Leaderless resistance today by Simson L. Garfinkel

Leaderless Resistance is a strategy in which small groups (cells) and individuals fight an entrenched power through independent acts of violence and mayhem. The cells do not have any central coordination — they are leaderless — and they do not have explicit communications with one another. As a result, causes that employ Leaderless Resistance are themselves resistant to informers and traitors.

Leaderless Resistance was popularized by the anti-government activist Louis Beam as a technique for white nationalists to continue their struggle against the government of the United States in the face of overwhelming odds. Since then, Leaderless Resistance has become the *de facto* strategy of the violent fringe of the animal rights and environmental activist movements.

After introducing the concept and history of Leaderless Resistance, this paper explores the use of the technique by Stop Huntingdon Animal Cruelty (SHAC), the Earth Liberation Front, and individual Islamic terrorists carrying out acts against U.S. interests. It argues that Leaderless Resistance is resistant to counterterrorism based on network analysis. Finally, this paper makes recommendations of ways that may be used to fight causes that employ Leaderless Resistance.

Contents

An introduction to leaderless resistance
Case studies in leaderless resistance
Applying network analysis to leaderless resistance
Policy recommendations

An introduction to leaderless resistance
Most terrorist groups have a pyramid structure similar to a modern corporation: a leader (president); an inner circle of senior members (vice presidents); individuals who oversee tasks such as fundraising or bombing (product managers); and, operatives (workers). Consider the Liberation Tigers of Tamil Eelam [1]: LTTE is headed by Supreme Leader Velupillai Prebhakaran, has six formal divisions, and has an estimated annual budget of more than US$100 million [2]. Some terror groups (e.g. IRA and Hezbollah) have worked so hard on strengthening their organization that they have largely evolved beyond terrorism — after all, violence is destabilizing, both to targets and to perpetrators, and most organizations have self-perpetuation as their primary goal [3]. Even the relatively small Al Qaeda organization still has the trappings of a corporate structure, with a military, political, legal, and finance committees working to further Al Qaeda's agenda [4].

This paper explores a different kind of organizational structure, Leaderless Resistance, which has been used by white supremacists, anti-abortion and environmental activists, and animal rights groups. I argue that, despite the problems inherent in Leaderless Resistance, this structure is well-suited to many ideologies. Furthermore, many problems inherent in classic Leaderless Resistance can be overcome through modern communications technology.

This is not to say that Leaderless Resistance is an effective strategy for achieving a movement's stated aims. To the contrary, the adoption of Leaderless Resistance by a movement should be regarded as an admission of failure. In many ways, Leaderless Resistance is a last-ditch effort to keep a struggle alive in the face of an overwhelming opposition. But by its very nature, movements that employ Leaderless Resistance are unlikely to have their violent tendencies moderate over time.

The roots of leaderless resistance

The term "Leaderless Resistance" was popularized by the white supremacist Louis Beam [5], who published an essay on Leaderless Resistance in 1983 [6] and again in 1992 [7]. Beam advocated Leaderless Resistance as a technique for fighting an incumbent government using self-organizing clandestine cells; he attributed the strategy to Col. Ulius Loius Amoss, [8], [9] allegedly a U.S. intelligence officer who was fearful that Communists were about to seize control of the U.S. in the early 1960s.

In his essay, Beam argued that traditional liberation armies employing pyramid-style organization are "extremely dangerous for the participants when it is utilized in a resistance movement against state tyranny" [10]:

"Especially is this so in technologically advanced societies where electronic surveillance can often penetrate the structure revealing its chain of command. Experience has revealed over and over again that anti-state, political organizations utilizing this method of command and control are easy prey for government infiltration, entrapment, and destruction of the personnel involved. This has been seen repeatedly in the United States where
pro-government infiltrators or agent provocateurs weasel their way into patriotic groups and destroy them from within." [11]

A more workable approach, argued Beam, is to convince like-minded individuals to form independent cells that will commit acts of sabotage or terrorism without coordination from above, and while minimizing communication with other cells:

"The so-called "phantom cell" mode of organization, developed by Col. Amoss, or Leaderless Resistance, is based upon the cell organization but does not have any central control or direction. In the Leaderless Resistance concept, cells operate independently of each other, but thisy do not report to a central headquarters or top chief, as do the communist cells ... 

Participants in a program of Leaderless Resistance through phantom cell organization must know exactly what they are doing and how to do it. This is by no means as impractical as it appears, because it is certainly true that in any movement, all persons involved have the same general outlook, are acquainted with the same philosophy, and generally react to given situations in similar ways. As the entire purpose of Leaderless Resistance is to defeat the enemy by whatever means possible, all members of phantom cells will tend to react to objective events in the same way, usually through tactics of resistance and sabotage." [12]

Despite exhorting the adoption of a resistance without a leader, it is likely that Beam was advocating Leaderless Resistance in an attempt to cement his position as a leader and thinker in the white separatist movement. Indeed, Leaderless Resistance is taken by some to be a technique of splitting an organization into an above-ground wing that primarily deals in propaganda, and an underground wing that actually carries out terrorist attacks [13].

A brief chronology of white separatist movements in the United States and the popularization of Leaderless Resistance appears in Table 1.

Table 1: A brief history of the white separatist movement in the United States. (Courtesy of Chip Berlet, Political Research Associates)

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1971 | William Potter Gale creates the identity group Posse Comitatus. The group consists of "loosely affiliated bands of armed anti-tax and Anti-Federal government
vigilantes and survivalists" who believe "that all government power is rooted at the county, not Federal, level" [14].

