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Complex contention: analyzing power dynamics within Anonymous

Justus Uitermark^{a,b}

^aDepartment of Sociology, University of Amsterdam, Amsterdam, The Netherlands; ^bDepartment of Sociology, Erasmus University Rotterdam, Amsterdam, The Netherlands

ABSTRACT

Anonymous is notoriously elusive as the movement takes on radically different guises, constantly mutates, and traverses national borders and ideological divides. Since Anonymous is difficult to grasp with conventional social movement theory, this paper uses insights from complexity theory to analyze the movement's evolution in general and its dynamics of power in particular. While participants in Anonymous radically reject hierarchy and leadership, dominant groups emerged at various points in the movement's evolution. This paper aims to explain how such dominant groups emerge and concentrate power and how they subsequently dissolve and lose power. Drawing on ethnographic research as well as secondary sources, it identifies mechanisms of power concentration and diffusion within nominally horizontalist movements.

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The nebulous entity Anonymous has claimed responsibility for a dizzying number and variety of actions, ranging from outing child molesters and chasing cat abusers to hacking into security firms and taking down websites of global corporations. Journalists often refer to Anonymous as a 'hacker collective' or a 'group of hackers,' but the movement lacks the cohesion and continuity usually associated with groups or collectives. Anonymous lacks a central authority, has no foundational ideology, does not represent categorically defined groups, does not consistently endorse ideologies, and has no fixed objectives. Anonymous can speak out against racism or promote it; Anonymous may demand military action against dictatorial regimes or oppose it; and so on. These specific qualities—the lack of a stable ideology, identity, or organizational base—mean that Anonymous' evolution is rhizomatic. Rather than being built on a foundation or directed from the top-down, the movement results from the constantly changing confluence of distributed users and systems. While participants can push the movement in a certain direction, the movement's evolution is beyond anyone's control. How are we to make sense of such a movement? If Anonymous can take on any form, then how does it take on particular guises in different episodes of contention? If there is no central coordination or leadership, how can we understand that some participants nevertheless have more power to define what the movement stands for than others?

This article analyzes the power dynamics in a movement that is, in actual fact but especially in the rhetoric of its participants, intrinsically unruly and indeterminate. While many movements have embraced networks as an egalitarian alternative to hierarchical institutions, nominally horizontal

CONTACT Justus Uitermark j.l.uitermark@uva.nl

networks tend to generate highly uneven patterns of connection and marked asymmetries of power. This is also the case for Anonymous: although many participants propagate an image of the movement as leaderless agglomerate, at various points in the movement's development, specific individuals and groups had dominant positions. What we need is a theoretical perspective that acknowledges Anonymous' intrinsic pluriformity and complexity while at the same time providing the analytical tools to grasp the movement's qualitative changes over time. Following recent theorizing in social and natural sciences as well as a few pioneers in social movement studies, I propose to use concepts derived from complexity theory to understand Anonymous' development and identify specific mechanisms of power concentration and diffusion. The literature on complexity has much to offer as it highlights how, in the absence of central coordination, highly uneven configurations can emerge. This paper's key argument is that we can understand how fundamentally polysemous, fluid, and mobile signifiers can be momentarily and partially stabilized as certain groups come to dominate by outshining and outflanking others within the movement. The empirical analysis below aims to explain how such groups emerge and concentrate power and, just as important, how they subsequently dissolve and lose power.

The next section distills from different variants of complexity theory concepts that can help understand power dynamics in movements that resist central leadership and a foundational ideology. After briefly setting out the methodology for this paper, the following section analyzes Anonymous' mutations, focusing especially on the mechanisms through which power within the movement is concentrated and diffused. The conclusion of this paper reflects on the rhizomatic qualities of social movements and asks how social movement theory should be amended to incorporate the dynamics observed in the case of Anonymous.

Complexity thinking on—and within—social movements

While social movements may exhibit certain regularities or obey certain rules, they are essentially generative, creative, and transgressive. Social movement scholars have long recognized this, and often, this attracted them to the study of social movements in the first place. But it has proven difficult to develop a framework that adequately captures these qualities (Goodwin & Jasper, 1999). Movements are defined by their capacity, however partial or precarious, to shape their own development. Movements, in other words, *self-organize*. Self-organization, a central concept within complexity theory, refers to the 'spontaneous occurrence of order' (Kauffman, 1993, p. viii). For social movements, this requires a level of autonomy from the established order that movements challenge. 'Social movements,' Castells says, 'exercise counterpower by constructing themselves in the first place through a process of autonomous communication, free from the control of those holding institutional power' (Castells, 2012, p. 9). Movements carve out online and offline spaces in which participants recursively and self-referentially enact the movement. This explains why invariant models fall short: movements are not only or primarily determined by outside causes but to at least some degree self-organize. This does not imply that movements are 'agents' or make strategic decisions. Movements are agglomerates beyond the control of any individual or groups. But they are also beyond the sole determination of environmental factors. To the degree that such self-construction succeeds and autonomy emerges, movements self-organize: they reproduce themselves with the help of their 'own logic and components' (Fuchs, 2006, p. 102). Complexity theory has provided one way to move beyond reductive analyses and emphasize the emergent, indeterminate, and iterative qualities of movements. There are two strands in the complexity literature that each have a specific contribution to make to the study of social movements.

