withdrew from the commune, or the "propertarian" hermits in Ursula LeGuin's *The Dispossessed*.

Let me enumerate some basic starting assumptions about the conditions under which networked alternatives will gradually supplant the state. First, we will experience a period characterized by "hollowed-out states," in which the eroding tax base coupled with rising unemployment means states' obligations for public services (fire, police, schools, streets, utilities, etc.) and the social safety net will far outstrip their revenues. As a result, states will steadily retreat from the social field and take an increasingly minimalist approach to public services. Second, total work hours per capita will gradually decline and rates of unemployment and underemployment will creep slowly upward. Third, as a matter of necessity, the unemployed and underemployed will shift a growing share of their needs from purchases with wages to self-provisioning, gifting and barter in the household and informal sectors. Fourth, as both the government and employer-based welfare states erode, the informal sector will of necessity evolve mechanisms for pooling income and risks and spreading costs.

This is likely to take the form, specifically, of people coalescing into primary social units at the residential level (extended family compounds or multi-family household income-pooling units, multi-household units at the neighborhood level, coordinated self-provisioning in micro-economies organized on residential blocks or cul-de-sacs, urban communes and other cohousing projects, squats, and stand-alone intentional

⁵ Much of the immediately following discussion is based on material in Chapter Six of Carson, *The Homebrew Industrial Revolution* (Booksurge, 2010).

communities), as a way of pooling income and reducing costs. As the state's social safety nets come apart, such primary social units and extended federations between them will fill the vacuum. A good fictional example is the Northwest Federation in Poul Anderson's Maurai stories, a comparatively decentralized and libertarian polity that stretched from British Columbia to northern California. In the aftermath of a nuclear holocaust, the new society coalesced around friendly societies and fraternal lodges as providers of public utilities and the social safety net.

One early sign of a trend in that direction: multi-generational or extended family households are at a fifty-year high, growing five percent in the first year of the Great Recession alone.⁶ The phyles we considered in a previous chapter—networked civil societies decoupled to a greater or lesser extent from geography—may also take over some public service and welfare state functions.

In a society where a major share or even a majority of people voluntarily participate in such primary social units, most of the social regulations that governed people's daily lives would be largely orthogonal to the distinction, in the conventional market anarchist conceptual framework, between self-ownership and coercion.

By way of comparison, the kinds of mainstream free market libertarians conventionally assigned to the Right treat the currently predominating model of employment in a business firm—and all the associated forms of command and submission it implies—as the norm. For them, the whole self-ownership vs. aggression paradigm is irrelevant to life within the corporate organizational framework, so long as participation in the framework is itself voluntary. Aha! But by the same token, when people are born into a framework in which they are guaranteed a share in possession of communal land and are offered social safety net protections in the event of illness or old age, in return for observance of communally defined social obligations, the same principle applies.

And in a society organized predominantly on this model, with social services provided mainly through primary social units, and the collection of benefits tied to the performance of defined social obligations, I believe most of the free rider problems with which so much market anarchist literature is preoccupied would fade into comparative insignificance. The key to organizing territorial defense on a large scale, through federations of such voluntary primary social units, is to overcome the free rider problem by bundling defectable and non-excludable territorial defense functions with excludable, non-defectable service obligations already provided through such associations. One of the duties of members of primary social units, in return for access to a plot of land or workshop and guaranteed old age support and healthcare, would be to provide support—in one form or another—to a territorial militia raised from federations of such communities.

Service in a militia unit, or payment to support full-time defense personnel, would in that scenario be a condition for the use of libraries and public utilities, participation in public pension or sickness and unemployment insurance, and the like.

Fred Foldvary depicts a hypothetical voluntary Georgist community in which public services are funded by membership fees assessed on the site value of land. Such communities would include

land trusts, condominiums, residential associations, proprietary communities (such as shopping centers and hotels), and apartment buildings. Membership in a community would be voluntary. These communities would associate together in networks and leagues. The members would share the belief that the land rent should be collected and distributed to all members equally or else used for public goods.

Under “geo-archy,” communities would create higher-level associations to provide public goods with a wide scope such as defense. Most communities would be members of the greater association, which would provide for a uniform rule of law at the highest level of association. Individuals and communities who are members would receive a package of goods, including security and access to public

⁶ Donna St. George, “Pew report shows 50-year high point for multi-generational family households,” *Washington Post*, March 18, 2010 <<http://www.washingtonpost.com/wp-dyn/content/article/2010/03/18/AR2010031804510.html>>.

works, which makes membership advantageous. Members could secede, but would lose the package, so secession would be limited. Folks would therefore have the advantages of a state, but without the tyranny.⁷

In the event a member failed to pay the land value tax, the voluntary association would declare the defaulting party to be "not subject to the protection of the governing agency, nor entitled to any of the agency's services."⁸

I argue below that a decentralized, stateless society is less vulnerable to foreign conquest insofar as it presents a much wider array of lower-profile, lower-value targets and there's no single center of authority to surrender. Nevertheless, as pointed out by Peter M. Lawrence (a polymath who frequently gives me feedback), there are historical models for bringing a decentralized society under subjection.

One of the most plausible scenarios by which a stateless society might be brought under subjection, and by which peasant communities were in fact brought under subjection historically, according to Lawrence, is by some combination of armed marauders raiding the populace from fortified strongholds, and/or condottieri offering their services for hire against such marauders. S. M. Stirling's scenario at the outset of the *Emberverse* series is a good fictional example of this model. Men at arms established fortified strongholds from which they raided surrounding villages, demanding tribute in return for protection. Those who refused tribute were subject to punitive raids, with houses burned and crops and movables carried away. But there were some differences between Stirling's scenario and what actually happened in the Dark Ages.

The big difference from the typical scenarios that actually happened as the feudal system emerged at the end of the Dark Ages was, he [Stirling] was applying a mafia protection money model, creating the menace he offered protection from. But the usual thing was much more like the Seven Samurai/Magnificent Seven scenario, in which people much like the threateners help the villagers instead of just doing their own raids etc. Imagine that happening on a regular basis rather than as a one off, i.e. with the rescuers sticking around for a retainer rather than a reward, and in lots of similar places at the same time.... [F]eudal structures are just as fair as ideal free markets, in themselves, but the unfairness comes in from the settings from outside (exogenous parameters, boundary conditions). Back then, it was the uneven bargaining position of warlords and peasants.⁹

Compare this to Kropotkin's account of the origins of feudalism in the *scholae* of the early Dark Ages:

These barbarians covered the country with villages and farmhouses; they cleared the forests, bridged the torrents, and colonized the formerly quite uninhabited wilderness; and they left the uncertain warlike pursuits to brotherhoods, *scholae*, or "trusts" of unruly men, gathered around temporary chieftains, who wandered about, offering their adventurous spirit, their arms, and their knowledge of warfare for the protection of populations, only too anxious to be left in peace....

The very peacefulness of the barbarians, certainly not their supposed warlike instincts, thus became the source of their subsequent subjection to the military chieftains. It is evident that the very mode of life of the armed brotherhoods offered them more facilities for enrichment than the tillers of the soil could find in their agricultural communities.... Drove of cattle, iron..., and slaves were appropriated [through armed raids].... There was plenty of waste land, and no lack of men to till it, if only they could obtain the necessary cattle and implements. Whole villages, ruined by murrains, pests, fires, or raids of new immigrants, were often abandoned by their inhabitants, who went anywhere in search of new abodes.... And if one of the *hirdmen* of the armed brotherhoods offered the peasants some cattle for a fresh start, some iron to make a plough, if not the plough itself, his protection from further raids, and a number of years free from all obligations, before they should begin to repay the contracted debt, they settled upon the land. And when, after a hard fight with bad crops, inundations and pestilences, these

7 Fred E. Foldvary, "Why Aren't You an Anarchist?" *Free Liberal*, February 14, 2006 <<http://freeliber.com/archives/001869.php>>.

8 Foldvary, "What Penalty For Not Paying LVT?" *Free Liberal*, March 7, 2006 <<http://freeliber.com/archives/001923.php>>.

9 Peter M. Lawrence, private email, December 17, 2010.

pioneers began to repay their debts, they fell into servile obligations towards the protector of the territory.¹⁰

By this process, “populations, once free, and simply agreeing 'to feed' a certain portion of their military defenders, gradually became the serfs of these protectors....”¹¹

Lawrence also suggested some historical models for resisting such strongarm tactics, either from the conquering barbarians or the *scholae*:

Responsibilities against raids were decentralised and handed off to frontier units, including privileges and tax breaks to encourage soldier-settlers (drawing on fleeing refugees, among others) like the Fencibles of Canada and New Zealand, and (in Spain and Portugal, and the Baltic) semi-monastic military orders with local holdings organised into commandries analogous to monasteries.¹²

In an egalitarian stateless society it would amount to self-organized “*scholae*,” created by the protected communities of, by and for themselves.

This is illustrated fictionally, in Stirling's Emberverser scenario, by the Dunedain Rangers. There were several free communities of several thousand people in the Pacific Northwest, including Clan Mackenzie and the Bearkillers, into whom members were born with automatic duties and entitlements to benefits, so long as they remained. Choosing to remain in the community at the age of majority, and receiving its safety net and community defense protections, entailed the free choice to provide defined amounts of collective work for the community and to provide militia service with one's comrades. Territorial defense for all these communities was undertaken by the Rangers, who maintained a chain of fortified frontier outposts, conducted regular patrols, and had mobile reserves in the event of incursions. The Rangers were supported by regular contributions assessed from the federated communities under their protection.

The most extreme barbarian invasion scenarios—sudden Viking raids on early medieval European towns, genocidal gangs of Hutus in Rwanda, fictional examples like the Reavers in *Firefly*—amount to swarming attacks. The proper defense, mounted by our self-organized *scholae* or Dunedain, is the counter-swarming attack. A fairly low-tech version of this was organized through the Catholic Church's radio network in the Congo—a country where wireless or telephone connectivity is virtually nil—as an agile defense against swarming attacks by rebel groups on isolated Congolese rebels. The mobile reserves called to the incursion point were either UN peacekeepers or the Congolese Army.¹³ But the same thing could be done, with even greater agility, through the Internet; and the mobile reserves could be recruited from the local population.

Similar nonstate defenses have been organized against Boko Haram in Nigeria. Residents of Kalabalga village in Nigeria's Borno state “got word” in May 2014 by unspecified means of Boko Haram forces moving in their direction, and laid an ambush that resulted in ten attackers and two trucks being captured, and about 200 killed.¹⁴

There's a fairly rich history of self-organized defenses against armed non-state actors.¹⁵ An especially prominent example is the Mexican *autodefensa* movement, which has organized village defenses against vicious narcotrafficking gangs that had previously either corrupted or terrorized law enforcement into inac-

10 Pyotr Kropotkin, *Mutual Aid: A Factor in Evolution* (New York: Doubleday, Page & Company, 1909), pp. 154-157.

11 *Ibid.*, p. 162.

12 Lawrence, private email, December 21, 2010.

13 David Axe, “Church radios form basis of a lifesaving system in Congo,” *Wired UK*, October 28, 2010 <<http://www.wired.co.uk/news/archive/2010-10/28/the-rebel-early-warning-network>>.

14 Kukogho Iruiesiri Samson, “Villagers Kill 200 Boko Haram Insurgents With Dane Guns, Arrows; Catch 10 Alive,” *Pulse*, May 14, 2014 <<http://pulse.ng/gist/fire-for-fire-villagers-kill-200-boko-haram-insurgents-with-dane-guns-arrows-catch-10-alive-id2851602.html>>.

15 “People Power Against Armed (Non-State) Groups,” *Rational Insurgent*, May 15, 2014 <<http://rationalinsurgent.com/2014/05/15/people-power-against-armed-non-state-groups/>>.

tion. In January 2014, in southern Michoacán state, *autodefensas* armed with weapons ranging from “single-shot hunting rifles to AK-47s,” successfully “fought drug-trafficking gunmen out of towns in which they used to rule unobstructed by the police.” The *autodefensas* acted in response to the *Caballeros Templarios* organization, which had begun imposing taxes on economic activities (including even tortilla-makers) in the region, and raping and kidnapping with impunity. In some cases the *autodefensas* had to disarm corrupt local police before dealing with the drug lords.¹⁶

There's been some controversy as to whether the *autodefensas* have been resorting to vigilantism and lawlessly expanding their own power over local populations, and whether the military's intervention to reclaim power from the *autodefensas* is a good thing. For Jesse Taylor at *Interference* the answer is simple:

these groups are not random individuals with guns “taking the law into their own hands”. They are well-organized groups of trusted/respected citizens who are chosen by and controlled by community assemblies. These community assemblies have decided that they want the cartels out of town. They have also decided that the police and government are controlled by the cartels, and so they need to go as well. So these groups aren't some random gang that decided to take over the town. They are the result of community members coming together and deciding that they wanted to take their town back from the cartels, and that the only way to do this was to take up arms against them. This movement for self-determination and community self-defense is spreading like wildfire, in dozens of towns across southern Mexico.

...The drug cartels, the rich, and the Mexican government cannot be considered as separate groups – at the top, you have the same people benefiting from all three. These criminal elites are terrified about what is happening in Michoacán—people taking back community power by force, kicking out the cops and governments that give the cartels/rich their power. This is why there is suddenly this wave of propaganda coming out of the corporate media in both Mexico and the U.S. trying to paint these groups as “vigilantes”.¹⁷

The movement is organized based on the principle of “citizen and social control of territory,” similar to the Zapatista *caracoles* (regional self-government structures) in Chiapas, and the self-defense organizations that exist today in 23 municipalities in Guerrero.¹⁸

The ninja arose under similar circumstances in medieval Japan. At the time life in most of Japan was disrupted by conflict between feudal warlords. The Iga and Koka region “had been pretty free of warlords and was determined to remain so. And what happened was that the villages there formed themselves like self-defense communes, and it was in that context that the ninja skills developed.”¹⁹ This also bears some resemblance to the origin of Switzerland, in portions of the Alps defensible against the Habsburg Empire.

The question we've considered in this section so far is whether the territorial defense function can be organized in an anarchist society, and consistently with its basic principle of voluntary association, as stated by Kropotkin: that is, based on “free agreements concluded between the various groups, territorial and professional, freely constituted for the sake of production and consumption...”²⁰ Could it be carried out by free federations of voluntary primary associations without taxing power by a territorial state or other imposition of coercive authority on non-consenting third parties? As already suggested above, I believe it could.

16 Pablo Piccato, “Are Mexico’s Armed Civilians “Vigilantes”?” *Dissent*, January 23, 2014 <<http://www.dissentmagazine.org/blog/are-mexicos-armed-civilians-vigilantes>>.

17 Jesse Taylor, “Deconstructing recent propaganda surrounding “vigilante groups” in Southern Mexico,” *Interference*, January 15, 2014 <<http://www.interference.cc/propaganda-surrounding-vigilante-groups-in-southern-mexico-autodefensas/>>.

18 “Analysis: A Case in Support of the Autodefensas Movement,” *Borderland Beat*, November 27, 2013 <<http://www.borderlandbeat.com/2013/11/analysis-case-in-support-of-autodefensa.html>>.

19 Ishaan Tharoor, “You Don’t Know the Ninja: 8 New Revelations About the Shadow Warrior,” *Time*, February 4, 2013 <<http://world.time.com/2013/02/05/you-dont-know-ninjas-8-new-revelations-about-the-shadow-warrior/slide/where-ninjas-are-born/>>.

20 Pyotr Kropotkin, “Anarchism,” *Encyclopedia Britannica* (1910) . Reproduced at Anarchy Archives <http://dwardmac.pitzer.edu/anarchist_archives/kropotkin/britanniaanarchy.html>.

Lawrence argues that it would be possible to fund such functions through voluntary membership dues. But, he continues, such a funding system can only work when a number of services are interlocked in the same funding system, and a history of payments is required to qualify.

On their own, membership dues can't work any more than health schemes you can put off joining until you get sick, and public shaming is a complete nonsense—it's only effective on those you don't need it for (think "if you outlaw guns, only outlaws will have guns"—you reward the shameless by hampering the rest)....

Interlocking is what happens with health schemes that do work, by interlocking entitlements with a history of payments. It's what makes clan systems work, since young men don't get land (read: other resources) until they have put in their time helping their elders, e.g. on a sharecropping basis in which a cut goes to the chief's household (which supports widows and orphans, if it wants to maintain legitimacy...); the chief gets to allocate lifetime holdings to clan members during good behaviour, and is generally elected for life from among descendants of chiefs by older clan members (Roman patron-client systems resemble the institution of "dash" among Nigeria's Yoruba, and so on). This can be—and has been—generalised to guild structures (apprentice to journeyman to master, with rostered grand masters), though those were under an outer authority structure; the point for rulers was, they did not form a drain on that structure, unlike modern forms, so proto-states could afford them where they couldn't afford tax and spend methods. All these things work through interlocking privileges, in which everybody has some privileges and so has a stake, just different privileges so there is an inter-dependency; age structuring makes it more equitable over a whole life.²¹

Such discussions are necessarily largely theoretical, addressing as they do questions of the organization of society as a whole in a hypothetical stateless order. As such, they are considerably more large-scale and theoretical than the overall focus envisioned for this book.

As Chris Sciabarra pointed out in *Total Freedom*, totalizing visions of a free society organized according to some grand libertarian philosophy are of necessity unrealistic. This is so for the same reason that utopian visions of a society organized in keeping with any ideology are unrealistic. Transitions from one system of social organization to another, in the real world, are piecemeal and partial, with a considerable variety of subjective visions and motives among those involved. So Murray Rothbard's vision of a stable majority of an entire society converted to the nonaggression principle, operating according to essentially the same libertarian law code, and with some set of model libertarian institutions, is probably as close to the literal meaning of "utopia"—nowhere—as we could imagine. It's about as unrealistic as the similar vision by the Socialist Party of Great Britain, of the entire world being converted by democratic agitation to their capitalist version of "Socialism" and instituting it near-simultaneously worldwide through parliamentary action.

Eugene Holland celebrates as a positive development the emergence of a new generation of utopian literature, which abandons the monolithic social models traditional to the genre for something less totalizing:

...[T]he grip of totalizing thought and absolute formal closure on utopian fiction begins to relax on the waning days of the twentieth century, as a new mode of utopian thinking appears, both in fiction... and in theory.... Rather than the "obsessive search for a simple, single-shot solution to all our ills" that characterizes the Imagination of classic utopian texts, more recent utopian thought and fiction acknowledge and emphasize... the plurality of possible utopias instead.... [Kim Stanley] Robinson's sprawling novels... portray a wide range of different utopian experiments and communities in the course of his account of the colonization of Mars. The significance of this recent direction taken in utopian thought and fiction is the departure from singularity and totality that had seemed inherent in, if not indeed definitive of, the genre: the plurality of utopian impulses and ideals defies the singular perfection of utopia. From here it is but one step—albeit a significant one—to the vocation of affirmative nomadology to detect and reinforce utopian ideals in actually existing institutions of whatever scale, from neighborhoods to virtual Internet communities to production cooperatives to far-flung global trade arrangements. The utopian character of these institutions remains completely distinct from any singular utopia conceived

21 Lawrence, private email, May 17, 2011.

as a total, self-contained community, for they are interwoven transversally with one another and constitute something like a meshwork rather than a unified whole.²²

And it follows that whatever system of meta-law emerges to maintain peace and regulate dealings between these varied communities, it will be organic (the product of ad hoc, bottom-up negotiation and precedents) rather than schematic (like Rothbard's libertarian law code).

So as irresistible as it was for me to engage in the broad speculations above about society-wide organization above, we need to get back to the question of security as it relates to the overall theme of this book: measures that are within the capabilities of individuals and networked groups to protect themselves in ways that previously required a territorial state.

Given this constraint, our primary emphasis will be at the micro rather than macro level. What can individuals and self-organized networks do, at the micro level, to secure themselves from the danger of attack and minimize the damage that does occur?

III. Active Defense, Counter-Terrorism, and Other Security Against Attack

So we return—again—to the question of how defense against terrorism and other external attacks would be provided for in a society of self-organized networks.

Eric Raymond sees the phase transition between forms of social organization as a response to insupportable complexity. The professionalized meritocracies that managed the centralized state and large corporation through the late-middle 20th century were an attempt to manage complexity by applying Weberian and Taylorist rules. And they did a passable job of managing the system competently for most of that time, he says. But in recent years we've reached a level of complexity beyond their capacity to deal with.

The “educated classes” are adrift, lurching from blunder to blunder in a world that has out-complexified their ability to impose a unifying narrative on it, or even a small collection of rival but commensurable narratives. They're in the exact position of old Soviet central planners, systemically locked into grinding out products nobody wants to buy.

The answer, under these conditions, is to “[a]dapt, decentralize, and harden”—i.e., to reconfigure the system along the stigmergic lines he described earlier in “The Cathedral and the Bazaar”:

Levels of environmental complexity that defeat planning are readily handled by complex adaptive systems. A CAS doesn't try to plan against the future; instead, the agents in it try lots of adaptive strategies and the successful ones propagate. This is true whether the CAS we're speaking of is a human immune system, a free market, or an ecology.

Since we can no longer count on being able to plan, we must adapt. When planning doesn't work, centralization of authority is at best useless and usually harmful. And we must harden: that is, we need to build robustness and the capacity to self-heal and self-defend at every level of the system....²³

As John Robb puts it:

- The global financial and economic system is now a network. Everything is connected.
- This system has become VERY big and VERY complex. It's simply beyond what government bureaucracies and markets were designed to manage/control.

22 Eugene Holland, *Nomad Citizenship: Free-Market Communism and the Slow-Motion General Strike* (Minneapolis: University of Minnesota Press, 2011), pp. 167-168.

23 Eric Raymond, “Escalating Complexity and the Collapse of Elite Authority,” *Armed and Dangerous*, January 5, 2010 <<http://esr.ibiblio.org/?p=1551>>.

•Inevitably, as with all unstable systems that can't be managed/controlled, it will collapse. It will shrink to a size that can be managed through markets and bureaucracy.²⁴

After the Boston Marathon bombing and subsequent security lockdown of the city, Robb noted that a society organized on such centralized and brittle lines as ours would spend an increasing share of days each year under lockdown from terrorist threats.

However, over the long run, I believe this phrase is going to look as silly as “Duck and Cover” does to today's world. The reason is simple. As the number of disruptions increase, we're going to face a choice. We can either stay under constant lock-down, or we can become resilient...²⁵

The ideal organization for countering the threat of terrorism is one that 1) has a distributed architecture in which damage to any one node will only do minimal damage to the network as a whole; 2) has no nodes large enough to present a valuable enough target, from an attacker's perspective, to expend resources attacking; 3) empowers those at the endpoints to act on their own initiative in response to the situation on the ground; and 4) doesn't go around the world stirring up terrorism in the first place. According to Ben Kohlman:

We heavily secure nuclear facilities and the big ticket infrastructure. But the attacks of 9/11 were successful because the attackers completely bypassed the US military in attacking our country. They rendered our multi-million dollar air defense fighters irrelevant.

Spend a few thousand dollars to cut oil pipelines, destroy main power transmission centers or strategically cut off transportation networks, and you've done as much damage as a highly coordinated, high cost attack would. And bureaucrats would still sit around wondering how their hundred billion dollar planning apparatus failed.

The solution to this is not a centralized, uncreative Department of Homeland Security, but rather a system that renders Open Source Warfare irrelevant. It creates an open infrastructure of its own, able to absorb unforeseen events, of both the natural and man made kind.

Most of all, this requires a radical new way of approaching our society. It is becoming apparent that the centralized, nation state model of the past century is increasingly antiquated. Much as Wikipedia has allowed knowledge to be more broadly accessible at very little cost, so too must our infrastructure development allow small, local innovations to take hold. This will create a resilient network of citizenship in its own right, while also lessening the ability of wily adversaries to cheaply disrupt our society at low cost.²⁶

The military's new information-centric warfare doctrines are an attempt to take advantage of network communications technology and cybernetic information processing capabilities in order to replicate, within a conventional military force, the agility and resilience of networked organizations like Al Qaeda. The problem is that interference from the military's old bureaucratic hierarchies systematically impedes all the possibilities offered by network technology. Rather than increasing the autonomy and reducing the reaction time of the “boots on the ground” directly engaged in a situation, military hierarchies wind up seeing the new communications technologies as a way of increasing mid-level commanders' realtime control over operations, and increasing the number of sign-offs required to approve any proposed operation. By the time those engaged in combat operations get the required approvals of higher-ups, the immediate situation has changed to the point that their original plan is meaningless anyway. Most people are familiar with the saying that no military plan survives first contact with the enemy. But in fact the plan has most likely already

24 Robb, “A Global Economic Reset? Don't Wait to Find Out. Build Something Better,” *Resilient Communities*, November 15, 2012 <<http://www.resilientcommunities.com/the-global-economic-reset-is-coming-fortunately-theres-time-to-build-something-better/>>.

25 Robb, “Governor to Boston area: 'Shelter in Place' Here's a better way,” *Resilient Communities*, April 20, 2013 <<http://www.resilientcommunities.com/governor-to-boston-area-shelter-in-place-is-there-a-better-way-yes/>>.

26 Ben Kohlman, “System Disruption and Resilient Networks,” *Disruptive Thinkers*, June 14, 2012 <<http://disruptivethinkers.blogspot.com/2012/06/system-disruptions-and-resilient.html?spref=tw>>.

been rendered obsolete, before contact with the enemy ever occurs, by its passage through the military bureaucracy.

Rigid hierarchies and standard operating procedures only work in a predictable environment. When the environment is unpredictable, the key to success lies with empowerment and autonomy for those in direct contact with the situation. Because of volatility and black swan events, as John Hagel argues

[t]he push programs that seemed so essential to scalable efficiency now produce the opposite: increasing inefficiency, as rigidly constructed programs face unanticipated changes in the market.

Equally importantly, we're moving from a world of knowledge stocks, where competitive advantage resides in proprietary knowledge of lasting value, to a world of knowledge flows, where competitive advantage can only be attained by participating effectively in a larger and more diverse set of knowledge flows. In a world that's changing more rapidly with growing uncertainty, knowledge stocks depreciate in value at an accelerating rate.

This suggests an alternative rationale for institutions. Rather than pursuing scalable efficiency, perhaps we need a new set of institutions that can drive scalable learning, helping participants to learn faster by working together. While simple to state and intuitively appealing, this requires profound changes to our institutional landscape.

Rather than relying on rigid push programs, we need to increasingly develop scalable pull platforms where people can draw out people and resources where they are needed and when they are needed, not just to perform pre-defined tasks, but to engage in creative problem-solving as unanticipated challenges arise....²⁷

A good example is the Transportation Safety Administration's response to the threat of Al Qaeda attacks. As Matthew Yglesias has argued, "the key point about identifying al-Qaeda operatives is that there are extremely few al-Qaeda operatives so... any method you employ of identifying al-Qaeda operatives is going to mostly reveal false positives."²⁸ As Public Intelligence comments:

The DHS' unfocused "terrorvision" continues to see a threat in every situation and the department seems to be busying itself crafting a response to every conceivable "threat." The problem with this "method" is that it turns any slight variation of "everyday activity" into something suspicious. The number of "terrorist implications" grows exponentially while the number of solutions remains the same.²⁹

The U.S. government's labyrinthine system for gathering, processing and coordinating intelligence is so complicated and produces such a high volume of data that it is overwhelmed with information it is incapable of digesting or putting to productive use. According to Dana Priest and William M. Arkin, a two-year investigation at the *Washington Post* found: "The top-secret world the government created in response to the terrorist attacks of Sept. 11, 2001, has become so large, so unwieldy and so secretive that no one knows how much money it costs, how many people it employs, how many programs exist within it or exactly how many agencies do the same work."

- Many security and intelligence agencies do the same work, creating redundancy and waste. For example, 51 federal organizations and military commands, operating in 15 U.S. cities, track the flow of money to and from terrorist networks.

27 John Hagel, "From Race Against the Machine to Race With the Machine," *Edge Perspectives with John Hagel*, August 22, 2012 <http://edgeperspectives.typepad.com/edge_perspectives/2012/08/from-race-against-the-machine-to-race-with-the-machine.html>.

28 Matthew Yglesias, "Too Much Information," *Matthew Yglesias*, December 28, 2009 <<http://yglesias.thinkprogress.org/archives/2009/12/too-much-information.php>>.

29 Bruce Schneier, "The Terrorist Risk of Food Trucks," *Schneier on Security*, November 15, 2012 <http://www.schneier.com/blog/archives/2012/11/the_terrorist_r.html>.

- Analysts who make sense of documents and conversations obtained by foreign and domestic spying share their judgment by publishing 50,000 intelligence reports each year - a volume so large that many are routinely ignored...

"I'm not aware of any agency with the authority, responsibility or a process in place to coordinate all these interagency and commercial activities," [retired Army Lt. Gen. John R. Vines] said in an interview. "The complexity of this system defies description."

The result, he added, is that it's impossible to tell whether the country is safer because of all this spending and all these activities. "Because it lacks a synchronizing process, it inevitably results in message dissonance, reduced effectiveness and waste," Vines said. "We consequently can't effectively assess whether it is making us more safe."

The effectiveness of this Rube Goldberg system of counter-terrorism intelligence was illustrated by the system's response to the so-called "underwear bomber":

These were all clues to what would happen when a Nigerian named Umar Farouk Abdulmutallab left Yemen and eventually boarded a plane in Amsterdam bound for Detroit. But nobody put them together because, as officials would testify later, the system had gotten so big that the lines of responsibility had become hopelessly blurred.

"There are so many people involved here," NCTC Director Leiter told Congress.

"Everyone had the dots to connect," DNI Blair explained to the lawmakers. "But I hadn't made it clear exactly who had primary responsibility."

And so Abdulmutallab was able to step aboard Northwest Airlines Flight 253. As it descended toward Detroit, he allegedly tried to ignite explosives hidden in his underwear. It wasn't the very expensive, very large 9/11 enterprise that prevented disaster. It was a passenger who saw what he was doing and tackled him.³⁰

So when your system for anticipating attacks upstream is virtually worthless, the "last mile" becomes monumentally important: having people downstream capable of recognizing and thwarting the attempt, and with the freedom to use their own discretion in stopping it, when it is actually made.

Our concern here is mainly with those things that are within the reach of individuals, small groups, and self-organized networks, as they are superempowered by the capabilities offered by networked platforms, and are forced of necessity to take on greater responsibility for their own endpoint or "last mile" defense in the face of states and other centralized systems that are increasingly hollowed out and brittle.

Our primary focus is not so much on decentralizing and hardening on a large-scale, society-wide basis, in keeping with some common policy. It is one of individuals, small communities and neighborhoods, business firms, utilities, etc., all doing what is within their own capabilities to minimize the danger of attack and mitigate its damage when it does occur, and taking advantage of whatever ways are feasible to network and federate with one another, in order to maximize their own long-term resilience.

The increasing technical capabilities of such networks and endpoints, combined with the increasing brittleness of the state and progressive hollowing out of its resource base, means there will likely be a general shift toward decentralizing and hardening, and of the state gradually retreating from the security field, perhaps on a pattern much like that of the late Roman Empire in the West. And it is likely that as these trends progress, and as hardened endpoints find larger and more complex ways of networking with one another, that at some point there will be "a transformation of quantity into quality" that will determine the character of the system as a whole. But the specifics will likely clarify themselves only in the emergent system.

Whatever the specifics of the networked system that emerges, the functional dynamics will probably follow some general principles outlined by security analyst Bruce Schneier. He argues for the importance of defense in depth, which basically means achieving security through more and cheaper redundant counter-

30 Dana Priest and William M. Arkin, "Top Secret America: A Hidden World, Growing Beyond Control," *Washington Post*, July 19, 2010 <<http://projects.washingtonpost.com/top-secret-america/articles/a-hidden-world-growing-beyond-control>>.

measures at multiple echelons of defense, in preference to more expensive, harder countermeasures at one line of defense. Defense in depth is a way of dealing with the fact that a system is only as strong as its weakest link, by ensuring that there is no one single point of failure.³¹

Because of the possibility that networked attackers will simply shift their efforts to a weaker link in response to security measures, last mile flexibility takes on supreme importance for dealing with the unexpected—as opposed to attempting to anticipate and develop a “written policy” for every contingency ahead of time.

Along with defense in depth, Schneier recommends dynamic defense. Schneier's concepts of defense in depth and dynamic defense overlap considerably, since the single point of failure in a complex system is likely to be a preset, one-size-fits-all policy that includes a limited menu of responses. A dynamic defense is one “that can adapt quickly, ...react quickly in several ways, and respond to whatever is happening at the time.”³²

This means that the person implementing security measures in the last mile is trusted with discretion to apply the rules to novel situations that were unforeseen by the people making the rules. A stereotyped, limited, inflexible menu of options is likely to result in the boots on the ground facing a situation which the rules don't cover, and being unable to respond effectively.³³ “People are dynamic, and better able to react to new threats and respond to new situations...”³⁴ They can “react to something they've never seen before: a new attack, a new threat, a new vulnerability.”³⁵ Remember the old saw about why the Israelis won the 1967 war? The Egyptians literally obeyed the Soviet field manuals' instructions to “retreat into the heartland and wait for the first snowfall.” The TSA has typically responded to attacks by formulating new policies that further limit the discretion of the people in direct contact with the situation. The static, inflexible kinds of policies that tend to predominate in bureaucratic organizations are the reason the work-to-rule strike is so devilishly effective: simply obeying the rules, literally, can bring an organization to a halt.

Good security has people in charge. People are resilient. People can improvise. People can be creative. People can develop on-the-spot solutions.... People are the strongest point in a security process. When a security system succeeds in the face of a new or coordinated or devastating attack, it's usually due to the efforts of people.³⁶

John Robb's distinction between robustness and resilience is key to understanding Schneier's concept of defense in depth. A robust system is simply hardened at all points, so that it can absorb an attack with minimal damage. A resilient system, on the other hand, focuses on rapid response to containing and repairing damage where it has already occurred, or bypassing damaged links so that the system can continue to function. The former is far more costly—usually prohibitively so.

A robust strategy means that you will continually make investments and decisions that reinforce your current position. Take steps that make yourself impervious to damage....

Resilience means you focus on investments that provide you with an ability to adapt. To change based on the what the situation becomes. What do you do? You build systems that produce food, energy, water, and products. You build networks and communities. You invest in the future....

Everyone needs robustness in the short term, to handle fast moving shocks. However, robustness is not a long term strategy. The only long term strategy is resilience. A resilience that invests in the ability to change and adapt. To meet threats and exploit opportunities that we... can't specifically anticipate.³⁷

31 Schneier, *Beyond Fear*, pp. 104-105.

32 *Ibid.*, p. 122.

33 *Ibid.*, p. 123.

34 *Ibid.*, p. 145.

35 *Ibid.*, p. 146.

36 *Ibid.*, p. 133.

37 John Robb, “Are You Robust or Resilient?” *Resilient Communities*, March 7, 2012

The relevance to our discussion above of empowering the last-mile network to respond rapidly to events that can't be planned for should be obvious. The normal tendency of bureaucratic organizations, Schneier says, is to over-react or respond over-specifically to particular events; this is directly analogous to hardening every point in an entire system against any potential attack, since it requires fully preparing against any possible contingency—while leaving the system paralyzed in the face of any attack the leadership *failed* to anticipate.³⁸

Schneier mentions several components of an in-depth, dynamic defense. Among them is *reaction*, which is a “response directed against the attackers” in the form of taking countermeasures during the course of the attack.

Doing this works because attacks are rarely instantaneous; more often, they involve multiple steps. Sometimes the best defense is to allow attackers to succeed a little bit, commit themselves, and only then to employ additional defenses.... Defenders make use of the lag time between the initial attack and the attacker achieving his objective.

The most cost-effective use of defensive resources... is “[a]n adaptive defense that detects and responds to the attacker's first intermediate success, before he manages to do anything else.” Reaction, as described here, is obviously relevant to the coordinated defense of an entire geographical area, in the face of incursions over a boundary line.

Another component of a dynamic defense is *mitigation*, “the portion of response that assumes failure and attempts to minimize the damage.” In other words, “[t]he system fails securely...”³⁹ Although mitigation can be used in coordination with the other components of an active defense, it is also closely relevant to our discussion later in this chapter of passive defense: designing overall structure to be less lucrative as a target set and less vulnerable to attack.

Recovery is a form of mitigation, “but after the attack is over.” The idea is to enable the system to survive the attack.⁴⁰ Redundant networks that can survive damage by rerouting traffic, infrastructures with easily replaceable or repairable components, and maintaining stockpiles of the most vital components, are all things that can contribute to recovery.

Finally, *counterattack* can be “a very effective form of defense.”⁴¹ Counterattack, strictly speaking, is about retaliation. But since an attack takes place over time, a counterattack may involve enemy forces currently in action, and it may involve attacks on the enemy's continued ability to conduct attacks in the future, the lines are blurred with response.

But whatever the character of the successor system, as stated above it will be emergent rather than imposed, and at best only dimly imaginable to us. So our theoretical speculations on the general nature of the system as a whole are at an end.

Of necessity the measures taken by small groups and localities—our main concern—will be primarily passive, or focus mainly on risk and damage mitigation.

<<http://www.resilientcommunities.com/you-choose-the-strategy-robust-or-resilient/>>.

38 Schneier, “Overreaction and Overly Specific Reactions to Rare Risks,” *Schneier on Security*, August 3, 2012 <http://www.schneier.com/blog/archives/2012/08/overreaction_an.html>.

39 *Ibid.*, p. 170.

40 *Ibid.*, p. 171.

41 *Ibid.*, p. 173.

IV. Passive Defense

We saw above that the organization of active defense against outside attack, in an age of what Eric Raymond called “insupportable complexity,” will require defensive organizations that are decentralized and hardened. Empowered last-mile networks will be central to thwarting attacks.

But perhaps an even more important arena for decentralizing and hardening will be the overall society, insofar as it constitutes a target, to make its utilities, distribution chains, communications networks, etc., more robust and resilient.

As Vinay Gupta points out, the only feasible way to realistically minimize the threat of terrorism from superempowered individuals and small groups—suitcase nukes, biotech, etc.—is a totalitarian state beyond anything we've yet seen.⁴² So ultimately, the only solution to terrorist threats may be a society with no targets big enough to be worth hitting.

Insupportable complexity is not simply an impediment to effective response to an attack. It is a force-multiplier for the attack itself. The more centralized an infrastructure, and the greater its complexity, the more damage the entire system—and its subcomponents—will suffer in an attack. The damage from an attack varies in proportion to the complexity of the system. When most of the functional resources of a system are located in the centralized infrastructure rather than in the endpoints, a large attack on the system will result in the end-points being submerged in the tsunami along with the entire system. There is no harbor or breakwater to absorb the force of the attack because the entire system is one big pool. And a localized collection of nodes cannot function effectively if the back of the centralized infrastructure is broken, because they don't contain the infrastructure they need to function autonomously. An attack on the system will take all the local nodes down with it.

In a distributed, scalable system, on the other hand, in which most functional resources are located in the endpoints on a modular basis, an attack on the infrastructure cannot destroy or incapacitate the endpoints. The basic functional infrastructure is replicated in each separate node, just as all the information in an image is encoded at each point of a hologram; so the only way to destroy all the endpoints is to attack them all separately.

The question is not how to organize a defense most effectively in an environment of unsupportable complexity, but how to organize society itself so that an active defense is less necessary, failures of the first line of defense are less catastrophic, and society can absorb a greater number of attacks without suffering unacceptable levels of damage. Rather than focusing on how to thwart an attack, the idea should be to make society less vulnerable to a successful attack when it does occur (along with the concurrent benefit of decentralization, which is to reduce the profile of the highest-profile targets and shift to a wider distribution of lower-value targets in order to make an attack less profitable). That means basing security not only on the organization of active defense itself, but on the target structure of civil society. That means a larger number of lower-profile targets and an increase in the resilience and robustness of communications, power and other utility networks. When centralized security systems are no longer subsidized by taxes, society will reconfigure itself to make itself less dependent on them. As John Robb put it:

Because we are unable to decapitate, outsmart, or defend ourselves against global guerrillas, naturally occurring events, and residual nationalism from causing cascades of failure throughout the global system, we need to learn to live with the threat they present.... [This means] the adoption of a philosophy of resilience that ensures that when these events do occur ... we can more easily survive their impact.

By building resilience into the fabric of our daily life, our response to these threats will organically emerge in what seems like an effortless way. Without them, we will suffer the effects of dynamic shocks on a brittle system.⁴³

42 Vinay Gupta, “The Long Peace,” *The Gupta Option* (2007) <guptaoption.com/2.long_peace.php>.

43 Robb, *Brave New War*, p. 183.

We already discussed the general likelihood that the demonstrated brittleness and periodic breakdown of various centralized public infrastructures would either cause those infrastructures to decentralize and harden in self-defense, or cause those served by them to switch to decentralized and hardened alternatives.

Robb makes the same argument regarding passive security in particular. “The strikes of the future will be strategic,”

pinpointing the systems we rely on, and they will leave entire sections of the country without energy and communications for protracted periods. But the frustration and economic pain that result will have a curious side effect: they will spur development of an entirely new, decentralized security system, one that devolves power and responsibility to a mix of local governments, private companies, and individuals....

Security will become a function of where you live and whom you work for, much as health care is allocated already.⁴⁴

Of course he tips his hat to the cliché, familiar to readers of cyberpunk dystopias, of the corporate super-rich living in gated communities. But more important (especially given that the corporate super-rich will likely be a dwindling presence when their means of rent extraction collapse),

[m]embers of the middle class will follow, taking matters into their own hands by forming suburban collectives to share the costs of security... and shore up delivery of critical services. These “armored suburbs” will deploy and maintain backup generators and communications links; they will be patrolled by civilian police auxiliaries that have received corporate training and boast their own state-of-the-art emergency-response systems....

...Cities, which will be the most acutely affected by the new disruptions, will move fastest to become self-reliant, drawing from a wellspring of new ideas the market will put forward. These will range from building-based solar systems by firms such as Energy Innovations to privatized disaster and counterterrorist responses.... Corporate communications monopolies will crumble as cities build their own emergency wireless networks using simple products from companies such as Proxim....

Perhaps the most important global shift will be the rise of grassroots action and cross-connected communities. Like the Internet, these new networks will develop slowly at first. After a brief period of exponential growth, however, they will quickly become all but ubiquitous and astonishingly powerful, perhaps as powerful as the networks arrayed against us.⁴⁵

In the specific example of the electric power grid, Robb proposes to decentralize it and make it less dependent on central high-value nodes. To do this, he suggests making the power system two-way by “allow[ing] any individual on the network to become both a producer and a consumer” of electricity, and making it “plug-dumb” so that any small-scale local power generator can sell power to the system simply by plugging into it. The power companies should cease to be primarily the producers of power, and instead become managers of transmission networks connecting producers and consumers. The transmission networks should be opened to outside service providers that provide value-added services, like conditioning power and storing power locally for resiliency against blackouts.⁴⁶

V. The Stateless Society as the Ultimate in Passive Defense

In some ways a stateless society represents an ideal in its lack of prominent targets. It's an example of what Schneier calls “compartmentalization,” in his discussion of defense in depth. If rather than capturing a

⁴⁴ *Ibid.*, p. 185.

⁴⁵ *Ibid.*, pp. 185-188.

⁴⁶ *Ibid.*, p. 175.

system as a whole by concentration of force at a strategic vulnerable point, it must capture each point separately, conquest becomes a lot more complicated and costly.⁴⁷

Historian Tom Nevins pointed out that in contrast to the Aztecs, who despite an advanced state with centralized controls fell quickly to the Spanish, the Apache “successfully wrested control of North Mexico” from the Spanish. “By the late seventeenth century, the Spanish had lost effective control of northern Sonora and Chihuahua to the Apaches.”⁴⁸ The Apache were able to stave off conquest for centuries because “[t]hey distributed political power and had very little centralization.”⁴⁹

The Apache fought wars on something like a p2p basis. An ad hoc, charismatic leader called the Nant'an, who had no institutional basis for his authority, would take up arms and lead by example. Geronimo, for example, simply declared war and was joined by volunteers. As described by Ori Brafman and Rod Beckstrom, based on their interview with Nevins:

The idea was, “If Geronimo is taking arms, maybe it's a good idea. Geronimo's been right in the past, so it makes sense to fight alongside him.” You wanted to follow Geronimo? You followed Geronimo. You didn't want to follow him? They you didn't. The power lay with each individual....

The Nant'ans were crucial to the well-being of this open system, but decentralization affects more than just leadership. Because there was no capital and no central command post, Apache decisions were made all over the place. A raid on a Spanish settlement, for example, could be conceived in one place, organized in another, and carried on in yet another. You never knew where the Apaches would be coming from. In one sense, there was no place where important decisions were made, and in another sense, decisions were made by everybody everywhere.⁵⁰

When the Spanish killed or captured a Nant'an, a new one emerged. The conventional strategy for defeating a state failed in the case of the Apaches “because no one person was essential to the overall well-being of Apache society.”⁵¹ The Spanish attempt at conquest failed because there was no one person or node whose capture would effectively disable the system, and no central point of control with the authority to surrender on behalf of the Apache nation.

A post-state society, similarly, would have no central node whose capture would lead to the incapacitation of the whole. Simply put, there would be no one to surrender on behalf of an entire country. Any would-be conqueror would have to conquer each separate part of a country, one at a time.

...a society in which power is decentralized lacks a command center whose defeat or surrender can deliver the entire nation into bondage. For example, during the American Revolution the British focused their energies on conquering Philadelphia, at that time the nominal capital of the United States, on the assumption that once the capital had fallen the rest of the country would be theirs as well. What the British failed to realize was that the United States was a loose-knit confederation, not a centralized nation-state, and the government in Philadelphia had almost no authority. When Philadelphia fell, the rest of the country went about its business as usual; Americans were not accustomed to living their lives according to directives from Philadelphia, and so the British troops ended up simply sitting uselessly in the occupied capital, achieving nothing. Hence Benjamin Franklin, when he heard that the British army had captured Philadelphia, is said to have replied, “Nay, I think Philadelphia has captured the British army.”⁵²

47 Schneier, *Beyond Fear*, p. 105.

48 Nevins interview with by Ori Brafman and Rod A. Beckstrom, quoted in Brafman and Beckstrom, *The Starfish and the Spider: The Unstoppable Power of Leaderless Organizations* (Portfolio, 2006), p. 18.

49 *Ibid.*, p. 19.

50 *Ibid.*, pp. 20-21.

51 *Ibid.*, p. 21.

52 Roderick Long, “Defending a Free Nation,” *Formulations* Winter 1994-95 <<http://www.freenation.org/a/f2213.html>>.

VI. Disaster Relief

The Hobbesian Myth of “War of All Against All” and Elite Panic. As Rebecca Solnit points out, after large-scale disasters the media are typically flooded with stories of looting and senseless violence by ordinary people. Almost none of the stories is true.

While I’ve been working on this project, my running summary for my friends has been that what happens in disasters demonstrates everything an anarchist ever wanted to believe about the triumph of civil society and the failure of institutional authority. It does—this alternative information is truly radical....

There was this moment of being overwhelmed by this hysterical belief in all these Hobbesian rumors—about rape, child rape, murder, general mayhem, and even at one point cannibalism, like something out of Bosch or Goya—but I was pretty sure it was a pile of lies.

Solnit argues that these urban legends reflect a culture of “elite panic”:

AT One of the most interesting ideas in the book is the concept of “elite panic”—the way that elites, during disasters and their aftermath, imagine that the public is not only *in* danger but also a *source* of danger. You show in case after case how elites respond in destructive ways, from withholding essential information, to blocking citizen relief efforts, to protecting property instead of people. As you write in the book, “there are grounds for fear of a coherent insurgent public, not just an overwrought, savage one.”

RS ...From the beginning of the field in the 1950s to the present, the major sociologists of disaster... proceeding in the most cautious, methodical, and clearly attempting-to-be-politically-neutral way of social scientists, arrived via their research at this enormous confidence in human nature and deep critique of institutional authority. It’s quite remarkable.

Elites tend to believe in a venal, selfish, and essentially monstrous version of human nature, which I sometimes think is their own human nature. I mean, people don’t become incredibly wealthy and powerful by being angelic, necessarily. They believe that only their power keeps the rest of us in line and that when it somehow shrinks away, our seething violence will rise to the surface—that was *very* clear in Katrina. Timothy Garton Ash and Maureen Dowd and all these other people immediately jumped on the bandwagon and started writing commentaries based on the assumption that the rumors of mass violence during Katrina were true. A lot of people have never understood that the rumors were dispelled and that those things didn’t actually happen; it’s tragic....

AT So on the one hand there are people responding in these moments of crisis and organizing themselves, helping each other, and, on the other, there are power elites, who sometimes, though not always, sabotage grassroots efforts because, as you say at one point, the very existence of such efforts is taken to represent the failure of authorities to rise to the occasion—it’s better to quash such efforts than to appear incompetent. The way you explore the various motivations of the official power structure for sabotaging people’s attempts to self-organize was a very interesting element of the book....

RS Not all authorities respond the same way. But you can see what you’re talking about happening right after the 1906 earthquake. San Franciscans formed these community street kitchens. You weren’t allowed to have a fire indoors because the risk of setting your house, and thereby your neighborhood, on fire was too great—if you had a house, that is. People responded with enormous humor and resourcefulness by creating these kitchens to feed the neighborhood. Butchers, dairymen, bakers, etcetera were giving away food for free. It was like a Paris Commune dream of a mutual-aid society. At a certain point, authorities decided that these kitchens would encourage freeloading and became obsessed with the fear that people would double dip. So they set up this kind of ration system and turned a horizontal model of mutual aid—where I’m helping you but you’re helping me—into a vertical model of charity where I have and you lack and I am giving to you....

Part of the stereotypical image is that we’re either wolves or we’re sheep. We’re either devouring babies raw and tearing up grandmothers with our bare hands, or we’re helpless and we panic and mill

around like idiots in need of Charlton Heston men in uniforms with badges to lead us. I think we're neither, and the evidence bears that out.⁵³

Hurricane Katrina. Most people are familiar with the mainstream news media's framing of the sheer incompetence and disorganization of federal disaster relief efforts after Hurricane Katrina, even if they don't realize the sheer *scale* of incompetence. But what they're not familiar with is the hostility of government at all levels to attempts by New Orleans residents to mitigate the disaster to themselves, and to outside relief efforts organized without government authorization. Not only did the state not support self-organized relief efforts after Katrina—it actively suppressed them.

Government may have been lax about such things as evacuating the population or getting the enormous stockpiles of trailers to where they were needed. But it was comparatively effective in directing resources to its genuine priorities: protecting food and clean water supplies in abandoned stores from “looting” by the hungry and thirsty, and maintaining armed checkpoints to turn away refugees attempting to escape the city.

Police put a great deal of effort in deterring “looters” from accessing and distributing supplies of safe food and water—almost all of which were rapidly spoiling with the power off, and which retailers would have to write off as a loss anyway—with a shoot-to-kill policy.⁵⁴

While uniformed “public safety officers” dropped the ball, the real heroes of Katrina—almost completely ignored by media coverage—were the ordinary people who made extraordinary efforts to help one another.

What you will not see, but what we witnessed, were the real heroes and sheroes of the hurricane relief effort: the working class of New Orleans.

The maintenance workers who used a forklift to carry the sick and disabled. The engineers who rigged, nurtured and kept the generators running. The electricians who improvised thick extension cords stretching over blocks to share the little electricity we had in order to free cars stuck on rooftop parking lots. Nurses who took over for mechanical ventilators and spent many hours on end manually forcing air into the lungs of unconscious patients to keep them alive. Doormen who rescued folks stuck in elevators. Refinery workers who broke into boat yards, “stealing” boats to rescue their neighbors clinging to their roofs in flood waters. Mechanics who helped hotwire any car that could be found to ferry people out of the city. And the food service workers who scoured the commercial kitchens, improvising communal meals for hundreds of those stranded.

Most of these workers had lost their homes and had not heard from members of their families. Yet they stayed and provided the only infrastructure for the 20 percent of New Orleans that was not under water.⁵⁵

Ordinary residents and tourists carried out their self-organized rescue efforts in the face, not only of official indifference, but of official hostility.

Law enforcement in many areas actually responded to self-organized evacuation attempts by turning people on foot away from bridges at gunpoint.

As we approached the bridge, armed sheriffs formed a line across the foot of the bridge. Before we were close enough to speak, they began firing their weapons over our heads. This sent the crowd fleeing in various directions....

We questioned why we couldn't cross the bridge anyway, especially as there was little traffic on the six-lane highway. They responded that the West Bank was not going to become New Orleans, and there would be no Superdomes in their city. These were code words for: if you are poor and Black, you are not crossing the Mississippi River, and you are not getting out of New Orleans.

* * *

53 Astra Taylor, “Rebecca Solnit,” BOMB 109/Fall 2009 <<http://bombsite.com/issues/109/articles/3327>>.

54 Larry Bradshaw and Lorrie Beth Slonsky, “Trapped in New Orleans,” *Counterpunch*, September 6, 2005.

55 Bradshaw and Slonsky, “Trapped in New Orleans.”

All day long, we saw other families, individuals and groups make the same trip up the incline in an attempt to cross the bridge, only to be turned away—some chased away with gunfire, others simply told no, others verbally berated and humiliated. Thousands of New Orleaners were prevented and prohibited from self-evacuating the city on foot.

* * *

...Just as dusk set in, a sheriff showed up, jumped out of his patrol vehicle, aimed his gun at our faces and screamed, "Get off the fucking freeway." A helicopter arrived and used the wind from its blades to blow away our flimsy structures. As we retreated, the sheriff loaded up his truck with our food and water.⁵⁶

Police also invaded self-organized neighborhood shelters with the demeanor of soldiers securing a neighborhood in occupied enemy country. Allen "Sarge" Smith, a Gulf War veteran who remembered his school being used as a neighborhood shelter after Hurricane Betsy in 1965, organized a group of forty residents on the second and third floors of the Samuel J. Green school. Among them were housebound elderly rescued from their homes. The residents were maintained in relative comfort with canned food and bottled water, blankets and a radio, and organized board games to pass the time. In addition, Smith and other volunteers made regular trips to take food and water to elderly residents still in their homes.

None of that mattered to the officers who finally showed up, with the tact typical of unformed gun-toting thugs everywhere, to evacuate the building.

A group of armed officers entered the school, demanding that everyone leave. The group included a couple of sheriff's deputies from New Mexico wielding M-16s, New Orleans police officers and some volunteers....

"You have to leave now," an officer yelled at no one in particular. "I can't believe you had this child in here like this. Let's go."....

When Anthon began to explain how the group had sustained elderly people in the community, the officer yelled: "Shut up. I don't want to hear you talking [expletive] no more."...

"The thing about this here is they are embarrassed," Sarge said. "They all know we did a better job than [the shelters] did. We took care of ourselves. We survived."⁵⁷

Unofficial attempts at evacuation or aid organized from outside met with similar official hostility.... New Orleans residents were prosecuted for commandeering empty schoolbuses from fleets of such idle vehicles to evacuate refugees ahead of the storm—something that apparently never occurred to government to do.

Malik Rahim addressed the audience with an analysis and an attitude that the mainstream corporate media refuses to transmit across its airwaves. He pointed out how Black doctors had been turned away from the devastated areas and how surrounding parishes had refused to help the predominantly poor and Black communities of New Orleans. He pointed out the hypocrisy of the state, which employed a shoot-to-kill order for young black men looking for food, but permitted armed, white vigilantes to roam the streets of New Orleans. He revealed that there are many so-called "looters" who are still in jail for attempting to commandeer empty buses and transport people out of New Orleans. Many of these unjustly imprisoned individuals have yet to see their day in court.⁵⁸

Many, many outside self-organized aid operations attempting to enter the city were turned away at gunpoint, just like residents attempting to leave.⁵⁹

56 Bradshaw and Slonsky, "Trapped in New Orleans."

57 Kelly Brewington, "A do-it-ourselves shelter shines," *Baltimore Sun*, September 7, 2005 <<http://www.baltimoresun.com/news/bal-te.community07sep07,1,1097093,full.story>>.

58 "ANSWER: October 23: Katrina survivors struggle for justice," A.N.S.W.E.R. Coalition, October 24, 2005

<http://www2.answercoalition.org/site/News2?abbr=ANS_&page=NewsArticle&id=6935>; Jeff Taylor, "Jabbor Gibson, American Hero," *Reason*, September 2, 2005 <<http://reason.com/blog/2005/09/02/jabbor-gibson-american-hero#010810>>

59 "Hurricane Katrina Timeline," *ImpeachBush.tv* <http://www.impeachbush.tv/news/katrina_timeline.html>.

Scott Crow of the Common Ground collective, in his book *Black Flags and Windmills*, describes in considerable detail his on-the-ground experiences of the efficacy of self-organized relief, versus active impediments by the “authorities.” To begin with, many areas were restricted—despite the unwillingness of the military to provide any help itself—by military blockade.⁶⁰ As the anarchist Common Ground relief effort expanded its activities in New Orleans, police “became increasingly volatile,” constantly harassing their distribution center and clinic, and pulling over volunteers delivering supplies to accuse them of everything “from stealing supplies to running guns.... All of us were subject to having guns randomly drawn on us, and threatened with death.” Crow recounts one incident, while delivering supplies on foot door-to-door to shut-ins, found himself “lying face down on the hot pavement in the middle of the street with guns pointed while they yelled for me to ‘get the fuck down.’” After interrogating him and accusing him of stealing the supplies, they sped off—presumably to terrorize someone else.⁶¹ This—being forced face-down at gunpoint and accused of stealing—was a common experience for volunteers.⁶² Police periodically raiding the distribution center—with drawn weapons and helicopters—referred to it as a “compound” or “fortress,” and exhibited out-of-control alpha dog behavior that put volunteers in genuine fear for their lives.⁶³ ICE—Immigrations and Customs Enforcement—was also part of the mix, pulling over vehicles distributing supplies with a cheery “freeze, motherfucker!”—and the de rigeur accusations of stealing from FEMA and the Red Cross (as if FEMA or the Red Cross had any useful supplies in their possession).⁶⁴

At its most blind and bureaucratic, FEMA maintained a jail—“Camp Greyhound”—in an abandoned bus station, where they dumped hundreds or thousands of black and Latino men selected mostly at random for being out at the wrong time, and then left them without food, water, sanitation or shelter.⁶⁵

On the other hand, as usual, the community's self-organized effort was miles ahead of official relief efforts. Here's an early communique from the Common Ground collective:

Now picture the community deciding that it would not be broken down by this disaster. People in this community in Algiers New Orleans decided to rebuild itself, when society and government forgot them....

This is not just relief, but the rebuilding of infrastructure within their means and ways...

But who will take out the garbage?

We will. The people of this community with the support and solidarity from the outside. We will deliver food, water and medical aid. We will watch and protect each other. We will secure, aid and reconnect the bonds the long history of disasters of neglect and abandonment have brought.

We have bicycles to transport us, deliver food, water and pick up garbage.

We have a first aid station set up.

We have communications with those outside of this community.

As the Black Panther Party used to say “We doin’ for ourselves...” with the support of those on the outside.⁶⁶

The distribution hub, which started out with five volunteers, had grown to seventy by late September and over 120 in October. The distro center and clinic together served hundreds of people, filled with pallets stacked high with bottled water, canned food, diapers and hygiene kits. In addition to the clinic, the project expanded to include a media center, prisoner advocacy and legal defense. It was able to function so effectively because of its “flexibility. There was no command hierarchy that information had to go through, fol-

60 Scott Crow, *Black Flags and Windmills: Hope, Anarchy and the Common Ground Collective* (Oakland: PM Press, 2011), p. 117

61 *Ibid.*, pp. 107-108.

62 *Ibid.* pp. 117-118.

63 *Ibid.*, pp. 118-119.

64 *Ibid.* p. 126.

65 *Ibid.* p. 139.

66 *Ibid.*, pp. 131-132.

lowed by useless paperwork and arbitrary rules. Often this meant that people would take up a project simply because they saw the need.”⁶⁷ Their public appeals resulted in donations (with touching letters) from seniors on limited incomes, and elementary, high school and college student groups—bringing in, by mid-October, almost \$100,000.⁶⁸

Meanwhile FEMA’s efforts consisted almost entirely of sending bureaucrats to process the paperwork for federal assistance applications that would take months or years to go through—in some cases expecting elderly people with no electricity or computers to apply for aid online. In the end, the FEMA center wound up unofficially directing people to Common Ground for real help. In fact at one point the regional head of FEMA came to the Common Ground clinic (with her armed escort) for minor medical attention in preference to the Red Cross or military doctors.⁶⁹

Common Ground also organized a Copwatch group to document law enforcement abuse and harassment on video and spread news of it through alternative media outside New Orleans. Naturally cops responded with verbal abuse and threats; in one case they abducted someone filming their harassment, and drove around dark streets threatening to kill him and “drop him in the river” if he didn’t stop—after which they released him.⁷⁰

One of the most important things the Common Ground collective, an outside volunteer effort made up mostly of white radicals, did was to respect the preexisting network of relationships and local leadership in the black community, and provide the help they asked for rather than trying to run the show for them. Common Ground was one part of a much larger composite of local efforts.⁷¹

The New Orleans pattern is typical in disasters throughout history, according to Jesse Walker. Self-organized relief and recovery efforts have typically dwarfed state contributions, and “the vast majority of the rescues [were] accomplished by the real first responders—the victims themselves.” Despite the popular image of looting and assault and a generally Hobbesian reversion to the “war of all against all,” the tendency toward cooperation and mutual aid also generally dwarfs anti-social behavior. “After the cataclysm,” Walker wrote, “social bonds will strengthen, volunteerism will explode, violence will be rare, looting will appear only under exceptional circumstances....”⁷²

Keith McHenry, a participant in the Food Not Bombs operation in New Orleans after Hurricane Katrina, describes his experience at the site:

I helped coordinate the Food Not Bombs relief effort after Katrina. The out pouring of support was wonderful. Our office was flooded with calls and emails from Food Not Bombs volunteers and supporters wanting to help. I had about four hours of sleep each night for the first eight months after Katrina. As you may know we organized kitchens in about 20 cities and worked closely with Common Ground in setting up kitchens in New Orleans. Chuck Munson helped us by listing our www.foodnotbombs.net/katrina.html site on his website.⁷³

Hurricane Sandy. The same issues emerged, in almost identical form, during Hurricane Sandy’s impact on the east coast of the United States. But as with Katrina, horizontal, self-organized relief efforts went a long way toward filling the void left by official failure. The “Occupy Sandy” relief effort was a project of Occupy Wall Street especially active in the greater New York City area.

67 *Ibid.* p. 144.

68 *Ibid.* p. 146.

69 *Ibid.* pp. 166-147.

70 *Ibid.* p. 139.

71 *Ibid.*, p. 135.

72 Jesse Walker, “Nightmare in New Orleans,” *Reason*, September 7, 2005 <<http://reason.com/archives/2005/09/07/nightmare-in-new-orleans/print>>.

73 Keith McHenry, personal email, December 25, 2011.

When Hurricane Sandy brought thrashing winds and a two-story surge of water to the city, Occupy activists mobilized to assemble a relief effort. According to volunteer Shlomo Adam Roth, 34, "We got on the ground in the Rockaways when one of the blocks was still burning."

As every organizer involved will be quick to remind you, Occupy does not see itself as an organization. It's a network, a swarm. In the wake of the storm, this decentralized, highly flexible structure proved to be a strength. While huge bureaucratic organizations like the Red Cross and overwhelmed government agencies like FEMA took days to reach some neighborhoods, Occupy made use of Facebook and Twitter to channel volunteers and supplies to existing local institutions like the activist group Good Old Lower East Side, churches, a mosque in Coney Island and ad hoc citizen relief groups that sprang up across the city.⁷⁴

A writer at Huffington Post described its operation in the Red Hook neighborhood of Brooklyn:

The flagpole had become a meeting place for Hurricane Sandy volunteers, and earlier Thursday, it served as a rallying center for people in the hurricane-battered neighborhood to request food, clothing and other necessities. [Conor] Reed said he learned some elderly people had been stuck on higher floors of their buildings without power or running water, marooned by elevators that weren't working.

"Since then we've been walking up and down stairs, providing care packages of food and flashlights and bottled water," Reed said.

Reed and others have been volunteering in Red Hook since Sandy hit, mostly organized via "Occupy Sandy," a now burgeoning offshoot of the Occupy Wall Street movement, websites like Recovers.org, a social hub for organizing volunteers online, and word of mouth.

Occupy Sandy volunteers aim to help smaller communities, where government relief organizations may not have arrived, Reed said.

"Occupy has gone from general protest work to now direct community support," Reed said. "What we're trying to do is build communities, not just charity."

A few blocks from the flagpole, the offices of the Red Hook Initiative, a community non-profit, was a bustling center for people needing clothing and hot meals. Boxes of clothes lined the street nearby. Inside, tables were stocked high with boxes of donated food. There were hand-written signs announcing the next hot meals and flagpole meetings....

"We've been getting tons of donations. This is all donations in here," [Lisa] Sikorski said, pointing at tables. "We also gave away a ton yesterday. Stuff has gone out to the Rockaways, Sunset Park, Coney Island. There are people coming in with rolling carts, school communities have come up with truckloads of stuff and unloaded it. This is all community-driven donation right now, all of it."

Federal Emergency Management Agency workers were nowhere to be seen, Sikorski said. She said she was told they may have been nearby Thursday afternoon. "They're not here," she said. "I don't see them."

...The email [Catherine McBride] sent to friends Thursday morning asking for donations got an immediate and overwhelming response.

"I think the key is connecting people to a tangible thing, because everyone wants to help out," McBride said. "Just telling people to go and do this. And then they'll do it."

More Occupy-organized volunteer operations have been set up in other badly damaged neighborhoods, including Sunset Park, Coney Island and the Rockaways.

Justin Wedes, an Occupy organizer, said the response from the Occupy movement has been "incredible," and Occupy Sandy groups were active in all five boroughs.

"We already have dozens of organizers working in hubs, working out of homes, mobilizing hundreds of volunteers," Wedes said. "We've worked with local community organizations, Recovers.org, and this really shows that communities do band together, reach out, and support each other."

74 Jared Malsin, "Best of Enemies: Why Occupy Activists Are Working with New York City's Government," *Time*, November 13, 2012 <<http://nation.time.com/2012/11/13/best-of-enemies-why-occupy-activists-are-working-with-new-york-citys-government/>>.

The Occupy Sandy movement has already received \$10,000 in donations via the group's Inter-Occupy website, Wedes said, and has teamed up with climate organization 350.org for a major relief effort this Saturday. New volunteers join every hour, he added.

"It's a pretty diffuse operation here," Wedes said. "But it's reaching thousands."⁷⁵

In the weeks after Sandy hundreds of volunteers showed up every day at two distribution sites Occupy Sandy set up in two Brooklyn churches, where they

cook hot meals for the afflicted and to sort through a medieval marketplace of donated blankets, clothes and food. There is an Occupy motor pool of borrowed cars and pickup trucks that ferries volunteers to ravaged areas. An Occupy weatherman sits at his computer and issues regular forecasts. Occupy construction teams and medical committees have been formed.

Managing it all is an ad hoc group of tech-savvy Occupy members who spend their days with laptops on their knees, creating Google documents with action points and flow charts, and posting notes on Facebook that range from the sober ("Adobo Medical Center in Red Hook needs an 8,000 watt generator AS SOON AS POSSIBLE") to the endearingly hilarious ("We will be treating anyone affected by Sandy, FREE of charge, with ear acupuncture this Monday"). While the local tech team sleeps, a shadow corps in London works off-hours to update the Twitter feed and to maintain the intranet. Some enterprising Occupiers have even set up a wedding registry on Amazon.com, with a wish list of necessities for victims of the storm; so far, items totaling more than \$100,000 — water pumps and Sawzall saw kits — have been ordered.

"It's a laterally organized rapid-response team," said Ethan Gould, a freelance graphic artist and a first-time member of Occupy. Mr. Gould's experience illustrates the effort's grass-roots ethos. He joined up on Nov. 3 and by the following afternoon had already been appointed as a co-coordinator at one of the "distro" (distribution) sites.

OCCUPY SANDY was initially the work of a half-dozen veterans of Zuccotti Park who, on the Tuesday following the storm, made their way to public housing projects in the Rockaways and Red Hook, Brooklyn, delivering flashlights and trays of hot lasagna to residents neglected by the government. They arranged for vans to help some people relocate into shelters. When they returned to civilization, they spent the night with their extra bags of stuff at St. Jacobi Evangelical Lutheran Church in Sunset Park, Brooklyn.

"They asked if they could crash here," said Juan-Carlos Ruiz, a community organizer there who knew the Occupiers from their previous endeavors. "Those few bags became this enormous organic operation. It's evidence that when official channels fail, other parts of society respond."⁷⁶

In one way, Occupy Sandy is much different from self-organized relief efforts in New Orleans after Katrina: federal and local law enforcement, and official relief coordinators like FEMA, are far less hostile.

Being among the first to move made Occupy a vital part of the city's hurricane relief infrastructure. As a result, this radical nonstate movement finds itself in the unlikely position of coordinating with government institutions it might otherwise be in conflict with. The group is now in contact with a wide range of agencies, and organizers said they participated in two recent conference calls that included FEMA. The agency's news desk did not respond to requests for confirmation from TIME.

On the ground in the city's disaster zones, the urgency of the situation has yielded some unlikely cooperation. This dynamic was apparent at an Occupy hub in a community center called You Are Not Alone in the Rockaways on Saturday. Amid the National Guard vehicles rumbling through the mud and the acrid smell of mold and ash, Tamara Crifasi, 30, a television producer, was frenetically coordinating deliveries and volunteer flows. On the phone, she gave directions to someone looking for the center: "It's Beach 113, after the bombed-out buildings."

75 Lucas Kavner, "Occupy Sandy, Occupy Wall Street Offshoot, Amasses New York Volunteers," *Huffington Post*, November 1, 2012 <http://www.huffingtonpost.com/2012/11/01/occupy-sandy-occupy-wall-street_n_2061067.html>.

76 Alan Feuer, "Occupy Sandy: A Movement Moves to Relief," *New York Times*, November 9, 2012 <<http://www.nytimes.com/2012/11/11/nyregion/where-fema-fell-short-occupy-sandy-was-there.html>>.

Crifasi said members of the Red Cross had visited the day before. "I think they were trying to see how our operation was working," she said. The National Guard has provided security when volunteers lock up the building at night and has even directed traffic for them, she added, saying, "They haven't necessarily been coming and giving us a hard time, which is sometimes what people expect."

Nowhere has cooperation been closer than in the unique case of Red Hook, where the joint Occupy-government relief point was set up on Nov. 11. That center was the result of an unusual 30-person meeting that reportedly included four members of the National Guard, a police officer and Andrew Olsen from the CAU and took place in Occupier Desmarais' Red Hook loft on Saturday.⁷⁷

Based on her experiences with Occupy Sandy, Willow Brugh and her colleagues have a lot to say about the superior effectiveness of open-source disaster relief efforts in directing aid to where it needs to go. The basic organization was stigmergic

Tasks and needs often emerged from community response centers, small and distributed throughout a neighborhood in places conducive to small-scale organization and distribution, places which are also already well known and loved – often schools and churches. While the available resources are fewer than in a large FEMA and Red Cross setup, the exactness with which they are used is far more precise.⁷⁸

After going through the intake node, incoming participants of OS self-assigned themselves to nodes based on current network needs and their individual skills. This responsibility in self-assignment of tasks and time slots is commonly seen in cooperative houses and businesses, and emerged in OS systems as well. The group cooperating sees what tasks need to be done, lists them, and self-assigns based on skill and need. When a specific participant might generally love cooking and be free on a Tuesday, perhaps the only open slot on Tuesday is delivering boxes. In the commitment to functioning response, this box-delivering task is performed by the person who is good at cooking. If a shipping professional arrives ready to work, they might take over the shift of someone less skilled who had taken on the role out of immediate need, and that person might go on to tear out moldy insulation from houses. This emergent macro-task completion is in direct contrast to the time-consuming assignment of individuals to positions in hierarchical organizations, where only one position should be held at a time by an individual, and decisions from higher up in the hierarchy try to intentionally create working teams.

One of the things most baffling to hierarchically socialized individuals about OWS, OS, etc is the idea of decision making. Within these groups, there is rarely what would be viewed as a "decision-making process" from a hierarchical organization, but rather a process of individual or small group proposal, followed by indicating potential coordination and collaboration. IE, rarely a "should we do this" but rather a "I am doing this, would anyone else like to join?" or "I am doing this, and would benefit from the following sorts of help." This meta-level stigmergic organization meant everyone focused on what was of most interest to them, while using the low transaction costs of communication and informal horizontal ties to keep others' needs in mind and steer useful resources to them or help them make connections as they come along.⁷⁹

In this system, collective meetings acted as a feedback mechanism.

Updates about activities were proffered, along with potential upcoming actions, and the group would discuss any questions which arose. Such sessions were sometimes single-tracked, to be sure everyone got a say, other times break-out groups formed so a topic could be focused on by those most interested or affected by it. At the end of each round, a "vote" of sorts would take place via hand-signals when in

⁷⁷ Malsin, "Best of Enemies."

⁷⁸ Willow Brugh, Galit Sorokin, Yaneer Bar-Yam. "Combining Distributed and Centralized Systems in Humanitarian Aid and Disaster Response." Unpublished draft for *Complexity*, New England Complex Systems Institute (2015), p. 9. Quotes and pagination are from earlier version hosted (with permission) at <<https://drive.google.com/file/d/0B1ELfXmNUmDwM0d4MGtlbEJDLUU/view?usp=sharing>>. The latest version is "Combining Distributed and Centralized Systems in Disaster Response." <<http://blog.bl00cyb.org/wp-content/uploads/2015/08/CombiningSystems2015Aug04.pdf>>.

⁷⁹ *Ibid.*, pp. 11-12.

person or via number-signaling when via conference line. Responses could fall into ‘agree,’ ‘disagree,’ ‘abstain,’ or ‘block.’ “Where well designed and implemented, these algorithms can help to ensure that no single member of the group wields undue power, while still facilitating effective decision making.”

If sufficient ‘no’s appeared, further discussion was needed, and the proposing group was expected to alter their course of action. If even one ‘block’ appeared, it indicated adamant resistance from another participant necessary to be further explored. This is different from a town meeting because it is focused on feedback loops around actions, rather than legislation to be externally executed.

In this, we see the “leader-full” versus “leaderless” component play out, with every person acting as both actor and decider as one member of a larger group. In the end, “decisions” are still referred to, this drastic distinction in process of a network with feedback loops versus a set of “decision makers” merits this level of detail, and must be remembered when considering actions taken and choices made.

Rather than be dependent upon one person or set of people to decree how things should work, people embed assumptions and expectations into protocols, which are visible to those who know, through orientation or intuition, how to look. Much attention was paid in OS to orienting people about different nodes, and in improving orientation practices through continuous iteration and updating. This commitment to self-improvement and clarity helped to cull and curate information, rather than simply appending additions on as more knowledge was gained through iteration or external remark.

Much attention has been paid to the technical abilities of OS, but little has been paid to the way in which OS participants not only drew upon the technical platforms, but also upon the cultural methods and practices of organizing applied in free, libre, and open source software (FLOSS). In these, issues with a software program can be filed by anyone, which anyone else can see and, hopefully, patch. These changes are reviewed for appropriateness before being accepted back into the core code base, and the entire change and its metadata is logged in a changelog. For OS, it wasn’t software that was being ‘patched’ and updated, but rather the protocols of interaction and working practices of the distributed network of nodes. This history of changes in documentation could later be perused to better understand changes in assumptions and trajectory, if people had questions as to why a method of practice was the way it was (or if an idea or change had been attempted before). This dynamic network is distinctly different from bureaucratic rules in that any person interacting with the system structure was encouraged to examine and tweak that structure. In a bureaucratic system, rules and processes are set top-down, and are revised only when a decision-maker experiences ill effects. OS’s iterative approach not only allowed, but also encouraged an evolutionary process, with detrimental practices being critiqued and abandoned, and new practices being attempted in an intentional way.⁸⁰

In contrast to centralized institutions like government agencies and establishment charities, whose primary capability was moving large quantities of material through a few centralized trunk pipelines, Occupy Sandy’s advantage lay in its ability to match up resources with needs at the retail level.

Many problems in response are last-mile problems. ...[W]hile formal response might get resources into an area, it can be infinitely more difficult for those resources to get to recipients within the time needed. In contrast, OS’s structure was exceptional at needs assessment and last-mile delivery, among other things.⁸¹

[Draft last modified December 4, 2015]

80 *Ibid.*, pp. 13-14.

81 *Ibid.*, p. 21.