



## Liquid Information Leaks

NATHAN JURGENSON  
PJ REY  
University of Maryland, USA

The notion that “information wants to be free” has long been a mantra for much of Silicon Valley and the digital technology world. This slogan captures the belief that, as information technologies become cheaper and more accessible, those trying to limit and control the flow of information will find those efforts increasingly difficult, and, instead, information will resist impediment, restriction, and obstruction. High-profile information breaches—such as those associated with Julian Assange’s WikiLeaks organization and Edward Snowden—that used the Web to leak large quantities of government documents, at least on the surface, seem to confirm this sentiment. How will governments and other institutions react to an environment where information proves increasingly difficult to control? Can they continue to operate in largely the same manner as they have prior to the Internet, or must they undergo substantial transformations in order to retain their power and legitimacy?

While these questions are highly speculative, the issues at stake are of such gravity that they merit considerable reflection. We make one attempt at this here, arguing that these global information-leak scandals can be productively understood through the framework developed by Zygmunt Bauman (2000) in *Liquid Modernity*, where he argues that Late Modernity is characterized by a trend of increasing liquidity. As an extension of this theory, we argue that *as information becomes increasingly liquid, it leaks*. For this reason, an environment of liquidity is hostile to entrenched, secretive institutions—the sort that leakers and transparency activists tend to view as inherently corrupt. To undermine these institutions, high-profile Internet leakers engage in a tactic of *enforced transparency*, using networks to gather up the increasing abundance of leaks and further harnessing the environment of liquidity to make these leaks highly visible. We conclude that “cyber-anarchist” philosophy—which we argue best characterizes Assange and other transparency activists—rests on an interconnected set of ideological assumptions: Increased liquidity leads to greater transparency, which, in turn, leads to better behavior by institutional actors. Both Bauman and Assange anticipate what evidence now indicates: Institutions attempting to solidify against the growing torrent of liquidity face the prospect of potentially being washed away.

### Liquidity and the Web

In contrast to older, more solid structures, “liquid” information, objects, people and even places are more nimble, move faster, and can more easily flow around time and space. Bauman summarizes his metaphor,

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Liquids, unlike solids, cannot easily hold their shape. Fluids, so to speak, neither fix space nor bind time. While solids have clear spatial dimensions but neutralize the impact, and thus downgrade the significance of time (effectively resist its flow or render it irrelevant), fluids do not keep to any shape for long and are constantly ready (and prone) to change it; and so for them it is the flow of time that counts, more than the space they happen to occupy: that space, after all, they fill but “for a moment.” In a sense, solids cancel time; for liquids, on the contrary, it is mostly time that matters. (2000, p. 2)

Bauman (2000, 2003, 2005, 2006) contends that virtually all aspects of our collective (social, political, cultural, and economic) lives are affected by this trend. Above all, Bauman is particularly concerned with changes in the nature of global capitalism. In Bauman’s historical analysis, capitalism has become more liquid by moving out of “solid” brick-and-mortar factories making “heavy” manufacturing goods and into a lighter form of capitalism surrounding informational products. He quips:

In its heavy stage, capital was as much fixed to the ground as were the labourers it engaged. Nowadays capital travels light—with cabin luggage only, which includes no more than a briefcase, a cellular telephone and a portable computer. It can stop-over almost anywhere, and nowhere needs to stay longer than the satisfaction lasts. (2000, p. 58)

In fact, virtually every aspect of the information economy—from production facilities to labor to markets to the very desires driving consumption—has become more contingent and ephemeral.

While the contemporary information economy predates the public, commercial Internet, the Web has been a (if not *the*) primary factor in accelerating the trend toward Liquid Modernity. Bauman has written about the Web before, especially about how Internet dating furthers liquid relationships and love (2003); however, further reflection is in order because developments on and around the Web continually seem to reinforce his thesis. In fact, the Web seems to liquefy just about everything it touches, be it things, people, or, of course, information.

The rise of the Web has created more liquid markets and products, concerns particularly important to Bauman (2000). With the Internet, there has been a rise of renting products that were once typically owned. The “transumer” is, in part, one who encounters “stuff” temporarily as opposed to accumulating it permanently (trendwatching.com, 2006). Zipcar, Netflix, Spotify, and an increasing number of other examples in which individuals rent rather than own demonstrate that, for many—especially the young and/or affluent—the physical amassing of stuff is undesirable; so, they have begun to rent items that previous generations tended to accumulate. Stuff, for many, is decreasingly allowed to solidify on our shelves and in our attics, instead flowing in a more liquid and nimble sense through consumers’ lives. Also, the rise of “virtual goods” (Lehdonvirta, Wilskab, & Johnson, 2009)—digital commodities such as gifts on Facebook or weapons on World of Warcraft—highlight the trend toward “lighter” exchange as opposed to the solid and heavier exchange of physical goods. Even currency (whose

function is to act as a lighter, more fluid placeholder for material goods [see Simmel, 1907/2004]) has grown even lighter and is no longer linked to material coins or bills (e.g., digital currencies like Bitcoin and Dogecoin).