Rhizomatic movements

One strand in the literature provides the philosophical tools to think of movements as unstable agglomerates of actors and networks traversing and defying categories and borders (cf. Chesters & Welsh, 2006; Hardt & Negri, 2004; Melucci, 1996). As recent social movements, especially the alter-globalization movement, attempt to break out of national confines and engage in the collective project of

creatively rethinking the foundations of social life, authors in this strand argue for an analogous move of scholars to rethink the analytical categories and presuppositions through which they make sense of social movements (Cox & Nilsen, 2007, p. 426). The concept of rhizome is often used to highlight that social movements emerge from the contingent combination of heterogeneous impulses (Chesters & Welsh, 2006; Deleuze & Guattari, 1987). While all movements emerge from distributed interactions among heterogeneous elements, rhizomatic movements explicitly resist ideological uniformity and organizational consolidation in favor of more open-ended modes of organizing. In other words, rhizomatic movements cannot only be objectively considered as complex and emergent but are also actively conceived and modeled that way by participants (Uitermark, 2015). For instance, the Spanish *indignados* and worldwide Occupy movements categorically rejected the delegation of power and instead hoped that a set of basic rules for deliberation would enable the movement to evolve iteratively. They self-consciously declared that they had no intention of formulating a desired end state for the movement; revolution was to come about in a bottom-up evolutionary fashion, as reflected in the slogan '(r)evolution' carried on banners at various protest sites. The desire for 'ad hoc, leaderless, participatory, and horizontalist' styles of organization is not new, but 'technology has brought a new dimension to protester desires for horizontalism by allowing ad hoc organizing to address collaborative needs in an unprecedented fashion' (Tufekci, 2015, p. 13; see also Bennett, 2013; Juris, 2012; Sitrin, 2012). Anonymous thrives on and stimulates these desires; the movement is highly heterogeneous in terms of ideology (Fuchs, 2013; Goode, 2015) and has been conceptualized as 'a hybrid of swarm and network' (Wiedemann, 2014, p. 322). Anonymous participants routinely emphasize the movement's radical openness and egalitarianism. While it is practically impossible for any authority, leader, or organization to control the appropriation of Anonymous symbolism, participants in the movement have also cultivated a culture that mitigates against the concentration and imposition of power (Coleman, 2014). This finds its expression in embracing anonymity not only as a practical means of evading the persecution for illegal acts but also as a condition that allows a higher state of organization and consciousness by shedding and superseding individuality. Anonymity is expressed and dramatized by Anonymous symbols like a suit with a question mark instead of a head and the Guy Fawkes mask donned by the lead character in the movie *V for Vendetta*. The conception of Anonymous as an emergent creature that is more than the sum of its parts finds expression in slogans like 'because none of us are as cruel as all of us' and analogies of the movement to a 'swarm,' 'giant globs of digital mucus,' a 'hydra,' a 'global consciousness,' or a 'hive.' While the movement's self-representations convey important dimensions of Anonymous' evolution, Anons are obviously not like bees in a hive or birds in a flock. Far from a supercreature that is effortlessly construed out of genetically pre-programmed units, like a hive or a flock, Anonymous is the emergent *and* contested outcome of Anons who work with *and* against each other.

Self-organization, power concentration, and saltations

A second strand in the literature on complexity focuses on the network dynamics that result from cooperation and competition. This strand is especially helpful for understanding processes of power concentration and power diffusion. Processes of power concentration are endemic to complex systems as well as rhizomatic movements. One central theme in research on complex systems is that networking among nominally equal nodes tends to produce highly uneven configurations (Barabási & Albert, 1999). The irony that rhizomatic movements face is that their rejection of the delegation of power can leave self-organizing processes of power concentration unchecked. Jo Freeman argues that the rejection of formal structure gives free reign to 'informal communication networks of friends' that are 'inevitably elitist and exclusive' (1973, p. 154). These observations, derived from a study of women's consciousness-raising groups in the 1970s, take on new meaning for movements that embrace networks as their preferred vehicle for organizing. Increased possibilities for networking not only allow new modes of egalitarian organizing but also revamp mechanisms of power concentration. Analyses of complex systems have identified a range of mechanisms through which inequalities emerge in the

absence of design and enforcement by a central authority. For instance, pronounced patterns of stratification and segregation may be the macro-level effect of micro-decisions to socialize with similar persons (Schelling, 1971). These effects are present at the level of societies and also within movements as participants who share certain interests and ideas pull together. Many analysts have further found that complex systems are highly uneven in terms of network connectivity: some nodes and clusters of nodes have many more connections than others. New nodes tend to connect to already well-connected nodes and thereby reinforce their centrality (Barabási & Albert, 1999) and well-connected nodes tend to preferentially connect to each other, creating what is called ‘rich clubs’ (Colizza, Flammini, Serrano, & Vespignani, 2006). These mechanisms of concentration are found in a great variety of complex systems, ranging from the human brain (in which cortex regions are nodes connected by white tracts) and the global airline traffic network (in which nodes are airports connected through routes) (Alstott, Panzarasa, Rubinov, Bullmore, & Vértés, 2014) and can also be expected to occur in movements as they, too, emerge from distributed local interactions (cf. Uitermark, 2012). We can therefore expect that certain groups consolidate and acquire central positions within the movement’s network system (cf. Nunes, 2014).

While mechanisms of power concentration are endemic to rhizomatic movements, so are mechanisms of power diffusion. Maintaining dominance in any complex system is hard work for elites as they have to expend resources and sustain internal cohesion (cf. Richards, 1993). Within rhizomatic movements, elites face the additional problem that putative challengers can call upon an egalitarian ethos to question elite dominance; due to the general antipathy against the usurpation of power, structural inequalities among participants are unlikely to remain uncontested (Coleman, 2014). In the belly of the beast—the Internet settings where Anons congregate—we do not see the harmonious collaboration of people who instinctively know their place within the collective (like birds or bees would) but an incessant struggle. Exactly because the movement lacks generally accepted procedures for making decisions and allocating power, there is a constant struggle to define what Anonymous is and how it should operate. Any hierarchy is thus fraught with tension and subject to challenges.

