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Citation: Mercea, D. & Funk, A. (2016). The social media overture of the pan-European Stop-ACTA protest: An empirical examination of participatory coordination in connective action. *Convergence: The International Journal of Research into New Media Technologies*, 22(3), pp. 287-312. doi: 10.1177/1354856514563663

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Link to published version: <https://doi.org/10.1177/1354856514563663>

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The social media overture of the pan-European Stop-ACTA protest

An empirical examination of participatory coordination in connective action

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As the latest instalments of protest from the Arab Spring to Occupy and beyond are digested in scholarly work, they point to a scalable, informal structure that develops as an impermanent framework for performing coordinational tasks formerly associated with collective organisations. Whilst a substitution of this nature appears a distinct possibility with social media, the participatory dynamics at the heart of such connective action remain largely uncharted. This paper scrutinizes the scope for the participatory development of motivations and resources to undertake collective action. For the purpose, it reviews an empirical study of public Facebook and Twitter communication associated with the pan-European protest against the Anti-Counterfeiting Trade Agreement. Ensuing results point to a rational, resource-oriented mode of communication figuring prominently on both platforms. Moreover, the time-distribution of motivational and resource-driven talk confound earlier claims about patterns of social media usage in collective action. Finally, despite their smaller number, motivational posts had a higher impact than resource-oriented talk on both platforms – an apparent sign of their particularly positive reception.

Key words: social media, participation, collective action, resource mobilisation, motivational coordination

In the current political climate marked by deep economic transformation, social upheaval is fast becoming a preferred avenue for voicing anger and opposition to austerity and the retrenchment of the welfare state (Castells, 2012). Recent instalments of street protests that have swept the European Union from Greece to France and Spain, Bulgaria to the UK have signalled a deep preoccupation of the European citizenry with social justice whilst also underscoring the centrality of horizontal digital media in sparking and fanning protest. Not least, protest has been directed at preserving the existing scope of digital media for unencumbered information and communication, as witnessed in the cross-national mobilisation against the Anti-Counterfeiting Trade Agreement (henceforth ACTA). With this article, we seek to investigate an ostensible process of participatory coordination with Facebook and Twitter, which were both used in the pan-European protests against ACTA. The aim of this study is to conceptualize and evaluate the scope for two modes of coordination it identifies – motivational and resource coordination – by way of a mixed-method study of data retrieved in the run-up to the last Europe-wide anti-ACTA demonstrations of 9 June 2012.

Coordination with social media tools has been principally considered in relation to the accomplishment of collective activities (Bennett and Segerberg, 2012: 749; Bennett *et al.*, 2014). Second, it has been discussed in reference to the formation of participant commitment to collective action (see Garrett, 2006; Juris, 2012; Valenzuela, 2013). This article speaks to both interests by assaying the scope for the cooperative rather than organizationally orchestrated development of requisite motivations and resources for collective action through networked communication. Consequently, we set out to delineate and empirically verify the notion of participatory coordination. Below, we begin this work with a brief overview of the Stop ACTA movement followed by a review of the sources informing the research aim and hyponym objectives outlined at the end of the same section.

ACTA, the pan-European protest and social media

According to the European Commission (2012), intense deliberations on an international agreement against counterfeit and copyright infringements started in 2007. They were followed by formal negotiations on ACTA which were launched in June 2008 and were finalized in November 2010. The main impetus for the ACTA talks has been to ‘help countries work together to tackle more effectively Intellectual Property Rights infringements’ (European Commission, 2012). On January 26 2012, the EU signed up to ACTA in Tokyo. The envisaged plan was that upon consent from the European Parliament and following ratification by national parliaments, the Council of Ministers would adopt a final decision concluding the agreement (European Commission, 2012:5).

The agreement received a swift rebuke as soon as it reached the public on grounds that it interfered with fundamental rights and freedoms and extant norms on data protection (Metzger and Matulionyte, 2011). Resistance to ACTA took off very soon after its signing. Within the EU, collective action occurred as early as the beginning of February 2012. Accounts of the initial demonstrations bear witness to ‘internet users who have protested for days both virtually and physically’ against the trade agreement (Arthur, 2012). Thereafter, the stream of demonstrations ebbed and flowed before peaking on 9 June 2012 with simultaneous demonstrations in the EU ahead of a vote on the ratification of ACTA by the European Parliament in early July that year. The opposition to the agreement comprised an array of formal organisations, informal groups and individuals manifesting their objections across multiple fora. Formal organisations such as Consumers International and the Electronic Frontier Foundation petitioned the European Parliament (Lischka, 2010) and met with EU officials at a civil society meeting on ACTA organised by the European Commission

(European Commission, 2011). The hacktivist group ‘Anonymous’ and national ‘Pirate Parties’ supported the Stop-ACTA movement either through statements on their websites or through direct involvement in demonstrations. Numerous other platforms spawned within the movement, focusing singularly on the Stop-ACTA protests. Examples here are websites such as www.stopacta.info, run by the advocacy group ‘La Quadrature du Net’.