Just as things have grown more liquid, so too have people (Bauman, 2000, 2003, 2003, 2006). Social media exemplifies this point: Users of sites such as Facebook or Twitter can communicate with more people, more quickly and across more time and space. For example, a photograph of a friend can be taken and immediately posted to a site like Facebook, shared, and commented on by "friends" around the globe. The social feedback loop has been intensified and made more rapid. This is in addition to other fairly recent technologies, like commercial flight, that allow us to physically transport our body around the globe, albeit at a pace slower than information can travel. When one of these flights crash-landed on the Hudson River in New York City, an individual snapped a photo on his mobile phone and posted it to Twitter. Within an hour, that image was disseminated across the globe and the photographer found himself being interviewed on cable television. By the morning, the photo ran on the front page of various print newspapers (Makey, 2009).

The examples above demonstrate how the Internet—an informational sphere—has massive implications on the physical world of material products and flesh-and-blood bodies. Liquefaction is a major example of how the offline world is "augmented" by the online (Jurgenson, 2011; Rey & Boesel, 2014). Products, markets, people, and most everything else is growing more liquid online because information on the Web is, of course, primarily digital, a form that is far more fluid than its analog counterpart. Bits are more easily transferred and reproduced than atoms; they elide both space and time. Prior to digital technology, the reproduction of information required the physical reproduction of whatever piece of media contained the information (e.g., the print newspapers in the Hudson crash example that were so far behind electronic forms). Information and the medium containing it were far more closely linked. And these media tended to be heavy, in the most literal sense. For example, institutional records would occupy warehouses and record collections might occupy an entire wall in one's home. With the advent of digital technology, information easily slides from one medium to the next and these media tend to be relatively light—a laptop, a tablet, a phone, a thumb drive. For some, books have fallen from shelves into e-readers and entire record collections have dissolved onto a single hard drive. In fact, cloud computing allows information to change hands without ever literally changing hands. Instead of amassing record or movie collections on their own computer hard drives, many people utilize cloud-based streaming services (e.g., Netflix, Hulu, Amazon Prime, HBO Go, Spotify, etc.) and pay a single fee to access vastly more content than even the largest brick-and-mortar video or music stores could possibly stock on their shelves. We are not arguing that liquefaction is universal. Indeed, the rise of mp3s is coupled with a resurgence of vinyl and digital photography with a renewed interest in vintage film photography. This "solid" reaction to liquidity will receive further attention at the end of this essay. The point here is that much liquefaction has occurred and will likely continue to occur in the future.

Manuel Castells (1996/2009), perhaps best captured this shift when he said that computer networking technologies were transforming society from a "space of places" to a "space of flows." The instantaneous nature of such communication technologies collapses or compresses time and space. The effect is to transform the world from a space where certain activities were segmented to certain places at

certain times into a space where virtually any activity can be conducted any place at any time. Want to work, shop, chat, play, or pray? There's an app for that. Of course, by its very nature, it is difficult to keep what goes on in a space of flows contained. Time and space—which once behaved as natural barriers, limiting access to institutions, much like a moat—are now easily overcome. Perhaps no organization has more prominently exploited this trend than WikiLeaks.

### **WikiLeaks and Beyond**

Initially launched in 2006, WikiLeaks is a not-for-profit online media organization that publishes leaked documents alleging government and corporate misconduct. WikiLeaks founder and director, Julian Assange, is an outspoken, and often inflammatory, activist. Assange currently has outstanding criminal charges in many countries in association with WikiLeaks' activity (as well as for allegations of rape). Wikileaks' "wiki" prefix is somewhat of a misnomer because everything it publishes is vetted by WikiLeaks editors (in contrast to traditional wikis like Wikipedia where users post directly to the site). WikiLeaks explains the oversight process:

We use traditional investigative journalism techniques as well as more modern technology-based methods. Typically we will do a forensic analysis of the document, determine the cost of forgery, means, motive, opportunity, the claims of the apparent authoring organisation, and answer a set of other detailed questions about the document. We may also seek external verification of the document. For example, for our release of the Collateral Murder video, we sent a team of journalists to Iraq to interview the victims and observers of the helicopter attack. The team obtained copies of hospital records, death certificates, eye witness statements and other corroborating evidence supporting the truth of the story. Our verification process does not mean we will never make a mistake, but so far our method has meant that WikiLeaks has correctly identified the veracity of every document it has published. (WikiLeaks.org, "About," n.d., Section 1.4)

While WikiLeaks exercises editorial control over its content, it is important to note that it does not actively solicit content (which would invite conspiracy charges in many countries).

WikiLeaks made headlines with leaks (or "cables") ranging from intelligence reports on the battle of Fallujah to internal documents from the Church of Scientology to drafts of various international climate policy agreements to secret U.S. Congressional reports summarizing more than a billion dollars' worth of classified, tax-payer-funded research. However, it was not until 2010—when Chelsea Manning (then known as Bradley Manning) began releasing vast quantities of classified documents to the organization—that WikiLeaks became an international focal point. Manning worked as an army intelligence analyst in a secure facility. Her clearance allowed her to access highly-sensitive materials, which she began copying and smuggling out of the facility.

In April 2010, WikiLeaks made public a video it dubbed the *Collateral Murder*, which it had received via Manning. The video showed a bird's eye view of civilians (including journalists and children) being killed in a U.S. airstrike. Then, in October of the same year, it released detailed information on Iraqi civilian deaths. In the following month, it released a series of secret State Department cables, including some that would become of great interest during the forthcoming Arab Spring of 2011. In April 2011, WikiLeaks released a widely publicized set of files pertaining to detainee treatment in Guantanamo Bay.

In light of these developments (and the ensuing embarrassment), the United States and other governments began to argue the WikiLeaks posed a national security threat. In some instances even more extreme rhetoric was used. For example, the Republican Chairman of the House Homeland Security Committee Pete King said that "WikiLeaks appears to meet the legal criteria" (McCullagh, 2010, para. 3) of a U.S.-designated terrorist organization. Later, Representative Candice S. Miller, a Republican from Michigan, issued a statement saying, "The latest release of stolen American secrets by the organization WikiLeaks once again proves that they are a terrorist operation" (Shane, 2011, para. 11). Governments began to put pressure on personal finance institutions such as Visa, MasterCard, and PayPal to stop processing donations to WikiLeaks. This financial blockade forced WikiLeaks to temporarily suspend operations and even threatened its very existence, since WikiLeaks relies solely on donations. However, the organization still has many supporters, most notably, the ideologically sympathetic Internet community/hacker collective known as "Anonymous" who retaliated against the finance companies with a series denial-of-service attacks.

While Assange and WikiLeaks have largely shaped the conversation around digitally mediated leaking, the most politically significant leaks in the Internet age, thus far, are, by most accounts, Edward Snowden's revelations about the depth and breadth of U.S. surveillance both at home and abroad—notably, the NSA Prism program's mass collection of metadata from the email traffic of U.S. citizens and from CIA eavesdropping on the private conversations of world leaders including German Prime Minister Angela Merkel. Snowden, an NSA contractor, is reported to have scraped 1.7 highly classified files from NSA servers, which he has and still continues to parcel out selectively to reporters and news agencies (Sanger & Schmitt, 2014). Once Snowden went public, he began to consult with Assange on strategy. Assange said of Snowden, "He is a hero. He has told the people of the world and the United States that there is mass unlawful interception of their communications, far beyond anything that happened under Nixon" (Schmitt, 2013, para. 5).

Though solid state structures may have difficulty plugging leaks, they are still relatively effective at restricting the movement of flesh-and-blood leakers. Facing imminent extradition to Sweden for alleged sexual assault and fearing that this, in turn, would lead to extradition to the United States for espionage, Assange sought asylum in Ecuador's UK embassy, where he has remained for over a year. Similarly, Snowden found himself stuck in customs for more than a month at Moscow's airport until finally he was granted temporary asylum. Manning was arrested, tried, and found guilty of espionage; she is serving 8–25 years in military prison. While information may be more liquid than ever, bodies are still relatively solid and have a hard time flowing through state barriers.

### Leaking and the Ideologies of Liquidity

While the leaking of classified documents is not new (the Pentagon Papers being the most famous example), the magnitude of what is being released is unprecedented. And none of this would have happened without the great liquefiers: digital technology and the Internet. As we previously stated, these technologies create information that is more liquid and leak-able and have also allowed the WikiLeaks organization itself to become highly liquid. It is not just one website; information also flows throughout the Web on its many "mirror" sites. Material is also disseminated over peer-to-peer (P2P) networks making it truly "the new Napster" (*The Atlantic*, 2010).

WikiLeaks is more broadly engaged in what we might call *liquid politics* (i.e., the struggle to either erect or remove barriers to the flow of information). In fact, WikiLeaks has a twofold relationship with liquidity. By enabling leaks, liquidity facilitates the WikiLeaks agenda and the organization, in turn, undermines the solid institutions that act as barriers to greater liquidity. This relationship with liquidity is quite deliberate, and an examination of Assange's rhetoric reveals a nuanced (and somewhat Utopian) ideology that liquidity is antithetical to corruption. This is because liquidity produces involuntary transparency, and transparency, Assange believes, causes actors to behave virtuously. Indeed, Assange has even been called "the prophet of a coming age of involuntary transparency" (Greenberg, 2010, para. 1). This broad political agenda is evident in the imagery of the WikiLeaks logo, which is designed to valorize fluidity by drawing on the classic light/dark, good/bad trope. Perched atop the logo is a dark, dangerous, solid globe; it melts like a liquid away into a lighter, happier globe that remains partially unformed. At the bottom, the word "WikiLeaks" is written in the same color scheme as the lighter, liquid globe, as if to announce "we're on the side of this new world order."

It is important to note, however, that liquid politics are not monolithic. Adam Thierer and Berin Szoka (2009) identify two distinct ideologies that emerge in contemporary political discourse surrounding freedom/control of information on the Web: cyber-collectivism (which argues that the Internet should be regulated to best conform with our values) and cyber-libertarianism (which focuses on minimizing government regulation). In examining the WikiLeaks agenda, we believe it is pertinent to add a third category, *cyber-anarchism*, which views the Web as a tool to weaken or dissolve unnecessary or problematic institutions. Because Assange's focus is on using the Internet as a mechanism to regulate institutions (through enforced transparency) and not on regulating the Internet, few would argue that Assange is a cyber-collectivist. Most often, Assange is described a cyber-libertarian, but *The Wall Street Journal* (Crovitz, 2010), for example, has labeled him an "information anarchist" (though this may only be because it sounds more sensational).

In order to differentiate these terms, we must define them first. Cyber-libertarianism is a well-established political ideology that has its roots equally in the Internet's early hacker culture and in American libertarianism. From hacker culture it inherited a general antagonism to any form of regulation, censorship, or other barrier that might stand in the way of "free" (i.e., unhindered) access of the World Wide Web. From American libertarianism, it inherited a general belief that voluntary associations are more effective in promoting freedom than government (the U.S. Libertarian Party's motto is "maximum freedom, minimum government"). American libertarianism is distinct from other incarnations of

libertarianism in that tends to celebrate the market and private business over co-opts or other modes of collective organization. In this sense, American libertarianism is deeply pro-capitalist. Thus, when we hear the slogan "information wants to be free" that is widely associated with cyber-libertarianism, we should not read it as meaning *gratis* (i.e., zero price); rather, we should read it as meaning *libre* (without obstacles or restrictions). This is important because the latter interpretation is compatible with free market economics, unlike the former. The barons of Silicon Valley are the most visible and obvious cyber-libertarians because they argue that an environment of enforced transparency is making the world a better place and use this moral claim as a justification for the immense profits they are accruing.

Cyber-anarchism is a far less widely used term and is often not distinguished from cyber-libertarianism. However, there are subtle distinctions between the two positions. Anarchism aims at the abolition of hierarchy. Like libertarians, anarchists have a strong skepticism of government, particularly government's exclusive claim to use force against other actors. Yet, while libertarians tend to focus on the market as a mechanism for rewarding individual achievement, anarchists tend to see it as means for perpetuating inequality. Thus, cyber-anarchists tend to be as much against private consolidation of Internet infrastructure as they are against government interference. While cyber-libertarians have, historically, viewed the Internet, at best, as an unregulated space where good ideas and the most clever entrepreneurs are free to rise to the top, cyber-anarchists see the Internet as a means of working around and, ultimately, tearing down old hierarchies. Thus, what differentiates cyber-anarchist from cyber-libertarians is that cyber-libertarians embrace fluid, meritocratic hierarchies (which are believed to be best served by markets), while anarchists are distrustful of *all* hierarchies. This might be why libertarians tend to organize into conventional political parties whereas the notion of an anarchist party seems almost oxymoronic. Another way to understand this difference is through how each group defines freedom: Freedom for libertarians is freedom to individually prosper, while freedom for anarchists is freedom from systemic inequalities.