Out of these processes of power concentration and diffusion emerge configurations where some participants, action repertoires, and discourses are more prominent than others. While movements are unstable due to their participants’ constantly changing connections, they occasionally undergo sudden changes that complexity researchers call ‘phase transitions’ or ‘saltations.’ As Woese (2004, p. 180) argues, ‘evolution, as a complex dynamic process, will encounter critical points in its course, junctures that result in phase transitions (drastic changes in the character of the system as a whole).’ Such phase transitions, or ‘saltations,’ are sudden, qualitative changes. Saltational evolution is what we are interested in when we want to examine Anonymous as this movement took on radically different guises in its short history. These saltations are related to (but not determined by) the settings in which movement participants mobilize. These settings afford (Wellman et al., 2003) different kinds of configurations, with some settings (like chat channels) allowing users to build reputations and attain privileges and other settings (like image boards) encouraging users to shed individual distinctions and identities. As the movement emerges on the interface of systems and users, it develops not only different claims and repertoires but also different configurations of power. By configuration of power, I refer to the movement’s uneven network structure and the relative prominence of participants and groups of participants within it. In sum, the perspective outlined suggests movements evolve constantly and occasionally undergo drastic qualitative ruptures. The goal is to reconstruct Anonymous’ evolution and tease out processes of power concentration and diffusion at various stages of its development by examining its changing logics of collective action.

Methodology

This case study is based on an ethnography and secondary literature. In December 2010, I started visiting online settings where Anons congregated, including chat channels, image boards, and various social media. Between December 2010 and August 2011, I especially spent time on the chat

channels of the IRC network of Anonymous Operators, which at the time served as an important site for the preparation and coordination of Anonymous activity. By spending hours glued to my screen, chatting with anons, and doing background research, I got a ‘feel for the game’ (Bourdieu, 1997) without getting a full grip on the technological details or being able to observe all of the movement’s activities. In the very beginning of what became my fieldwork, I considered myself a prospective activist and curious citizen more than a researcher. Over time, my interest in the movement became more academic. Every time I had conversations I might want to use for research, I identified myself as an academic researcher and explained my purposes. I shared initial insights with some Anons with different positions within the movement, including several who had been involved in high-level hacking activities. After completing one exploratory article (Uitermark, 2011), I took steps back and digested my experiences while still keeping track of developments through social media and reading secondary literature (especially Coleman, 2014; Olson, 2012). These accounts supplemented my own primary research because they validated many of my impressions and provided fuller insight into the dynamics within groups organizing within exclusive and secretive chat channels. In addition to these secondary accounts, I drew on media interviews given by arrested Anons and leaked logs from chat channels. Although I have on occasion been present in channels where hacking activities were coordinated, I did not have the nearly same level of access as Olson, Coleman, or embedded journalists like Garrett Brown (who is currently serving prison time for his involvement in Anonymous). Whereas these authors tend to focus on the groups and campaigns that caught the public’s attention, most of my observations concerned campaigns that did not make news headlines. These observations thus shed light on the parts of the movement that receive little attention in journalistic and media accounts, yet constitute the bulk of activity at any moment in time. In addition, I could observe and experience how rank and file participants view elite users and the campaigns they are involved in. By triangulating data obtained from these different sources, I developed an understanding of the dynamic of the overall movement configuration and the position of dominant groups within it. It is notoriously difficult to separate fact from fiction as Anons often withhold or manipulate information to trick or manipulate Internet users and enforcement agencies. For this reason, and to protect the privacy of the movement’s participants, I do not use direct quotations or observations in this piece. My interest is in the movement’s general development, not in the nitty-gritty of the countless operations carried out under the Anonymous label. By abstracting away from the particularities, I hope to shed light on the broad dynamics of power concentration and power diffusion.

Anonymous’ respective configurations of power

Phase 1: the quest for lulz

On so-called image boards, users usually do not use screen names other than ‘Anonymous.’ 4chan is the largest of these image boards with 10 million unique visitors per month (Grigoriadis, 2011). Each day, 800,000 messages are posted on the site—more than 550 per minute (*ibid.*). On the largest sub-board (/b for ‘random’ messages), most messages stay on the front page for less than five seconds and on the site for less than five minutes (Bernstein et al., 2011). The image boards are a swirling stream of ephemeral messages and pictures related to everything from ponies and necrophilia to religion and porn. Reflecting the demographics of the bulk of the users—teenagers and young men from the United States and Western Europe—the boards represent an absurd combination of teenage fantasies and fears. Within this setting, selection occurs by the users—if they comment on a message, they ‘bump’ it and push it up on the site. Because users adopt the same screen name (‘Anonymous’), people profile themselves as established users through Internet dialects while slurring insults to outsiders who do not conform to the informal rules (Bernstein et al., 2011). The ruthless slandering goes together with bonding—the insiders are considered ‘/b/ros’ or ‘fellow-anons,’ the outsiders are designated as ‘faggots,’ ‘newfags,’ or ‘niggers.’ Message boards remained the prime settings for collective trolling, but the campaigns also spawned a network of smaller and larger chat networks like ‘partyvan’ or ‘bantown’ where devoted users plotted and coordinated raids. The raid on Habbo Hotel became a landmark event for

collective action springing from this environment. On 12 July 2006, Bill Cosby's birthday, thousands of black men dressed in disco outfits and with Afro haircuts, 'nigras,' flooded Habbo Hotel, an online meeting space for teenagers. The nigras blocked the swimming pools and formed swastikas. When Habbo's moderators removed the nigras, the crowds, noting that only black characters were removed, protested against the moderators' racism. The nigras dispersed, hid in libraries and private rooms, and then regrouped to again raid the pool. A year after the first Habbo raid, the nigras came back with more inciting and bizarre rhetoric. In an absurdist parody of Martin Luther King's 'million men march,' the nigras announced they were to block Habbo's swimming pools 'to stop the AIDS!' and protest the racism of the Habbo moderators. The raids on Habbo Hotel and many other targets demonstrated to participants as well as onlookers the potential of synchronized and subversive mobilizations, even if they were at this point merely ironic and playful.

The configuration of power in this phase is characterized by ephemeral collective action and unstable hierarchies. Campaigns are impulsive, whimsical, and brief, with participants typically taking interchangeable positions as faceless anons. This is not to say that degrees and types of participation are the same. Exactly because the campaigns mobilize masses, participants who put effort and wit into directing the crowd wield disproportionate power. Already early on in Anonymous' history, users opted for chat channels to plot campaigns, in effect taking on leading and coordinating roles. However, the mass dynamics on the image boards decided which campaigns took off and which did not. Such cascades are intrinsically difficult to predict (let alone steer) even in complex configurations where more influential participants can be recognized (as on Twitter, for instance; see Bakshy, Hofman, Mason, & Watts, 2011), but the default anonymization on image boards deprives users of the possibility to see whether initiators of a campaign have the qualifications to pull it off. The image boards are a 'hetacomb of failed attempts with few survivors' (Koopmans, 2004; p. 371) because the vast majority of calls to action remain unanswered. The result is an extremely volatile dynamic where campaigns that generate a positive feedback early on (i.e. they quickly draw in many participants) succeed in generating the critical mass necessary to collectively disrupt games, manipulate polls, or cause other kinds of mayhem. At this point of Anonymous' development, it 'was strength in numbers. The more people were there, the bigger the deluge' (Olson, 2012, p. 52). Anonymous had emerged from the relatively autonomous space as a self-organized and self-referential entity. Participants developed a configuration of power characterized by ephemerality of collective action and interchangeability of participants. Participants mobilized under the same banner and used a distinct set of symbols and slogans, but did not develop a stable division of labor, fixed roles, or durable networks.

Phase 2: the battle against scientology

The moment that Anonymous engaged in a sustained battle against the Church of Scientology in 2008 is widely regarded as a qualitative change of the movement (e.g. Coleman, 2014). From the 1990s on, critics had made public revelations and released classified documents to draw attention to what they considered coercive, exploitative, and manipulative strategies on the part of Scientology. These battles intensified in 2008 when Youtube removed a leaked video of scientologist Tom Cruise, attesting to the extraordinary acumen and prowess of the Church's followers. Responses to the first call for action posted on 4chan's sub-board/b were mixed, with some openly hostile to the idea ('I think scientology is cool and the guy who had this awesome idea to create a fake religion just so he can collect money from idiots is brilliant!'), others skeptical ('mission impossible—a random image board cannot take down a pseudo-religion with the backing of wealthy people and an army of lawyers'), and others falling in line with the idea ('We are the true face of the human race. We are the anti-hero, we will do good, and fuck anyone, good or bad, who happens to be in the way. The world is a fucked up place, and apathy and weak willed liberal fucks won't change it. We will, or we'll all die trying...'). A new call to action on the next day solicited more and more positive responses as users noticed that the Scientology website was experiencing downtime. Anons wrote short instructions how recruits could participate in a so-called Distributed Denial of Service (DDoS) attack in which bogus packages are send

from multiple computers to clog Scientology's servers. They also published addresses of Scientology buildings so prospective participants could call for taxis and pizza delivery.

The image boards were crucial sites for mobilizations, but the campaign sprawled to other settings. Opposition against Scientology had already proliferated in many corners of the Internet and the move to 'a better place to plan' was already hinted at in the first call to action. Veteran critics of Scientology, new Anonymous recruits, and many other Internet users responding to the battle cries increasingly gravitated to Internet Relay Chat (IRC) channels. IRC affords a very different set of roles than image boards. IRC networks have network administrators that have ultimate command over the channels, chat rooms on IRC can be closed to non-invited users, chat rooms feature a range of different positions with different privileges, and last but not least, all these features are associated with user names. These characteristics of IRC imply that there are many visible differentiations among users in terms of reputations and roles.

Gregg Housh, an avid 4chan user based in Boston, came to play a key role in this period. When Housh and four other activists congregated in one chat room to discuss press strategies, they discovered that they collectively had the skills to make a clip and put together an Anonymous video press release with a computerized voice uttering declarations of injustice against a background of dramatic visuals. The video press release became a hit in obscure places like 4chan but also in more mainstream Internet venues like Gawker and Reddit. The then little known publishing platform Wikileaks released classified Scientology documents that Anonymous volunteers helped to interpret and circulate (Domscheit-Berg, 2011). Anonymous also adopted street protests in this period. Housh had applied for a permit and was subsequently targeted by Scientologists, but instead of backing off, Housh spoke out strongly against Scientology in the courts and especially in the media. To deal with the massive inflow of recruits, Housh and his fellow activists made separate chat rooms for activists based in different cities and they also set up an exclusive and secret chat room called #marblecake for people who were deemed competent and committed enough to serve as coordinators.¹ Prompted by a video from a veteran opponent of Scientology (colloquially referred to as 'wise beard man'), they also developed elaborate protest manuals, instructing activists how to challenge Scientology while keeping within the law. Housh turned from a 4chan enthusiast with an appetite for mayhem into a strict coordinator, saying he ran meetings in a designated chat room for high-level activists 'with an iron fist' (cited in Olson, 2012, p. 88).

While whimsical mass trolling continued unabated on the image boards, Anonymous had developed an entirely different configuration as it took on Scientology and settled in IRC channels—a saltation had occurred. Movement participants organizing in this setting developed a clear organizational structure, calibrated a set of protest tactics, and had pushed forward spokespersons with clearly defined talking points. Well-structured and strongly connected groups developed synchronized and sustained campaigns with the purpose of winning over the public rather than shocking it. However, the transformation of Anonymous from a ruthless and unpredictable pack into a protest machine triggered negative feedback. There were bitter complaints about 'moralfags' and Housh and his associates saw their infrastructure come under DDoS attacks. One Anon broke every rule in the protest manual by busting into Scientology's New York offices covered in a 'thick layer of petroleum jelly' with a 'generous admixture of pubic hairs and toenail clippings'—an effort not only to shock Scientology but also to upset what had become an all too predictable movement seeking respectability rather than thrills (Dibbell, 2009).

Phase 3: the battle for wikileaks

As the battle against Scientology suffered from dwindling momentum and infighting, groups of Anonymous activists initiated other campaigns, for instance, providing Iranian insurgents with software to evade surveillance during the 2009 uprising. Coordinating from a designated IRC network hosted in a number of countries to minimize chances of persecution, Anons had struck against a range of targets with DDoS attacks and occasionally with an SQL injection attack (Olson, 2012). While

Anonymous had now become a label for online activists in pursuit of structural social change, the movement did not converge on a shared goal or gravitate to a particular setting; no campaign drew near as much attention and participants as the battle against Scientology. In 2010, Operation Payback had as its goal to strike against organizations combating media piracy. In short, in 2010, Anonymous was a fragmented movement engaging in a range of campaigns on a number of different platforms—there was no dominant logic, even if some campaigns (like Operation Payback) were more prolific than others.

A qualitative change occurred when, in December 2010, Wikileaks hit the global headlines. ‘Operation Payback’ morphed from a campaign about copyrights into a campaign about Wikileaks. The successful disruption of websites of large financial institutions like PayPal, Mastercard, and VISA also made global headlines, creating a positive feedback loop: the number of users in the IRC channels exploded in a matter of days from hundreds to thousands. New recruits provided their bandwidth for DDoS attacks, drew attention to the campaigns on social media, and set up new communication forums. Anonymous did not only scale up but also changed qualitatively. Movement participants wrote manifestos and press releases explaining the rationale of the attacks and identifying Anonymous as a force of reason and freedom:

The battle standard that Anonymous follows, however, is the freedom of information. Without information, one cannot fight for any other cause. Children will remain abused if their plight remains unknown. Nations will rage wars against their own people if cloaked in secrecy. Crimes will go unpunished, victims will go uncomfortable, and walls will remain undefended. As Thomas Jefferson put it, ‘Information is the currency of democracy.’ But we would go further and say that information is the life-blood of society. (Anonymous Press Release, December 16, 2010)

The movement not only solidified its discourse but also its methods. While DDoS attacks had often been used against copyright organizations, now DDoS became a mass tactic as recruits hooked their computers into a network controlled by an operator in one of the IRC chat rooms, in effect forming a voluntary botnet. Many participants used the Low Orbit Ion Canon, an ironically named computer program designed to make participation in DDoS attacks easy for participants without specialized computer skills. LOIC predates Wikileaks by a few years, but the program was pivotal in accommodating new recruits who were willing to participate in the attacks but lacked technical competence to operate botnets or use scripts. At the highpoints of the attacks, more than a thousand participants reportedly hooked their computers into the volitional botnet, enacting the virtual equivalent of a blockade or sit-in (Coleman, 2014). The image of masses of Internet users converging on targets provided a powerful impetus to the idea of Anonymous as an egalitarian mass movement. Movement participants in IRC channels were intensely debating targets and politics but most of all they were thrilled by the experience and the idea of Anonymous as a collective and collaborative project that transcended each and therefore belonged to all. However, there were important and largely invisible inequalities among participants. Although much of the deliberation on targets took place in public channels and through instant surveys, more privileged users—those with botnets, hacking capabilities, writing skills, or administrative privileges—coordinated in channels that were invisible to other users and by invitation only. A few users in control of (non-volitional) botnets provided the majority of digital fire power. On at least one occasion, a channel administrator also manipulated the LOIC settings to make it seem as if the attacks were carried out by masses of Anons while his botnet was in fact leading the attack (Olson, 2012). Elite users consciously and effectively created a *mise-en-scène* where rank and file users could participate in a simulated experience of bringing down websites of major corporations.

The configuration of power at this point was characterized by marked imbalances between different groups of participants. Already during the campaigns against copyrights, influential users made decisions in a channel called #command. This channel included botnet operators whose digital fire power basically gave them the capacity to decide which targets would go down. Other users in this channel manipulated Anons in the public channels into thinking that their crowd-sourced packets were clogging the target websites while in fact the botnet operations were pulling the strings (Olson, 2012). As campaigns in retaliation for the Wikileaks blockade took off, media coverage intensified and masses of new recruits flocked to the movement, the elite users within #command consolidated their

dominance. However, the users in #command could sustain their dominance for a limited amount of time only.

Phase 4: proliferation and fragmentation

As the numbers of users grew, infighting intensified and users branched off to create exclusive channels of their own. Participants who had been drawn to DDoS operations against financial institutions stuck around on the Anonymous Operators network and created channels and operations of their own. It became increasingly impossible for individuals or groups to direct and coordinate the movement, even though this did not keep some from trying. With thousands of users active in dozens of channels at any moment, the Anonymous Operators IRC network had become a tumultuous and unruly powerhouse of online activism. While Internet users were still appropriating the Anonymous label in other settings too, the Anonymous Operators IRC network by itself had become a launching pad for many different campaigns and also featured channels for different geographical regions, interests, and campaigns. While veteran and elite users were active in a number of these campaigns, connecting and coordinating dispersed efforts, many campaigns were relatively independent: their initiators embarked on their own agenda and developed hierarchies that were internal to their channels and campaigns.