Social media content such as tweets, twitter hashtags, Youtube videos, Facebook groups and pages seemed to act as a lifeline for the protests, connecting disparate demonstrations into a scalable network that materialised on the streets of Europe on 9 June 2012. The data at the heart of this project were gathered upon a close following of the activity associated with the Stop ACTA movement on Twitter and Facebook in March–May 2012. On the basis of informed observations, data collection commenced two weeks prior to the 9 June protest when a noticeable peak in activity was expected (Earl et al., 2013) and recorded. As a result, 19,000 tweets were harvested with the hashtag #ACTA by interrogating the Twitter Search API. The retrieved tweets were in 14 different languages. In addition, we built a database of 7,000 Facebook posts collected manually from 28 public Stop-ACTA event pages, 16 Stop ACTA groups and 6 Facebook pages representing 16 European countries. These Facebook outlets were identified with the platform’s embedded search engine.

Facebook and Twitter have been the most widely utilized social media platforms in globally reverberant protests, from the Green Revolution in Iran (Seegerberg and Bennett, 2011), to the Arab Spring (Tufekci and Wilson, 2012), the Indignados (Castells, 2012) and the Occupy Movement (Pickerill and Krinsky, 2012). A key technological affordance of both Facebook and Twitter has been to facilitate congregation around interests or attributes common to groups or individuals (Bruns and Burgess, 2012; van Dijck, 2012). Both platforms may be viewed as social infrastructures enabling, *inter alia*, the public display of highly individualized and personalized exchanges (Langlois *et al.*, 2009; Poell, 2014). On

that basis, the two social network sites can be construed as socio-technological architectures that have seized on the dissolution of collective solidarities (see below) whilst actively re-coding networks and publics with their algorithms. Consequently, they have been probed for both their *restrictive* and *productive* possibilities for social, political or cultural interrelations (2009: 417–19). At the same time, the two services leave distinct imprints on the public communication to which they are applied (Poell, 2014: 719). Twitter hashtags – key words or abbreviations preceded by the hash sign (#) – provide one pertinent illustration of these assertions. Hashtags have been noted for their instrumental role in the raising and publicizing of an issue for discussion (Bruns and Burgess, 2012:804). In that way, a hashtagged topic of public concern such as that of the repercussions of the ACTA agreement may attract myriad Twitter users who in their turn add to discussion as well as, arguably, to mustering collective responses to the issue.

On Facebook, the public expression of political preferences is made possible through fan and event pages or groups where users can gather under a shared banner. These modalities for assembling *networked publics* (Langlois et al., 2009) have proved especially valuable for political activism on multiple levels. In an illustrative case study (Harlow, 2012: 236) it was shown how Guatemalan protestors turned to Facebook pages in a descending order to call others to action, to share what they deemed as pertinent information, to voice their opinions or to reference their past and future protest participation. Similarly, Twitter has been the object of activist repurposing to express solidarity with on-going street protests (Papacharissi and de Fatima Oliveira, 2012: 275).

With the present investigation we seek to unpick the scope for participatory coordination with Facebook and Twitter of individual motivations to partake in collective action and of requisite resources for its enactment. The analytical interest therefore lies not with establishing the range of antecedent individual motives for sharing content (c.f. Leung,

2009) but rather with probing the potential for individual motives to engage in collective action to be elicited through communication on social media platforms. For the purpose, we put forward the notion of motivational coordination and probe the concept by reference to framing theory and the social-psychological treatment of participation in collective action. Subsequently, we turn our attention to the issue of resource coordination through a revisitation of resource mobilisation theory. By taking up this task, we dwell on the *productive* aspects of Facebook and assist in pinpointing the social, technological and discursive parameters and implications of enacting (contentious) politics with networked communication technologies (c.f. Langlois et al., 2009:417).

Participatory coordination of motivation and resources

Two strands of social movement theory inform this study. The first has historically alerted investigators to the pivotal position of activist organisations in collective action due to their capacity to incentivise individual participation. This line of argumentation draws on Olson's (1965) celebrated theory of collective action which has nonetheless been critiqued for failing to acknowledge that collective action is an equilibrium contingent on social interaction that aligns individual motives with collective resources and goals (Baldassari, 2009: 394). Put differently, the classical theory of collective action has been ill-prepared to entertain the possibility that activist organisations might gradually become unseated from their position as lynchpins of collective action (c.f. Flanagin et al., 2006).