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982-1983</td>
<td>Gale forms Committee of the States.</td>
</tr>
<tr>
<td>May 1983</td>
<td>Louis Beam publishes &quot;Leaderless Resistance.&quot;</td>
</tr>
<tr>
<td>June 1983</td>
<td>Gordon Kahl dies in a shootout with Federal agents, becoming the movement's first martyr.</td>
</tr>
<tr>
<td>Summer 1983</td>
<td>Covenant, Sword, and Arm of the Lord starts plotting mayhem.</td>
</tr>
<tr>
<td>August 1983</td>
<td>CSA affiliates try to arson gay-positive church.</td>
</tr>
<tr>
<td>August/September 1983</td>
<td>&quot;Order&quot; cell formed by members of various groups.</td>
</tr>
<tr>
<td>November 1983</td>
<td>CSA affiliates with Richard Wayne Snell stage attacks on a pawnshop owner they mistakenly thought to be Jewish.</td>
</tr>
<tr>
<td>June 1984</td>
<td>Snell shoots Arizona state trooper.</td>
</tr>
<tr>
<td>Year</td>
<td>Event</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>June 1984</td>
<td>Order cell assassinates Denver liberal Jewish radio talk show host Alan Berg.</td>
</tr>
<tr>
<td>April 1985</td>
<td>Raid on the Covenant, Sword, and Arm of the Lord.</td>
</tr>
<tr>
<td>1988</td>
<td>Beam is tried for sedition at Ft. Smith.</td>
</tr>
<tr>
<td>1991</td>
<td>President George Bush gives &quot;New World Order&quot; speech.</td>
</tr>
<tr>
<td>1992</td>
<td>Beam republishes &quot;Leaderless Resistance.&quot;</td>
</tr>
</tbody>
</table>

**Leaderless Resistance Today**

Today, the term "Leaderless Resistance" is typically used to describe any clandestine organization that employs cells [15]. It has also been used to refer to networked organizations with hub-and-spoke architecture. Such terminology is incorrect. Rather, "Leaderless Resistance" applies specifically to groups that employ cells and that lack bidirectional vertical command links — that is, groups without leaders.

Under many circumstances, the "resistance" advocated by Beam could easily devolve into random acts of anarchistic violence without any formal political objective. Indeed, the effects of Leaderless Resistance can easily be dismissed as the work of "wannabe terrorists," petty criminals engaging in copycat crimes, and angry loners participating in "sympathy attacks." That is, it could easily devolve into traditional forms of "resistance" or "cultural resistance" employed by the poor or powerless to impede or subvert a more powerful foe [16].

The violence of Leaderless Resistance is different from what sociologists often refer to as "cultural resistance." While it is uncoordinated, Leaderless Resistance supports a common political goal: It is violence with an agenda. Typically, this agenda is set by political tracts or other documents that set forth objectives, demands, and classes of particular targets. Agenda-setting is also performed by specific individuals who take part in terrorist activities: when one Earth Liberation Front member attacks a dealership for sport utility vehicles (SUVs) that opens another "front" in the "battle," and gives others the idea and motivation of attacking SUV dealerships as well.

By reporting some actions widely while ignoring others, news media effectively create a
positive feedback marketplace for Leaderless Resistance ideas and actions: successful actions are copied by sympathizers; extraordinarily successful actions serve to recruit new members to the leaderless network. Unsuccessful actions become lost and forgotten. By communicating exclusively through the media and shunning direct cell-to-cell communications, groups employing Leaderless Resistance are remarkably resilient to informers and infiltrators.

It has been suggested [17] that the de facto leadership for a "Leaderless Resistance" movement could be an inspirational author or public figure, who selects broad categories of targets and political objectives, but who does not actually participate in the planning or execution of violent acts. In the U.S., inspirational leaders could claim that their writings and public statements are protected speech under the First Amendment. It is quite likely that this was the position that Beam was attempting to create for himself by publishing the Leaderless Resistance essays.

However, the ruling of the U.S. Court of Appeals for the Ninth Circuit in the case of the "Nuremberg Files" [18][19], suggests otherwise: if the statements of an inspirational leader constitute a "true threat," that leader might be successfully sued for damages by victims or even charged with conspiracy by law enforcement agencies.

Acts of Leaderless Resistance may result in a sustained campaign of property damage and the occasional loss-of-life. But the very same lack of structure it advocates prevents it from achieving political change. Whether decisions are made by consensus in groups or by elites, politics requires organizing and decision-making. Leaderless Resistance provides neither.

Case studies in leaderless resistance

This section examines three groups employing Leaderless Resistance against U.S. targets. The groups are on an organizational continuum: the first is an animal rights group that has significant structure but which attempts to maintain some sort of plausible deniability or "arms length" relations with those engaged in direct action. The second is a federation of environmental activists that have been labeled as terrorists by the Federal Bureau of Investigation (FBI). Lastly there are individuals who have engaged in acts of Islamic terrorism, even though they do not appear to be members of any terrorist organization.

Stop Huntingdon Animal Cruelty (SHAC)

Activist groups can use Leaderless Resistance techniques as a way to disclaim responsibility for their actions. This appears to be the case with the activists who call themselves Stop Huntingdon Animal Cruelty (SHAC).
Based in Worcestershire, England, SHAC was founded in 1999 "by a group of activists who had successfully closed down Consort kennels and Hillgrove cat farm" [20]. SHAC has organized a "hard-hitting direct action campaign" [21] against Huntingdon Life Sciences (HLS), one of the world's largest animal testing laboratories. The campaign appears to be primarily coordinated through electronic mail: SHAC has 5,000 subscribers on its U.K. mailing list [22]; various regional chapters have their own lists for local events. (The Boston mailing list has 326 subscribers [23].) Table 2 lists some key SHAC victories.

SHAC maintains various websites at www.shac.net, www.shacusa.net, www.shacgermany.net, www.shacpt.net, www.huntingdonsucks.com, and other locations. The Web sites are heavily cross-linked with other extremist organizations, such as the Animal Liberation Front. Perhaps more importantly, the Web sites are easy to find using Internet search engines: An individual who learns about SHAC from an article in the Boston Globe or on cnn.com would have no problem finding the organization's multiple Web presences or signing up for a mailing list.

With graphic photographs, well-written prose, and high production values, SHAC's Web sites are powerful tools for recruitment and mobilization. The Web sites also both state and set SHAC's agenda. For example, a page titled "SHAC Targets" lists the names of eight Huntingdon senior personnel, underneath a bulls-eye. Accompanying the names is a typical business boilerplate from Huntingdon's "July 10th business statement" — boilerplate that seems chilling in the context of the SHAC Web site:

"We believe our success will depend on the continued employment of our senior management team, especially Andrew Baker (Chairman and CEO) and Brian Cass (President and Managing Director). If one or more members of our senior management team were unable or unwilling to continue in their present positions, those persons could be difficult to replace and our business could be harmed." [24]

Linked from this page are pages for each member of the HLS management team, with that person's photograph (in four cases), a biography, and a list of other companies with which the director is currently involved. SHAC invites its sympathizers to contact those related companies and "put pressure on [the director] to leave HLS." Addresses, phone numbers, fax numbers and other contact information is provided to facilitate.

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2000</td>
<td>Protesters obtain a list of the largest shareholders in HLS and leak the list to the</td>
</tr>
<tr>
<td>Date</td>
<td>Event Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>March 2000</td>
<td>A group of protestors [26] sends letter to 1,700 HLS shareholders, telling them that they may be targeted for protests [27]. Reportedly 250 shareholders sell immediately upon receiving the letter; one who doesn't, 70-year-old David Braybrook, has his house picketed by four protestors with placards a month later [28].</td>
</tr>
<tr>
<td>March 2001</td>
<td>HLS is effectively delisted from world stock exchanges when the firm's two remaining market makers announce that they will no longer deal in the company's shares [29]. The BBC calls this &quot;a sign that investors are becoming increasingly wary of being associated with the controversial firm&quot; [30].</td>
</tr>
<tr>
<td>April 2001</td>
<td>Private trading in HLS stock is all but halted after Charles Schwab Europe announces it is &quot;severing links&quot; [31] with the firm after a SHC protest against Schwab's offices in Birmingham.</td>
</tr>
<tr>
<td>July 2001</td>
<td>HLS given a bank account by England's Department of Trade and Industry — a highly unusual move — after all of the firm's commercial bank accounts had been closed by bankers fearful of threats from SHAC activists [32].</td>
</tr>
<tr>
<td>December 2002</td>
<td>U.K. government &quot;agreed to provide insurance services to Huntingdon&quot; after its sole insurance company, Marsh UK, ceases providing insurance services to Huntingdon [33]. Marsh offices and employee homes had been targeted by SHAC activists.</td>
</tr>
</tbody>
</table>
In 2002 SHAC organized a harassment campaign against Huntingdon's insurance firm, Marsh & McLennan's. Harassment included vandalism of four greens and four holes at the Meadowbrook Golf Club, where Marsh former chairman Frank Tasco [34] was scheduled to play golf [35]; smoke bomb and vandalism attacks against Marsh offices in Southampton, U.K. [36], and Seattle [37]; and, the "stalking" of a mid-level manager in Boston who was apparently unrelated to the Huntingdon account [38]. These actions occasionally resulted in arrest: in Boston, 12 protestors were indicted in October 2002 for allegedly threatening "to burn down the home" of the Marsh executive [39]. In the end, these attacks had their desired result: in December 2002, Marsh stopped offering insurance to HLS [40].

SHAC protests are coordinated by messages posted on the various SHAC Web sites and in e-mail messages sent to sympathizers naming the time and date of protests; one message invites members to "engage in phone blockades for these scum" by repeatedly calling a target company's telephone number [41]. At that end of that same message is the message, "Our Animal Liberation brothers and sisters need your support! Write to these political prisoners" with the names and addresses of individuals who have been imprisoned for various acts of violence.

SHAC portrays itself as a popular movement, not an organization. According to one spokesperson, "SHAC is more of a campaign than a group, so we do not have official members .... There are thousands working on the campaign across the country" [42].

According to SHAC-USA's Web site:

"Stop Huntingdon Animal Cruelty is comprised of above ground volunteers who spearhead an international, legal campaign to close Huntingdon Life Sciences. We operate within the boundaries of the law, but recognize, and support, those who choose to operate outside the confines of the legal system.

SHAC does not organize any such actions or have any knowledge of who is doing them or when they will happen, but encourage people to support direct action when it happens and those who may participate in it." [43]

An individual responding to e-mail sent to SHAC's Web site denies that the organization is terrorist: "Whilst the campaign against HLS is certainly very aggressive, I don't think that protests, civil disobedience and minor acts of property destruction are acts of terrorism. Terrorist organizations hijack planes and bomb buildings, they don't hold demonstrations" [44]. This reasoning is flawed, of course: political demonstrations have been a staple of many terrorist organizations, including the PLO, IRA, and others.

Arguably, while SHAC attempts to wear the trappings of leaderless resistance, it is actually a clandestine organization that owes its success to a great deal of organization and coordination. Someone affiliated with SHAC arranges for confidential documents to
be stolen from its target, and then distributing those documents to SHAC's volunteers. Someone has "change control" for SHAC's numerous Web sites. Someone is sending out the missives to the SHAC mailing lists with the time and location of protests and other demonstrations.

**Earth Liberation Front**

According to its Web site, The Earth Liberation Front is "an international underground movement consisting of autonomous groups of people who carry out direct action according to the ELF guidelines" [45]:

"Modeled after the Animal Liberation Front, the E.L.F. is structured in such a way as to maximize effectiveness. By operating in cells (small groups that consist of one to several people), the security of group members is maintained. Each cell is anonymous not only to the public but also to one another. This decentralized structure helps keep activists out of jail and free to continue conducting actions.

As the E.L.F. structure is non-hierarchical, individuals involved control their own activities. There is no a centralized organization or leadership tying the anonymous cells together. Likewise, there is no official "membership". Individuals who choose to do actions under the banner of the E.L.F are driven only by their personal conscience or decisions taken by their cell while adhering to the stated guidelines" [46].

There are three ELF guidelines for staging an ELF action. First, the action must "inflict economic damage on those profiting from the destruction and exploitation of the natural environment." Second, the action must educate the public. Third, the action must "take all necessary precautions against harming any animal, human and non-human" [47].

ELF was founded in the early 1990s; the organization claims that its creators were former Earth First! [48] members who left Earth First! after Earth First! adopted a strategy of non-violence [49], [50]. Paul de Armond disputes this claim, noting "Other than this claim, there is no basis to believe this is so" [51].

ELF can either be seen as an evolution in the development of the "Leaderless Resistance" concept, or as one of the first true realizations of the concept.

**Table 3: Actions claimed in the name of the Earth Liberation Front.**

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>ELF allegedly founded &quot;by Earth First!&quot;</td>
</tr>
<tr>
<td>Year</td>
<td>Location Description</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------------------------------------------------</td>
</tr>
<tr>
<td>1992</td>
<td>Brighton, U.K.</td>
</tr>
<tr>
<td>October 1996</td>
<td>Eugene, Ore. Grants Pass, Ore.</td>
</tr>
<tr>
<td>November 1997</td>
<td>Burns, Ore.</td>
</tr>
<tr>
<td>December 1999</td>
<td>Monmouth, Ore.</td>
</tr>
<tr>
<td>December 2000</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>Event Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Long Island, N.Y.</td>
<td>under construction, and burns down five luxury homes under construction. Total damage over US$2M.</td>
</tr>
<tr>
<td>January 2003 Erie, Pa.</td>
<td>Several sport utility vehicles are destroyed at a Pennsylvania auto dealership, resulting in an estimated US$90,000 in damage [54].</td>
</tr>
</tbody>
</table>

ELF's success is most likely due to its "press officers," who have included Craig Rosebrough [55], an Oregon activist who adopted the role as spokesperson for both ELF and the Animal Liberation Front in the 1990s; Leslie James Pickering [56]; and, the organization's current anonymous press officer, who communicates through an anonymous e-mail service — "Encrypted email preferred" [57]. These press officers distribute communiqués as press releases and maintain the ELF Web site.

At the bottom of each press release is this disclaimer:

"The North American Earth Liberation Front Press Office is a legal, above-ground news service dedicated to exposing the political and social motives behind the covert direct actions of the underground Earth Liberation Front. The North American Earth Liberation Front Press Office receives anonymous communiqués from the ELF and distributes the message to the media and public" [58].

The disclaimer on the Web site goes further:

"The EarthLiberationFront.com website and the domain names earthliberationfront.com exists in the interest of free speech, freedom of information and public interest.

The information contained within EarthLiberationFront.com website and the domain names earthliberationfront.com is NOT intended to encourage anyone to do anything illegal.

EarthLiberationFront.com website and the domain names earthliberationfront.com provide all information for education and research purposes only.

The information, views and opinions contained within the information on EarthLiberationFront.com website and the domain names earthliberationfront.com are not those of the owner or the site host, neither are they necessarily those of the maintainer or the contributor." [59].
These spokespeople disclaim all responsibility for ELF and ALF actions, and instead insist that they are merely publishing anonymous communiqués received from the organizations' autonomous cells. Indeed, if their claims of separation from their sources are true, then the press officers are actually functioning as activist journalists, not as terrorists. Nevertheless, their ability to publicize events "claimed" by "ELF" dramatically increases the media impact of these events.

The approach of the ELF press office has proven to be remarkably successful. ELF spokespeople have received substantial press coverage — much of it friendly. They have been invited to appear at conferences, to speak on National Public Radio [60], and even to testify before Congress [61].

At the present time, there is no recorded case of a person being injured or killed as the result of an ELF-claimed action. (This record may sound better than it actually is, since actions are only claimed after they occur. Presumably, if someone were accidentally killed in an action, that action would not be claimed.)

ELF is more accurately described as a movement or a milieu, rather than an organization or a formal group. Unlike SHAC, no internal ELF communications appear to exist; this is because there are no ELF demonstrations, events, or actions that require more than one or two people. ELF's Web site contains stirring admonishments for individuals to pick up arms and defend the environment through economic sabotage. ("It is up to each committed person to take responsibility for stopping the exploitation of the natural world. No longer can it be assumed that someone else is going to do it. If not you, who, if not now, when?" [62]) The opening page of the Web site contains news stories of successful "actions," such as the arson of a Pennsylvania auto dealership that specialized in low-mileage Sport Utility Vehicles [63]. Alongside these news items is a link to download ELF's 37-page guide, Setting Fires With Electrical Timers, a highly technical and accurate treatise on effective arson techniques, the construction of timers and igniters, and how to avoid getting caught. The guide repeatedly stresses techniques that can be used to avoid leaving DNA evidence [64]. With the guide, US$50 and a few spare weekends, it is likely that any suitably motivated individual could conduct a successful arson attack and not be caught.

But ultimately, there is no way to know if the crimes attributed to ELF are actually the work of motivated sympathizers, or if they are acts of arson for other purposes (e.g., revenge or insurance fraud), that are being attributed to ELF as a way of diverting suspicion from the actual perpetrator. They could even be unrelated acts of arson that are claimed by the ELF because their circumstances match the ELF agenda.

The ELF Web site is hosted by EnviroLink Networks, a non-profit organization in Pittsburgh, Pa., that hosts Web sites for many controversial animal rights and environmental organizations [65], [66].

"We do not take any positions on environmental or animal rights issues, but we do advocate freedom of expression," reports an administrator at EnviroLink. "The content of
all websites we host, including controversial content, is the responsibility of the maintainer of the website. We encourage visitors to these websites to submit their opinions to the owners of the websites themselves" [67]. The administrator says that the Web site contributes to free speech and political discourse and will not be shut down unless EnviroLink is legally compelled to do so.

The registrant of the "earthliberationfront.com" domain is Darren Thurston [68], a Canadian animal rights activist who spent five years under investigation by the Royal Canadian Mounted Police after four pipe bombs were sent by mail to various far-right individuals across Canada [69]. The registrant's address is a post office box; the phone number listed in the registration has been disconnected. E-mail messages sent to the listed e-mail address were not answered.

The Federal Bureau of Investigation classifies ELF and ALF as examples of "special interest extremism" and states that they have "emerged as a serious terrorist threat" in recent years [70]. According to Congressional testimony, "The FBI estimates that ALF/ELF have committed approximately 600 criminal acts in the United States since 1996, resulting in damages in excess of 42 million dollars." In particular, ELF "claimed responsibility for the arson fires set at a Vail (Colorado) ski resort in October 1998, which caused 12 million dollars in damages" [71]. Most recently, activists have been setting fire to Sport Utility Vehicle dealerships [72]. Prior to 11 September 2001, the FBI saw the ALF and ELF as the leading terrorist threat facing the United States.

The Earth First Web site is an example of "exhortation of the deed," says Chip Berlet, senior analyst of Political Research Associates, which monitors anti-democratic and authoritarian movements and trends. "It is a framework for recruiting young men to do this kind of stuff," says Berlet. "You come up with an exhortation of what a hero will do, and some [person] comes out and says, 'I want to be a hero'" [73]. As more people are exposed to the message, says Berlet, more people are likely to be convinced.

It is tempting to consider those engaged in ELF actions as criminals and copycats, rather than terrorists. But if the crimes are not being committed for the purpose of insurance fraud and are not the actions of Mafia "enforcers" who are punishing the property owners for bad debts — if the crimes are in the least bit motivated because of perceived environmental insults — it is hard to argue that the actions are not terrorist acts. Certainly the victims and victims' communities feel terrorized. Even if they are the acts of teenagers engaged in "copycat crimes," as seems to be the case in the Long Island arsonists, who were motivated after reading press accounts and visiting the ELF Web site, why couldn't these teenagers be terrorists as well? Even crimes committed for ulterior purposes, once claimed by ELF, can be powerful motivators for other ELF actions.

For example, in Powder Burn: Arson, Money, and Mystery on Vail Mountain [74], author Daniel Glick argues that there are many possible suspects for the arsonists of at Vail Resorts, including ecoterrorists, environmental lobbyists, immigration workers, residents of Vail who resented the changes in the economy caused by the tourism industry, and others. But even if ELF was not responsible for the Vail fire, ELF's claim of the fire gives
it a powerful propaganda tool: a photograph of what appears to be the burning hotel appears on the front page of ELF's Web site. Even if people believing in ELF's ideology were not directly responsible for the fire, the existing of ELF and its ideology may have given the arsonists the additional motivation or cover to carry out the crime.

Would shutting down the ELF be an effective strategy for combatting the organization's actions? Certainly, eliminating this Web site would impede communication between ELF's autonomous cells. But even if the ELF Web site did not exist, ELF adherents could continue to communicate their actions to the public by sending messages directly to the media, or even anonymously posting messages in various public forums on the Internet. (The press release boasting of the January 2003 attack on sport utility vehicles in Erie, PA, was carried in its entirety by the Independent Media Center — a radical news organization, but certainly not a terrorist group.) The U.S. Supreme Court has held that the First Amendment guarantees a right to anonymous political discourse: it is hard to imagine that a court would not hold that communiqués issued by ELF activists are non-political [75].