Are the liquid politics of WikiLeaks and Julian Assange best described as cyber-libertarian or a cyber-anarchist?

Assange speaks positively of markets and seems to favor minimal interference in the relationship between supply and demand. In fact, he states "So as far as markets are concerned I'm a libertarian" (Assange & Greenberg, 2010, para. 115). However, contrary to typical libertarian position, Assange is skeptical as to whether private ownership of the means of production (as opposed to collectivist or government ownership) is the best means of accomplishing this goal: "I have mixed attitudes towards capitalism, but I love markets" (Assange & Greenberg, 2010, para. 108). He explains the thinking behind this nuanced position of supporting markets, while being skeptical towards capitalism: "I have enough expertise in politics and history to understand that a free market ends up as monopoly unless you force them to be free" (Assange & Greenberg, 2010, para. 115). That is to say, like government, businesses are inclined to collude and conspire against the general public if accountability is not imposed on them through mechanisms such as enforced transparency.

Assange's primary objective in seeking a more liquid world is not to create a system that better rewards innovators (as the cyber-libertarians hope); instead, Assange's aim is to disrupt what he views as

the conspiratorial practices of solid institutions (i.e., institutions with strong barriers against the flow of information). Assange (November 10, 2006; see also Sklar, 2010) has an unusual and quite specific understanding of the word “conspiracy,” which he describes as a property of networks. Basically, a *conspiracy* is a dense cluster of individuals who rapidly exchange information to the mutual benefit of the in-group, but to the detriment of the out-group. In such an arrangement, the in-group is motivated to erect barriers between themselves and the out-group in order to further consolidate their mutually beneficial arrangement. In fact, using Bauman’s metaphor, a conspiracy is a solid structure within a network. Assange argues that the appropriate tactic for disrupting a conspiracy is not attack the actors, but to breach its boundaries and divert the flow of information. Without exclusive control over the flow of information, the conspiracy loses its advantage. Assange elaborates upon his tactics:

We can deceive or blind a conspiracy by distorting or restricting the information available to it. We can reduce *total conspiratorial power* via unstructured attacks on links or through *throttling* and *separating*. A conspiracy sufficiently engaged in this manner is no longer able to comprehend its environment and plan robust action. (December 3, 2006, p. 5, emphasis in original)

This antagonism to solid, conspiratorial institutions seems to be Assange’s driving principle. This, paired with his professed skepticism toward capitalism, seems to indicate that Assange better fits with the ideal type of the cyber-anarchist than with the cyber-libertarian barons of Silicon Valley. Assange, in fact, has little sympathy for these figures, saying in one interview

Facebook in particular is the most appalling spying machine that has ever been invented. . . . Facebook, Google, Yahoo—all these major US organizations have built-in interfaces for US intelligence. It’s not a matter of serving a subpoena. They have an interface that they have developed for US intelligence to use. (Emmett, 2011, para. 12),

In many ways, Assange is more ideologically aligned with the Internet community/hacker collective known as Anonymous. As their namesake indicates, they embrace a principle of anonymity that places inherent limits on hierarchy within the group—ethnographer Biella Coleman (2011) describes an “anti-leader and anti-celebrity ethic” as central to the group’s collective identity.<sup>1</sup> Members often work collectively to disrupt the technological infrastructure of established institutions (often in response to perceived abuses of power). All actions initiated by the group are voluntary, and it is said that anyone can

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<sup>1</sup> Assange explained that he initially tried to organize WikiLeaks in a manner similar to Anonymous:

I originally tried hard for the organisation to have no face, because I wanted egos to play no part in our activities. . . . However this quickly led to tremendous[ly] distracting curiosity about who [runs the organization] and random individuals claim[ed] to represent us. In the end, someone must be responsible to the public and only a leadership that is willing to be publicly courageous can genuinely suggest that sources take risks for the greater good. In that process, I have become the lightning rod. I get undue attacks on every aspect of my life, but then I also get undue credit as some kind of balancing force. (2010, para. 26)

spontaneously suggest a target. The ethos of the organization was well-captured in a quote retrieved from one of its Twitter feeds (@AnonymousIRC): “[Anonymous] shouldn’t be about personalities. The focus should always be transparency for the powerful, privacy for the rest.” Note that this implicit linkage between transparency and accountability is what distinguishes a cyber-anarchist from other run-of-the-mill anarchists. For the cyber-anarchist, the struggle against power is a struggle for information. Or, rather, it is a struggle to determine what information is revealed and what information is concealed. Assange is not universally opposed to secrecy; he only opposes secrecy when it reinforces conspiracy. In fact, he even praises secrecy in one interview, saying that

[s]ecrecy is important for many things but shouldn’t be used to cover up abuses, which leads us to the question of who decides and who is responsible. It shouldn’t really be that people are thinking about, Should something be secret? I would rather it be thought, Who has a responsibility to keep certain things secret? And, who has a responsibility to bring matters to the public? And those responsibilities fall on different players. And it is our responsibility to bring matters to the public. (Assange & Stengel, 2010, p. 1, para. 11)

For Assange, transparency and secrecy are tactics, not ends in-themselves. The process of reveal and conceal is intrinsically linked to any struggle for power. However, Assange celebrates “technological changes that embolden us with ways to act in which our forebears could not” (2010, p. 1). In the vocabulary employed in this article, we could interpret this to mean technology creates an environment of liquidity that enables outsiders to better make use of the tactic of enforced transparency. In fact, Assange seems to believe that a culture of transparency would improve the lot of the many with respect to the few. The WikiLeaks mission statement includes the following:

Publishing improves transparency, and this transparency creates a better society for all people. Better scrutiny leads to reduced corruption and stronger democracies in all society’s institutions, including government, corporations and other organisations. (WikiLeaks.org, “About,” n.d., Section 1.3)

Note, however, that this transparency is for institutions, not for individuals. Transparency for individuals is the purview of Facebook, Google, and the other “appalling spying machines” that Assange detests. Assange wants a completely liquid world where individuals may have their secrets, but when politically important information is shared, it is shared with everyone equally.

### **Consequences of the New Politics of Liquidity**

Assange’s complicated position on secrecy and openness highlights a larger theoretical point regarding Bauman’s liquidity thesis. Just as liquidity helps theoretically situate WikiLeaks (and leaking more broadly), the theory can also be further refined in light of this example. Assange and WikiLeaks’ nuanced view of secrecy and openness underpins a larger conceptual position with respect to the political economy of transparency.

Assange's primary goal is to end government secrecy. And he acknowledges the seemingly contradictory point that the government response to leaking is very likely a long-term move toward becoming *more secret*. And this, somewhat counterintuitively, is exactly what Assange wishes to accomplish.

Assange states that, "in a world where leaking is easy, secretive or unjust systems are nonlinearly hit relative to open, just systems" (December 31, 2006, para. 3). Put simply, what Assange is arguing is that old structures will further solidify and become less porous in response to the threat of liquefaction. The effect will be that already-too-solid structures in our liquid modernity will become even further out of step with the contemporary world. To take the liquid-solid metaphor further, we might imagine how one builds a literal structure to withstand a flood: the structure, perhaps a house, is built on stilts; not only to keep the rooms above the water but also because the stilts, poles, or pilings can withstand the same torrent of water that might push over a solid wall. The stilts might be said to be *more porous* and, as such, less solid.

Assange offers an additional metaphor:

When we look at an authoritarian conspiracy as a whole, we see a system of interacting organs, a beast with arteries and veins whose blood may be thickened and slowed until it falls, stupefied; unable to sufficiently comprehend and control the forces in its environment. (December 3, 2006, p. 5)

Drawing from these literal examples, we argue that, theoretically, in an increasingly liquid world, old, heavy structures need to become more porous or else they will be washed away in the rising wave of liquidity. Assange's strategy is precisely to make what he supposes to be corrupt institutions unwilling to reform (e.g., the U.S. government) more secretive and, therefore, less porous. As a consequence, these institutions will be less effective at communicating both internally and diplomatically to others—Assange describes this effect as a "secrecy tax" (cited in Douthat, 2010, para. 6).

The scenario that Assange describes arguably played out during the Egyptian uprisings that ousted then-president Hosni Mubarak in January 2011. Armed in part with social media—the great tool of liquid information—Egyptian protesters effectively organized themselves into a formidable force. However, Mubarak famously shut off the Internet; he literally closed the spout of liquid information. While the fact that he was effectively able to turn the Internet off signals the limits of liquidity, the aftershock resonates clearly: Erecting barriers and becoming more solid (less porous) served to make a government already in a legitimacy crisis seem even more repressive and anachronistic. Becoming even more solid—indeed, too solid—the structure of Mubarak's government was even less prepared to withstand the rising tide of a liquid world that demands free-flowing, nimble electronic communications. "Pulling the plug" on the Internet did not slow protests, but enflamed them. Unable to bend, lacking in porousness, the structure was largely washed away—at least, for a while. If the structures that are reasserting themselves in Egypt fail to become more flexible, we may see this same cycle play out again.

A much less dramatic but still illustrative example occurred when San Francisco's Bay Area Rapid Transit (or BART) subway system turned off mobile coverage because there were rumors of protest. That protest never materialized, but the restriction of communication resulted in condemnations from the ACLU and other free-speech organizations as well as angering the previously mentioned hacker group Anonymous. BART websites were then attacked, and Anonymous organized another protest that gained international media attention. We could describe more examples (such as British Prime Minister David Cameron's contemplation of shutting down certain electronic communications during the 2011 riots in London). The point is that when structures attempt to further solidify in order to repress a rising tide of liquid information, things, and people, this often serves to mobilize and instigate the crowd because these efforts to restrict the free-flow of information simultaneously confirm that information's importance.

Governments across the globe are increasingly being faced with similar decisions: further solidify or become more porous. On one hand, a government that prohibits flowing digital information in today's liquid world appears immediately repressive. On the other, allowing the free flow of information might foster dissent (which is why, for instance, China has a powerful, solid "Golden Shield"—sometimes called China's "Great Firewall"—around Web traffic that allows it to more tightly control information). This dilemma (more specifically, "the dictator's dilemma" [Tufekci, 2011]) is summed up in a *New York Times*' quote from a senior state department official,

Some may take measures to tighten communications networks. . . . Others may conclude that these things are woven so deeply into the culture and commerce of their country that they interfere at their peril. Regardless, it is certainly being widely discussed in the Middle East and North Africa. (Glanz & Markoff, 2011, para. 18)

This update to the theoretical lens of liquidity helps illustrate why becoming tighter, less porous, and more draconian (and thus more solid) makes for increasing vulnerability to the rising torrent of liquidity.

The history of the Internet will be, in part, its role in creating an increasingly liquid world—one where information largely transcends spaces and extends across time. WikiLeaks may very well come to be a paradigmatic example that is as (or more) important than Napster. It has already substantially threatened the status quo for major public and private institutions. Even if Wikileaks' influence wanes and its activists move on to other networks, the ideology it has articulated and embodied persists and continues to be embraced by a new generation of leakers (such as Snowden). If the U.S. government and other such institutions react to this changing environment by becoming increasingly solid, heavy, and out-of-date, they may find themselves increasingly unfit to compete.

### References

- Assange, J. (2006, November 10). State and terrorist conspiracies. Retrieved from <http://cryptome.org/0002/ja-conspiracies.pdf>
- Assange, J. (2006, December 3). Conspiracy as governance. Retrieved from <http://cryptome.org/0002/ja-conspiracies.pdf>
- Assange, J. (2006, December 31). The non linear effects of leaks on unjust systems of governance. iq.org. Retrieved from <http://iq.org/#Thenonlineareffectsofleaksonunjustsystemsofgovernance>
- Assange, J. (2010, December 3). *Julian Assange answers your questions*. Retrieved from <http://www.guardian.co.uk/world/blog/2010/dec/03/julian-assange-wikileaks>
- Assange, J., & Greenberg, A. (2010, November 29). An interview with WikiLeaks' Julian Assange. *Forbes*. Retrieved from <http://www.forbes.com/sites/andygreenberg/2010/11/29/an-interview-with-wikileaks-julian-assange>
- Assange, J., & Stengel, R. (2010). *TIME's Julian Assange interview: Full transcript/Audio*. *TIME*. Retrieved from <http://www.time.com/time/world/article/0,8599,2034040,00.html>
- The Atlantic*. (2010, August 5). Wikileaks Is the new Napster. The Daily Dish Blog. Retrieved from <http://www.theatlantic.com/daily-dish/archive/2010/08/wikileaks-is-the-new-napster/183908>
- Bauman, Z. (2000). *Liquid modernity*. Cambridge, UK: Polity.
- Bauman, Z. (2003). *Liquid love*. Cambridge, UK: Polity.
- Bauman, Z. (2005). *Liquid life*. Cambridge, UK: Polity.
- Bauman, Z. (2006). *Liquid fear*. Cambridge, UK: Polity.
- Castells, M. (2009). *The rise of the network society: The Information Age: Economy, society, and culture* (Vol. I, 2nd ed.). Cambridge, MA: Wiley-Blackwell. (Original work published 1996)
- Coleman, B. (2011). Anonymous: From the Lulz to collective action. In *The new everyday: A media commons project*. Retrieved from <http://mediacommons.futureofthebook.org/tne/pieces/anonymous-lulz-collective-action>
- Crovitz, G. (2010). Julian Assange, information anarchist. *The Wall Street Journal*. Retrieved from <http://online.wsj.com/article/SB10001424052748703989004575653113548361870.html>

- Douthat, R. (2010, December 1). The ambitions of Julian Assange. *The New York Times*. The Opinion Pages. Retrieved from <http://douthat.blogs.nytimes.com/2010/12/01/the-ambitions-of-julian-assange>
- Emmett, L. (2011). WikiLeaks revelations only tip of iceberg: Interview with Julian Assange. *Russia Today*. Retrieved from <http://rt.com/news/wikileaks-revelations-assange-interview>
- Glanz J., & Markoff, J. (2011, February, 15). Egypt leaders found "off" switch for Internet. *The New York Times*. Retrieved from <http://www.nytimes.com/2011/02/16/technology/16internet.html>
- Greenberg, A. (2010, November 29). WikiLeaks' Julian Assange wants to spill your corporate secrets. *Forbes*. Retrieved from <http://www.forbes.com/sites/andygreenberg/2010/11/29/wikileaks-julian-assange-wants-to-spill-your-corporate-secrets>
- Jurgenson, J. (2011, February 24). "Digital Dualism versus Augmented Reality." *Cyborgology*. Retrieved from <http://thesocietypages.org/cyborgology/2011/02/24/digital-dualism-versus-augmented-reality>
- Lehdonvirta, V., Wilskab, T., & Johnson, M. (2009). Virtual consumerism. *Information, Communication and Society*, 12, 7.
- Makey, R. (2009, January 16). Can a tweet be a scoop? *The New York Times*. The Lede blog. Retrieved from <http://thelede.blogs.nytimes.com/2009/01/16/can-a-tweet-be-a-scoop>
- McCullagh, D. (2010). Congressman wants WikiLeaks listed as terrorist group. *CNET News*. Retrieved from [http://news.cnet.com/8301-13578\\_3-20023941-38.html](http://news.cnet.com/8301-13578_3-20023941-38.html)
- Rey, P., & Boesel, W. (2014). The Web, digital prostheses, and augmented subjectivity. In D. Kleinman & K. Moore (Eds.), *Routledge handbook of science, technology, and society*. New York, NY: Routledge.
- Sanger, D. E., & Schmitt, E. (2014, February 8). Snowden used low-cost tool to best N.S.A. *The New York Times*. Retrieved from <http://www.nytimes.com/2014/02/09/us/snowden-used-low-cost-tool-to-best-nsa.html>
- Schmitt, E. (2013, June 30). Snowden revelations will continue, Assange says. *The New York Times*. Retrieved from <http://www.nytimes.com/2013/07/01/us/politics/snowden-assange.html>
- Shane, S. (2011, August 30). WikiLeaks prompts new diplomatic uproar. *The New York Times*. Retrieved from <http://www.nytimes.com/2011/09/01/us/01WikiLeaks.html?ref=WikiLeaks>
- Simmel, G. (2004). *The philosophy of money*. New York, NY: Psychology Press, Routledge. (Original work published 1907)

Sklar, U. (2010). Understanding conspiracy: The political philosophy of Julian Assange. *The Huffington Post*. Retrieved from [http://www.huffingtonpost.com/urizenus-sklar/understanding-conspiracy-\\_b\\_793463.html](http://www.huffingtonpost.com/urizenus-sklar/understanding-conspiracy-_b_793463.html)

Thierer, A., & Szoka, B. (2009). Cyber-libertarianism: The case for real Internet freedom. *The Technology Liberation Front*. Retrieved from <http://techliberation.com/2009/08/12/cyber-libertarianism-the-case-for-real-internet-freedom>

trendwatching.com. (2006, November). Transumers. Retrieved from <http://trendwatching.com/trends/TRANSUMERS.htm>

Tufekci, Z. (2011, January, 28). As Egypt shuts off the net: Seven theses on dictator's dilemma. *Technosociology*. Retrieved from <http://technosociology.org/?p=286>

WikiLeaks.org. (n.d.). About. Retrieved from <http://wikileaks.org/About.html>