Although the overall configuration was inherently fragmented, some individual campaigns came to stand out due to self-reinforcing mechanisms: if a campaign took off for whatever reason, it drew interest, and consequently attracted more participants until interest dwindled and participants changed target or moved elsewhere. This pattern continued as the revolutions associated with the so-called Arab Spring took off and one country after another attracted Anonymous' attention. For instance, the designated channel for Operation Tunisia (#optunisia) was bustling with activity as Anons engaged in crowd journalism, developed software to evade surveillance, monitored attempts by the Tunisian Government to entrap Internet users, and engaged in DDoS attacks. Experienced hackers also used their skills to deface websites operated by the Tunisian Government. While the Tunisian Government was increasingly restricting access of citizens to all but its own websites, those websites were hacked and their front pages replaced with manifestos lambasting the government and cheering on the Tunisian insurgents. After the Tunisian revolts had subsided, Anons gravitated to mobilizations for Egypt, Algeria, Libya, and other countries. Each of these operations developed its own hierarchies and divisions of labor, with some particularly active and prominent Anons being active in the chat channels of multiple or all mobilizations. In addition to the sheer number and diversity of campaigns, fissures within the elite made it increasingly difficult for them to sustain their dominance. Squabbles among elite users spilled over into public channels and on occasion escalated into full-scale conflicts involving extensive name calling, 'doxing' and DDoS attacks. The proliferation of campaigns and elite divisions created an unstable configuration of power; there were operations and Anons with more clout than others, but the overall configuration was volatile and fragmented.

Phase 5: the elite hacker spree

Hackers had been involved in Anonymous operations from the early days. While their skills provided them with resources to do things others could not, thus far, hackers had not formed a distinct clique. This slowly changed as users built up reputations and socialized in exclusive chat rooms where they could solidify their ties and reflect on their position within the overall movement. In February 2011, users in one such chat room discussed media reports on research conducted by Aaron Barr, director of the cyber security company HBGary Federal. Barr had developed a method to identify Internet users and he claimed it was so successful that he had uncovered the names of Anonymous' leaders. While Barr's claims were discussed and laughingly dismissed in the channel for Operation Egypt, the most prolific operation at the time, a group of hackers were meeting in an exclusive chat room, called #HQ, to coordinate retaliation against Barr. After a couple of days, they gained access to the servers of Barr's company, defaced his website, took over his Twitter account (and renamed it 'Colossal Faggot'),

and obtained troves of emails sent by Barr and his associates. Barr's emails contained all sorts of embarrassing information, including a slide show that proposed to undertake a slandering campaign against WikiLeaks. Although the hack was done by a few individuals, many Anons participated in a crowd-sourced effort to go through the emails and to ridicule Barr with memes. News on the campaign against Barr spread through social media and was covered on programs like the *Colbert Report*.

The reorientation from revolutions in the Middle East to a security company in the United States had been entirely improvised—the hackers decided to go after Barr only after he had presented his research and left his servers vulnerable to attack—but it did provide a prototype for a new model of mobilization. The hackers would obtain information by breaching systems and then involve the Anonymous community to publicize their findings. This implied a clear division of labor: groups of hackers initiated campaigns and selected targets while rank and file users engaged in applauding, exploiting, and communicating the breaches. This new division of labor and implied stratification were further buttressed by the arrests of dozens of Anons who had been involved in DDoS campaigns as coordinators or attackers. These Anons had different statuses in the movement—some were well-known and respected figures in chat rooms while others were marginal or entirely unknown—but they shared in common that they had not used botnets. While their roles in the attacks had been marginal, their incapacity to effectively hide their identities had made them targets for law enforcement. Up to that point, it was assumed that law enforcement had either no interest in going after Anons whose individual contributions were negligible, or that this was infeasible given their high numbers. These developments reinforced inequality within the movement: the masses of Anons lost their functionality for the attacks while skilled hackers became more prominent. Not only did they deploy their technical skills, they also became celebrities within the movement, with other movement participants being increasingly reduced to a role as supporters or spectators.

Olson (2012, p. 218) sums up the successive rounds of self-selection through which this dominant group emerged: 'Their group now consisted of Topiary, Sabu, Kayla, Tflow, AVunit, and occasionally the hacktivist called Q—a concentrated group of elite Anons. AnonOps had been a gathering of the elite in Anonymous; #InternetFeds a group of even more elite; and #HQ was a distillation of that.' Although Olson captures the general dynamic, chat logs and interviews reveal that the group actually was considerably larger and more fragmented; many other users were invited to #HQ and users were always active across a range of different channels on different IRC networks, creating a mishmash of networks rather than a clear hierarchy (Coleman, 2014). It is nevertheless fair to say that these few users now formed a tight core within the much larger and more ephemeral movement.

After having gradually grown closer and forming a distinct group, the hackers involved in the HBGary hack started Lulzsec. Lulzsec's Twitter bio originally stated that the group was there to aid Anonymous, but this was later replaced with 'the world's leaders in high-quality entertainment at your expense.' The members of Lulzsec hacked dozens of companies and organizations in May and June 2011, including X-factor, Sony (a couple of times), gaming platforms, the *Sun*, and contractors for the FBI. In stark contrast to the flurry of verbose statements made during the campaigns for Tunisia and other Middle Eastern countries, Lulzsec provided minimal and nihilistic explanations for its targets, emphasizing that they did it for the lulz (for laughs). On the occasion of their thousandth tweet, the group wrote a memo conveying the group's nihilistic and hedonistic approach to hacking:

Do you feel safe with your Facebook accounts, your Google Mail accounts, your Skype accounts? What makes you think a hacker isn't silently sitting inside all of these right now, sniping out individual people, or perhaps selling them off? You are a peon to these people. A toy. A string of characters with a value....

Yes, yes, there's always the argument that releasing everything in full is just as evil, what with accounts being stolen and abused, but welcome to 2011. This is the lulz lizard era, where we do things just because we find it entertaining. Watching someone's Facebook picture turn into a penis and seeing their sister's shocked response is priceless. Receiving angry emails from the man you just sent 10 dildos to because he can't secure his Amazon password is priceless. You find it funny to watch havoc unfold, and we find it funny to cause it. We release personal data so that equally evil people can entertain us with what they do with it.²

In an exchange with 4chan users who were infuriated that their gaming websites had been knocked offline, Lulzsec described itself as ‘the concentrated success of 2005 /b/’ and there is some truth to that. Several hackers in the group had been involved in the Anonymous world for years and through iterated selection, they had now formed this small elite group of approximately six individuals. Although Lulzsec said that it was not part of Anonymous, its hacking spree made it into the movement’s focal point. Anons flocked to Lulzsec’s IRC channels, discussed their hacks on social media, and browsed through the hacked data that Lulzsec was publishing online.

The configuration of power had changed: there was one small and consolidated focal group that stood out within the movement. This is not to say that Lulzsec’s members were masterminding the movement. Chat logs as well as interviews indicate that the Lulzsec members did not only cause havoc but were also caught in the storm. They acted ad hoc on vulnerabilities that others had discovered and improvised their responses to their growing number of enemies, including rival hacking groups, disgruntled Anonymous activists, and of course various branches of law enforcement. One of the first major figures to be arrested was a young man that used the screen name ‘ryan’ who had been providing some of the infrastructure for the group. Lulzsec closed shop after a 50-day hacking spree, but members and supporters remaining at large did not stop. Some within the group sought a return to hacking for social justice. When Lulzsec disbanded, they established #antisecc, a campaign directed against the public and private security industry:

Top priority is to steal and leak any classified government information, including email spools and documentation. Prime targets are banks and other high-ranking establishments. If they try to censor our progress, we will obliterate the censor with cannonfire anointed with lizard blood.

Hackers breached the systems of a range of different organizations, ranging from Arizona’s border police to NATO. The Stratfor hack is one of the biggest carried out as part of #antisecc. Following leads from Sabu and working with others, a hacker using screen names ‘sup_g’ and ‘anarchaos’ obtained more than five million emails from the security company and a wealth of credit card data that were used to make donations to charities.

Although the political emphasis changed from Lulzsec to #antisecc, the configuration of power remained the same: a few skilled and well-connected users served as the movement’s prime hub. Users within this hub brokered information on vulnerabilities of potential targets, connected different groups and individuals, and played a large role in representing the movement to the media. This is in particular true for Sabu, a restless and devoted hacker who incessantly incited and provoked others to strike against establishment institutions ranging from border police and banks to governments and consultancy agencies. Sabu also served as a key broker: Anons with information on vulnerabilities or in the process of a hack would approach Sabu to get him or his many associates involved. Although there were certainly many Anons who undertook actions independently of Sabu and his crew, Lulzsec and #antisecc marked a period of concentration where a group of elite hackers took a position that was similar in terms of network configuration to that of Gregg Housh and his associates during the heydays of the campaign against Scientology: attention, resources, and social contacts were in very important part channeled to and through a small group of elite hackers who functioned as the movement’s prime hub.

Phase 6: accelerating global protests through weak ties

Shortly after the Stratfor hack, it became clear that Sabu had become an informant for the FBI. In court documents, the FBI describes him as an ‘extremely valuable and productive cooperator’ who contributed directly to arrests of other Lulzsec members and spent months assisting law enforcement in the investigation of numerous hacks and hacking groups. Sabu had first been Anonymous’ connection to the underground hacking scene; now, he performed the same role for the FBI. Law enforcement also arrested Anarchaos, Topiary, Kayla, and Tflow. Many Anons were devastated by the arrests and especially by Sabu’s betrayal, but this did not mean that operations were halted. In fact, various hacks were

committed to demonstrate that the series of arrests neither deterred nor demotivated Anonymous. But the configuration in which these actions took place changed drastically. In line with Julian Assange's network theory of power, one might say that the crackdown increased the thresholds for conspiring (Assange, 2006). First, the arrests and Sabu's delivering of fellow activists to law enforcement underscored that it is dangerous to trust others or to claim credits for a hack. Developing direct ties to undertake collective action was therefore discouraged. Second, the hub's disappearance implies that others lost indirect ties to hackers, journalists, and a huge following on social media. The crackdown did not end Anonymous, but it did fragment the movement.

Anonymous lived on, not so much as an internally cohesive social movement, but as a set of symbols and communication channels that are appropriated by a range of different groups for a range of different purposes. The masks that activists donned at the protests against Scientology have now become ubiquitous as they show up in demonstrations from Brazil to Hong Kong and from Turkey to the United States. The infrastructure that Anonymous has built up over the last years is now used to communicate about a range of protests in different countries. Rather than pushing for change itself, Anonymous accelerates the diffusion of protests that are initiated by others. For instance, Anonymous did not originate the idea to occupy Wall Street, but through Twitter, IRC, and other channels of communication, it did play a crucial role in accelerating Occupy. The configuration of power, then, is that Anonymous provides weak ties among a range of different protests in a variety of geographical contexts, serving as a relational infrastructure that connects and accelerates activism originating both within and outside of Anonymous.

Conclusion

Analyzing Anonymous is hard not only for journalists and the public, but also for social movement theorists. Attempting to understand Anonymous requires a rethinking of what movements are and how we can understand them. New movements generally challenge old frameworks and therefore prompt the reconsideration and reformulation of established theories and vocabularies (Jasper, 2012) and this rethinking is particularly urgent now that there is a consensus that deterministic models fail to recognize the contingency, creativity, and unpredictability of movement dynamics (Goodwin & Jasper, 1999; McAdam, Tarrow, & Tilly, 2001). Deterministic models assuming unitary actors or discrete factors cannot grasp Anonymous as the movement takes on radically different guises, constantly mutates, and traverses national borders and ideological divides. While familiar analytical concepts like 'resource mobilization,' 'political opportunities,' 'framing,' 'networks,' and 'emotions' may help understand certain aspects of Anonymous, they do not (individually or together) allow a comprehensive understanding of movement dynamics. Much of what is normally considered foundational to movements is absent in Anonymous. For example, while the literature has suggested that 'shared beliefs' and 'solidarities' are an essential part of social movements (e.g. Diani, 1992, p. 9), this is emphatically not the case for Anonymous, whose participants acknowledge and embrace the fact that the movement can pursue radically different goals. Anons are keen to point out that the movement does not have a foundational ideology and does not represent any particular interest, value, or identity. Although it could be suggested that Anonymous is anomalous or perhaps not a movement at all, I would rather argue that Anons highlight what in other movements is easily overlooked or downplayed: the lack of any intrinsic foundation or coherence in terms of values, solidarities, or networks. For instance, while it may seem evident that the LGBT movement revolves around the rights of lesbians, gays, bisexuals, and transgender people, in practice, this is contested. For instance, some consider same-sex marriage as the movement's ultimate goal, others vehemently oppose marriage as an institution of heteronormative sexual morality that should be dissolved rather than demanded, and yet others focus on cultural self-expression rather than legal rights. By reflexively acknowledging that it is impossible to fix what Anonymous stands for, Anons remind scholars that movements are in essence fully performative and self-referential: they are brought into being by the expressions of their participants and the participants are defined as such through their expressions. When taking on

the task of developing an analytical vocabulary that can make sense of unpredictable and contingent movement dynamics, Anonymous is therefore an ideal test bed. In this context, Beraldo (2014, p. 9) proposes to analyze Anonymous as a 'movement brand,' 'a loosely connoted, but highly denotable sign, circulating through the digital ecology and mobilizing activists around disparate objectives all over the world.' Anonymous, and arguably other 'movement brands' like Occupy, represent sets of signifiers that take on radically different meanings depending on the contexts and networks in which they are mobilized. Participants are perennially engaged in struggles to settle what is intrinsically unstable: what the movement is, what it stands for, and who its legitimate spokespersons are. One of the challenges for social movement researchers is then to explain why some meanings, groups, and repertoires dominate at the expense of others. The analysis showed that this occurs when one or more power concentration mechanisms are at play. First, Anons cluster through processes of self-selection: they seek each other out based on their status, interests, and skills, with the effect that one or a few clusters contain higher concentrations of elite movement participants than others. Second, clusters with elite participants can develop collective power. As the cluster's participants develop strong internal links, they come to perceive themselves as a collective actor and they can effectively pool their resources, develop a division of labor, and coordinate actions, increasing their collective power to plan and carry out complex and high-profile collective action. Third, this group can come to serve as a hub for other clusters and individuals. Movement participants, journalists, and opponents prefer to connect to already well-connected movement participants, reinforcing the centrality of the core group and especially its celebrity figureheads (Barabási & Albert, 1999; Colizza et al., 2006). These three mechanisms were fully and jointly at play during the campaign against Scientology and in the aftermath of the HB Gary hack. As a core group concentrates power, the movement's diversity does not necessarily disappear but recedes to the background. As the spotlight is fixed on the core group, its actions and discourse increasingly define what the movement does and stands for. The group around Housh stressed the coordination, standardization, and disciplining of protest and the group around Sabu focused the movement's energies on committing and exploiting high-profile hacks. In both cases, there were countless Anons who took an altogether different approach but they received much less attention from the movement's constituents, scholars, and especially the public at large.

However, there are also mechanisms of power diffusion. First, the concentration of power antagonizes movement participants with a marginal position and a different vision of how the movement needs to develop: power concentration generates resistance from within the movement. Marginalized groups or rival elites always have incentives to question the status quo, but this is especially the case for rhizomatic movements whose participants can call upon an egalitarian discourse to criticize power holders or, in Anonymous parlance, 'leaderfags.' Second, centralization breeds vulnerability as it provides opponents—including rivals within the movement, counter-movements, and law enforcement—with a target, increasing the probability of central figures being neutralized through assault or arrest. Gregg Housh and others who spoke out publicly against Scientology were targeted by Scientologists as well as Anons who accused the group of usurping power. Sabu and others within Anonymous' circle of prominent hacktivists were almost all arrested by law enforcement and had also come under pressure from a diverse group of opponents, including rival hacker groups and disgruntled Anons seeking to uncover their identities.

If the substance of movements—their goals and means—cannot be presumed, it must be explained. The empirical analysis in this paper thus explained Anonymous' changing repertoires and goals with reference to underlying network mechanisms. The analysis presented here captures these varied connection patterns as configurations of power, focusing in particular on the degree to which logistic, symbolic, and communicative power is concentrated in one among many clusters. It is true that Anonymous is 'a hydra,' as movement participants often say, in the sense that the movement consists of multiple and relatively autonomous clusters. However, some clusters may come to play a much more prominent role than others. Investigating the underlying mechanisms and patterns of power concentration and power diffusion is, therefore, both of crucial importance in understanding Anonymous and in the study of movement dynamics in general.

Notes

1. Since Housh has become the entry point into Anonymous for both the media and academia, it is easy to overstate his role in driving the demonstrations. However, it should be recognized that the profiling of one key person as a spokesperson is not an aberration but an outcome of the structural forces driving Anonymous' move out of the image boards: Housh became identified as a result of his involvement in a street protest and became a key figure as journalists and others were looking for a reliable source and spokesperson.
2. Retrieved May 10, 2015, from <http://pastebin.com/HZtH523f>.

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Notes on contributor

Justus Uitermark is an associate professor of sociology at the University of Amsterdam and the Gradus Hendriks professor in Community Development at Erasmus University Rotterdam. Uitermark is a political sociologist interested in urban governance and social movements. His books include *Dynamics of Power in Dutch Integration Politics* (published by University of Amsterdam Press, 2012) and the forthcoming *Cities and Social Movements* (with Walter Nicholls, published by Wiley).

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