Against the backdrop of late-modern individualized *life-politics* (Giddens, 1991) and a fracturing of ties between established collective organisations such as trade-unions, civic and community organisations and individuals (Bennett, 2003; Putnam, 2000) there are, on the other, emerging instances of collective action formed on the backbone of networked

communication (Flanagin et al., 2006). Social actors are increasingly finding in ICTs the means to choreograph their contention without the coordination of established movement organisations (c.f. Gerbaudo, 2012). According to this view, emergent loosely-coupled networks of variegated groups and individuals are developing a growing capacity to communicate and cooperate in a distributed, scalable and directed manner with ICTs (Langlois et al., 2009; Bennett and Segerberg, 2012).

The Indignados Movement in Spain and the transnational Occupy Movement are exemplars of the latter development (Bennett and Segerberg, 2012; Castells, 2012; Mercea *et al.*, 2013). Their lack of a central organisational structure erected by established, ‘brick-and-mortar’ movement organisations testifies to the complex user-driven networked communication fuelling and maintaining them (Bennett and Segerberg, 2012; Castells, 2012; Juris, 2012). By some accounts, the latter organizational architecture is increasingly characteristic of fragmented network societies (see Quandt, 2012). Nonetheless, this trend does not preclude a process of adaptation to the morphing communication environment upon which established movement organizations may embark to drive up their efficiency and public appeal (Bennett and Segerberg, 2012: 756).

Taking note of what is arguably a qualitative turn, Bennett and Segerberg (2012) make the distinction between *collective* and *connective* action. The latter is an expressive form of participation that hinges on individual acts of sharing ‘political demands and grievances ... in very personalized accounts’ (2012: 742). The personal nature of individual contributions, arguably, does not impede the capacity for coordination towards collective action. Such coordination is made possible by the technology itself which becomes a networked organisational structure (2012: 750).

In this light, social media are not solely an instrument for the transmission of information but also an organisational infrastructure underpinning collective action. In fact, in the latest empirical follow up to their connective action theory, Bennett et al. (2014: 234) contend that as encountered in the Occupy Wall Street Movement, through concerted peer-production, distributed networks may attain ‘coherent organisation’ as they partake in the *production, curation* and *integration* of information and resources accessible to all of them across the entire network ecology. Key vehicles in this work are *personal action frames*. They encompass ‘different personal reasons for contesting a situation that needs to be changed’ (2012: 744). They stand in contrast to stable group identities and ideologies which are organizational paraphernalia one has to embrace whenever joining organizationally orchestrated collective action (2012: 746). Accordingly, personal action frames may encapsulate multiple and granular rallying and strategic information circulated in networked communication that aids in the coordination and enactment of distributed protests (c.f. Castells, 2009, 2012). Whilst this macro-level rendering of peer-production paints a necessary global image of connective action, meso-level studies point to inequalities in involvement and influence within ostensibly decentred connective action networks (González-Bailón et al., 2013).

Such network-level dynamics need to be addressed in the analysis of framing processes (Snow et al., 1980), the second strand of social movement theory. Framing is to ‘assign meaning and to interpret relevant events and conditions in ways that are intended to mobilize potential adherents and constituents, to garner bystander support, and to demobilize antagonists’ (Snow and Benford, 1988: 198). Framing has historically been described as a process led by social movement organisations. Consequently, a fundamental critique of the frame-analytical perspective posits that one of its intrinsic weaknesses rests with the fact that ‘individual actors do the framing but the frames are ascribed to [superordinate] social

movements' (Opp, 2009: 273). In other words, the construction and negotiation of collective action frames inside social movements have remained largely unscrutinized and perhaps even more so in the context of networked communication (c.f. Bennett and Toft, 2008).

Frames are an output of discursive processes unfolding inside social movements (Benford and Snow, 2000:615). Discursive processes are 'the talk and conversations – the speech acts – and written communication of movement members that occur primarily in the context of, or in relation to, movement activities' (2000: 623). Evidence to verify inferences about the participatory discursive construction of frames has historically been scant (c.f. Gamson, 1992). Seminal studies have prioritized an examination of organisational input into the distillation of activist narratives into poignant frames circulated within sprawling constellations of activist websites (Bennett et al., 2011); or have shed light on underlying facilitative digital network structures (c.f. Bennett and Toft, 2008) whilst relegating discursive processes to a subordinate place.

If, as already shown, frames are extracted out of fuller narratives, the latter are of necessity a product of at least three points of view required to congeal however loose a sense of collective identity – that of the narrator, the protagonist and the audience (Polletta, 1998: 223). In consequence, activist narrations – and particularly those articulated within the self-expressive communicative environment of social media – lend themselves to a systematic survey of the participatory dynamics at play in the discursive construction of frames. As assumed experts in an area of contention who are prized for their 'well-evidenced and clearly specified arguments', activists are in an especially difficult position to give free rein to self-expression (1998: 230). One might therefore expect to find ordinary participants playing a pivotal part in discursive processes on social media that render the trademark narratives and frames of a collective cause. