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FIELDS OR NETWORK? STRATEGIC ACTION AND SOCIAL SKILL AMONGST TWITTER ACTIVISTS

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Networks and Fields

Though massive amounts of digital trace data can be collected about how people exchange information online, the question of why they do so remains elusive. In order to explain how information cascades, how viral dynamics are launched, researchers often analyse issue diffusion following a "social contagion" model whereby information spreads smoothly and continuously across nodes (Myers and Leskovec 2010; Onnela & Reed-Tsochas 2010). Network science can be used to model the interdependence of individual actions and decisions: the previous behaviour of network participants can affect subsequent actions and decisions. At the ego-level, social influence and thresholds are invoked to explain at what point individuals are moved to act by the behaviour of others. At the macro-level, the focus shifts to the effects of network centralisation, clustering and density (Gonzalez-Bailon 2013).

Social contagion does not account for cultural dynamics or the reflexivity of actors, and we argue that a field-level approach is useful to understand how patterns of relations between networked actors are organised in collectively significant ways. Fligstein & McAdam (2012) define a strategic action field as a constructed mesolevel social order in which individual or collective actors are attuned to and interact with one another on the basis of shared (though not consensual) understandings about the purposes of the field, relationships to others in the field (including who has power and why), and the rules governing legitimate action in the field.

Right away then we must address the question of what constitutes an online field. It would be tempting to argue that, on the Internet, a network equals a field. Indeed patterns of interpersonal ties can build a network with outcomes greater than the sum of the pairwise connections between participants (Haythornthwaite 2007). Such outcomes include the ways in which information flows, positions of individuals within the network (e.g., who is most central), and how resources are distributed and circulate across the

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network as a whole. However the notion that a prominent actor's sudden entry or withdrawal would significantly change a network's metrics, and hence its shape; whereas the boundaries of a field, created by the mutual recognition and interaction of all actors, would not be affected, is persuasive: offline, the logic of fields is not encoded in the structure of the network but in the "cultural conceptions of power, privilege, resources, rules and so on that shape action within the strategic action field" (Fligstein & McAdam 2012: 30).

Online Activist Fields

Though compelling, this notion must be balanced against the specificity of Internet sociality, which is that online interactions are extraordinarily more public than their offline counterparts. What is required for an online field theory is to weigh the public performances of actors and the trajectory of issues against what is known about actors' status. Previous research in this vein has examined the online environmental field in terms of how hyperlink and frame networks foster a sense of collective identity (Ackland & O'Neil 2011). A statistical analysis of which online environmental groups were most likely to adopt a new issue such as the contestation of nanotechnology suggested that the newest entrants were more likely to adopt a new frame as the means to gain recognition and challenge the issues that the incumbents regard as legitimate (O'Neil & Ackland 2014). Similarly in the case of Occupy Wall Street activists on Twitter, new entrants were found to be more likely to use the "#s17" frame (which commemorated the first-year anniversary of the movement) than incumbents (Perez, Ackland & O'Neil 2014).

Building on these insights, we characterise an online activist field as a social arena in which participants vie for the definition of the most urgent cause or risk issue. In addition to enrolling others into a customisable collective identity, a core social skill in online activist fields is the capacity to successfully launch issues into social space. Online activist fields can be equated to networks in terms of the status of nodes and messages (since there are no other means of expressing recognition and appreciation than through visible signs such as retweets, follows and @replies). However the overall shape of a network does not constitute a field (the removal or addition of an actor might significantly change the structure of the network, but not necessarily of the field). In order to determine what makes an online field a field we examine two core aspects of field theory: the behaviour of incumbents and new entrants in response to a new issue, and the dynamics of field formation. Hashtags create ad-hoc connections between people, resulting in what Bruns and Burgess (2011) call "ad hoc publics". Yang et al. (2012) argue that Twitter hashtags "serve as both a tag of content and a symbol of membership of a community". We take the use of the hashtags #ows and #occupywallstreet as a proxy for participation in an activist field. Using Netbadges data we track and analyse the spread of issues having emerged amongst Twitter users who employed the hashtags #ows and #occupywallstreet since October 2011. Issue popularity phases are identified by applying change-point detection algorithms to a time series of the volume of tweets mentioning the relevant keywords.

RQ1. The role of dominant actors in issue diffusion

Retweets are the clearest measure of influence on Twitter, since they indicate that someone has made a conscious decision to pass information on, so we define dominants as those actors who are the most retweeted. Fligstein & McAdam (2012) suggest that incumbent socially skilled actors will defend the status quo. It follows that if a new frame emerges, it will come from a challenger group. We will assess to what extent this is the case online, or if online dominants have a different behaviour, by presenting a dynamic map of the network of actors (connected by retweets, mentions or follower relationships). To what extent are challengers prone to build niches, to what extent are dominants defined by incumbency, and likely to imitate, coopt, or merge with new frames?

RQ2. The factors leading to the formation of a new online activist field

We will also present a dynamic semantic map of hashtags constituting the issue space for OWS on Twitter, which we will then correlate to the network of actors and to the timeline of OWS events. We assess the internal and external factors which affect the trajectory and longevity of activist issues such as anonymous, fablab, and fracking. Do exogenous shocks lead to field formation? To what extent are new online activist fields likely to emerge nearby existing fields, likely to be populated by existing groups who "migrate" or by offshoots of existing groups? To what extent are new online activist fields destabilized by external shocks originating from other online activist fields, or by state actions?

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