Islamic Terrorism in the U.S.

"Exhortation of the deed" could be a powerful tool for encouraging Islamic terrorism within the United States: all that is required is a steady stream of information to young Muslims telling them that they are under attack by U.S. interests, leaders who advocate violent reprisals, and the ready availability of means with which to conduct terrorist acts. The result would likely be a string of apparent "hate crimes" or isolated acts of terrorism carried out by individuals or small groups against U.S. targets for no apparent reason. That is, the perpetrators are inspired to commit acts of violence by what they read or see, rather than being recruited into a terrorist organization, receiving training, and finally acting on orders.

Propaganda has always been an effective tool for terrorist organizations. When journalist Steven Emerson visited Abdullah Azzam's [76] son Hudaifa Azzam in Pakistan in 1994, he noted "ten printing presses" that were part of Azzam's "jihad organization" [77]. These days, electronic media have made printing presses largely superfluous.

A survey of recent attacks in the U.S. shows that there are a significant number of incidents that match this description (See Table 4).

**Table 4: Islamic extremist terror attacks on U.S. soil/targets abroad, not obviously part of an organized terror campaign.**

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
</table>


<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 January 1992</td>
<td>Fairfax Va.</td>
<td>Mir Aimal Kasi shoots and kills CIA employees Frank Darling and Lansing Bennett outside agency headquarters. Three other employees are wounded [78].</td>
</tr>
<tr>
<td>1 March 1994</td>
<td>Brooklyn, N.Y.</td>
<td>Rashid Baz opens fire with automatic weapons on a bus filled with Jewish Yeshiva students on the Brooklyn Bridge, killing Ari Halberstam and leaving Nachum Sasonkin brain-damaged. Baz is convicted of second degree murder and 14 counts of attempted murder; his two accomplices are sentenced to five years probation. In December 2000 the U.S. Department of Justice reclassifies the attack as an act of terrorism [79], [80].</td>
</tr>
<tr>
<td>25 February 1997</td>
<td>New York, N.Y.</td>
<td>Ali Hassan Abu Ali Kamal, 69, pulls a gun and fires on tourists on the 86th floor observation deck of the Empire State Building, killing one and injuring six, before killing himself. Relatives in Gaza City say that Abu Kamal was &quot;a conservative, not especially religious man&quot;; the shooting was attributed to Ali Kamal's loss of his life's savings in a failed investment scheme [81].</td>
</tr>
<tr>
<td>31 July 1997</td>
<td>Brooklyn, N.Y.</td>
<td>Lafi Khalil and Ghazi Ibrahim Abu Mezer are arrested after police raid their restaurant and seize five pipe bombs. Police allege that Khalil and Mezer had planned to detonate the bombs inside the New York City subway system; police also say that Khalil had previously been arrested in Israel and was accused of being a member of a terrorist organization [82].</td>
</tr>
<tr>
<td>4 July 2002</td>
<td>Los Angeles, Calif.</td>
<td>Hesham Mohamed Hadayet, 41, attacks the El Al ticket counter at Los Angeles International Airport, killing two and wounding four others, before he is shot dead by airline security agents [83].</td>
</tr>
</tbody>
</table>
Hadayet had no history of terrorism or affiliation with radical groups. However, when he entered the U.S. in December 1992 [84], Hadayet had told U.S. officials that he had been arrested and falsely accused by the Egyptian government of being a member of the terrorist group "Islamic Group". U.S. officials classify this attack as an act of terrorism by a lone gunman [85].

| 6 September 2002 Stuttgart, Germany | German officials arrest a 25-year-old American woman — a supermarket employee at the American base in Heidelberg — and her 23-year-old Turkish fiancée, claiming that the pair planned to attack a U.S. military base on the anniversary of the 11 September attack. Five pipe bombs and 280 bounds of chemical explosives are discovered in the pair's apartment [86]. |

Clearly, some acts attributed to "lone gunmen" are actually the work of a larger organization. Rabbi Meir Kahane was assassinated on 5 November 1990 by El-Sayeed Nosair; although police thought that Nosair acted alone, 47 boxes of evidence seized at Nosair's apartment indicated that he was part of an international terrorist movement that planned a range of attacks on U.S. soil [87]. Nosair was arrested again in June 1993 for his participation in planning a "Day of Terror" with Sheikh Abdel Rahman [88]. Likewise, the bombers in the 1993 attack on the World Trade Center had access to apparently "unlimited funds" [89]; federal documents named 118 unindicted co-conspirators in that attack [90]. But the existence of these cases does not contradict the thesis that a significant number of incidents do not appear to be centrally planned or coordinated.

### Applying network analysis to leaderless resistance

After the attacks of 11 September 2001, Network Analysis was proposed by many commentators as a powerful tool for fighting terrorist networks. In network analysis, the goal is to reconstruct a "social network" — e.g., a graph where the nodes are humans and the edges are social contacts. Network analysis can be used to find points of vulnerability,
such as highly-connected nodes called "hubs", that are critical for holding a network together [91]. Network analysis can also be used to identify nodes that were previously unknown.

Network Analysis was successfully used by French Colonel Yves Godard to break the Algerian resistance and end the insurgency's bombing campaign between 1955 and 1957; mapping was accomplished through the use of informants and torture (much of it carried out by French Major Paul Aussaresses) [92], [93], [94]. Link analysis, a form of network analysis, was used successfully by both MI5 and the IRA against each other in the 1970s and 1980s. Link analysis was used to determine the identities of important individuals in the opposing organization; these individuals were then targeted for assassination, severing the links and disrupting the opposing network [95].

Malcolm Sparrow notes that the success of "removing one individual or a set of individuals from a network depends not only on their centrality, but also upon some notion of their uniqueness. The more unique, or unusual, their role the harder they will be to replace. The most valuable targets will be both central and difficult to replace" [96].

Links between terrorists can only be found if they actually exist. Traditional terrorist organizations have many links: Money, training, command, supplies, and recruitment [97]. Many of these links exist not for the commission of terrorist acts, but for the persistence of the organization itself.

Causes that employ Leaderless Resistance do not have these links because they are not organizations: They are ideologies. To survive, these ideologies require a constant stream of new violent actions to hold the interest of the adherents, create the impression of visible progress towards a goal, and allow individuals to take part in actions vicariously before they have the initiative to engage in their own direct actions.

The Internet brings to Leaderless Resistance the possibility for autonomous cells (including cells of a single person) to share information and reinforce ideology without even knowing each other's identity. Cells can simply publish anonymously on the Web. Other cells can find those publications through the use of well-known Web sites (such as www.earthliberationfront.com) or, if those Web sites are shut down, through the use of search engines.

A significant problem in mapping the Leaderless Resistance networks is that each participant need only engage in a single action of terrorism in his or her lifetime. Even if that individual comes to regret their action, the event's persistence on Web pages and in media reports still serves as a recruitment tool for new blood.

Since much communication and radicalization takes place through the Internet, it might be tempting to attempt to use the Internet to find the presumed communication links between current and future activists. But this approach is not likely to be fruitful.

The Internet contains a substantial amount of hate literature, radicalizing propaganda, and technically accurate bomb-making instructions. Even if it were legally permissible and
technically possible to compile a list of names and identification numbers for each person who had downloaded every such document, it would be very difficult to determine precisely why those documents had been downloaded.

For example, activist William Meyer's Web site, www.iiipublishing.com, contains a well-reasoned pamphlet [98] arguing nonviolence is a dead-end strategy for any movement seeking radical social change. "Almost every organization seeking radical change in the USA has been targeted by organizers for the nonviolence movement," [99] writes Meyer:

"Most social-change activists, including environmentalists, have little or no experience with inflicting violence on other people. Yet the Nonviolence activists target social change activists with their doctrine, rather than teaching it to those policemen, soldiers, politicians, and businessmen who do occasionally practice violence" [100].

This document can be found by searching the Internet for "environmentalists and violence," "nonviolence and federal building," and even "McGovern for President and Earth First" [101] — it isn't possible to know why a person was looking for this document, what they were going to do with it, or what effect it has on their psyche. A person reading this document might be a potential terrorist, or they might be a journalist, an educator, a student writing a research paper, or even a "bot" [102] downloading the page so that it can be indexed by a Web search engine.

The same argument can be made about the ELF bomb-making handbook.

-----------------------------------------------

Policy recommendations

Terrorist actions serve two primary purposes: direct action, and recruitment. News organizations covering the events (e.g., a story in the New York Times) expose fertile new minds to the doctrine. The new communications technologies make it possible for a movement to exist solely as an ideology, with no membership lists, no financial records, no direct communication between the operatives — and no "off" switch. There is no way to negotiate with such an ideology, no way to compromise.

Unlike conventional terrorist groups, there is no incentive for an ideology employing Leaderless Resistance to moderate or evolve beyond terrorism. Because there is no formal "group" with assets, interpersonal relationships, or other stabilizing factors, individuals who moderate simply leave the milieu; their writings and actions remain behind, recruiting new members. Indeed, there could be significant lapses of time in which a group like ELF or ALF has no members: in the future, one or two people could discover the writings, be inspired, and carry out their own act of terror "in the name of the ELF."
Leaderless Resistance is not a strategy that is likely to be employed by a successful terrorist organization. Leaderless Resistance has no provisions for command, control, planning, building a broad base of political support, or for terminating violence once political objectives have been met. Instead, Leaderless Resistance is a desperate strategy employed by movements that do not have broad popular support and that fear infiltrators.

Today the U.S. appears to be fighting Leaderless Resistance networks such as SHAC and ELF with an eradication strategy based on crime-fighting: the goal is to create very high penalties for individuals who participate in direct action. The danger of this approach is that the eradication effort itself may inadvertently serve to attract new recruits to a violent ideology, by making the cause appear a just response to an unjust enemy. Consider this excerpt from a leftist magazine, regarding the sentencing of one ELF activist:

"In Eugene, Oregon ... the local newspaper ... reported that a man who killed a woman while driving drunk received a 10 year jail sentence. Six days later, the same newspaper reported that Jeffrey Leurs had been sentenced to 22 years and 8 months for causing arson damage to three SUVs. Even though the judge admitted that Leurs had taken precautions against harming people, Jeffrey, who is now 22, will spend as much time in Jail as he has already spent on earth" [103].

Instead of continuing this strategy, I propose an alternative:

- It is unlikely that prosecutions and sentences that appear disproportionate will have a deterrent effect; they may have the reverse effect. Perpetrators of these non-organizations appear to be motivated out of anger, frustration, and (in the case of some Islamic terrorism) humiliation. Instead of using traditional anti-terrorism or anti-crime strategies, a strategy of treating the violence as a public health problem may be more successful.

- In the past, the U.S. Congress has subpoenaed ELF spokesperson Craig Rosebraugh to testify before the Subcommittee on Forest and Forest Health [104]. This action generated significant backlash throughout the environmental and civil libertarian communities, and resulted in no information being revealed that was not already known. No further subpoenas should be issued: they only serve to radicalize fence-sitters.

- However, it is unclear whether or not ELF "press officers" are actually non-participants, as they claim, or are also organizers. Spokespersons for these groups should be closely monitored and arrested in the event that they are engaging in illegal activities.

- Likewise, it is clear that Web sites and mailing lists used by these groups serve a key role in organizing, motivating, and radicalizing. Although shutting down these communications channels poses constitutional problems within the United States, they should be closely monitored to see if they cross the line and become agents of a conspiracy to commit violence. Although there are clearly no First Amendment
problems in shutting down these servers if they are located outside the United States, the world is so vast and there are so many opportunities for low-cost or free Web hosting, that it is inconceivable that the movements would be unable to find a place to house their Web site. Once it had a home, the location could be registered with Internet search engines so that it could be easily found by others.

- One of the goals of terrorist organizations is to encourage the opponent to engage in disproportionate retaliation against the populace at large, with the goal of radicalizing more people in the general public. Policymakers should resist the urge to label animal rights and environmental organizations as “terrorists”. Instead, groups that advocate change but do not advocate violence should be made part of the policy debate on animal testing and environmental degradation. Providing non-violent opportunities to effect substantive policy changes reduces the appeal of illegal violent activities.

- Leaderless Resistance is unstable. If actors are successful in their activities, their activities will inevitably generate fan clubs, support groups, and other kinds of social structures. A network will emerge, which will then create the opportunity for network analysis.

- Finally, activists for SHAC and ELF appear to pride themselves in executing targeted violence. A public relations campaign emphasizing collateral damage of these events might have a strong deterrent effect. End of article

About the Author

Simson L. Garfinkel is a researcher in the field of computer security and commentator on information technology. Garfinkel is the author or co-author of numerous books, including Database Nation: The Death of Privacy in the 21st Century (O'Reilly & Associates, 2000) and Practical UNIX and Internet Security (third edition; O'Reilly & Associates, 2003). In 1998 Garfinkel founded Sandstorm Enterprises, a computer security firm that develops offensive information warfare tools used by businesses and governments to audit their systems. Garfinkel is currently a doctoral candidate at the MIT Laboratory for Computer Science. E-mail: simsong@lcs.mit.edu

Acknowledgments

This paper was originally written as a final project in Jessica Stern's class ISP-211, Non-state threats to International Security, at the Harvard Kennedy School of Government. Paul de Armond, Chip Berlet, Peggy Davis, Jessica Stern, and Paul Schulte provided valuable feedback on previous drafts of this article.
Notes


2. Jessica Stern, lecture on LTTE, ISP-211, Harvard University, 4 November 2002.


4. Rohan Gunaratna, lecture on Al Qaeda, ISP-211, Harvard University, 30 October 2002.


16. Thanks to Amy Rosenberg for this observation.


26. The protesters originally called themselves the BUAV Reform Group, perhaps an attack against the British Union for the Abolition of Vivisection (which had apparently failed to abolish vivisection). After BUAF obtained an injunction against the group for using its name, the protestors changed their name to "The Group With No Name." It is likely that these individuals eventually became SHAC. [Source: Matt Born, "Animal Rights Group Tracks Down Lab Investor," cited 8 January 2003, at http://www.angelfire.com/in/xinfernos/labinvest.html; see also Jamie Wilson, "Animal protesters besiege pensioner," below.].


41. Smash-hls-boston@lists.riseup.com, "[smash-hls-boston] e*trade Protest — 12/14," e-mail to mailing list.

42. shac-usa, "Re: Information requested," e-mail to author, 11 December 2002.


44. 'Mez, webmaster of huntingdonsucks.com, "Re: Questions about SHAC," e-mail to author, 6 January 2003.

46. Earth Liberation Front.com, "Meet the E.L.F.," *ibid.*

47. Earth Liberation Front.com, "Meet the E.L.F.," *ibid.*


53. Earth Liberation Front.com, "Diary of Actions," *ibid.*


67. Marla, "Re: information about envirolink," e-mail to author, 10 January 2003.


71. Dale L. Watson, ibid.


77. *American Jihad*, p. 73.


88. *American Jihad*, p. 49.

89. *American Jihad*, p. 46.

90. *American Jihad*, p. 47.


97. Rothenberg notes that a recovered Al Qaeda manual "urges that persons in cells not know those in other cells, so as to have less to tell when captured." If true, one of the reasons for the success of the September 11th hijackers may have been their adoption of some aspects of Leaderless Resistance. See Richard Rothenberg, "From Whole Cloth: Making up the terrorist network," *Connections*, volume 24, number 3 (2002), pp. 36-42.


100. *Nonviolence and Its Violent Consequences*, p. 2.

101. The author of this research paper found *Nonviolence and Its Violent Consequences* by searching for "No Business As Usual Day"; Meyers helped organize NBAU day in Seattle in 1985 and notes this accomplishment in his author's credits.


---

**Editorial history**

Paper received 27 January 2003; revised 9 February 2003; accepted 26 February 2003.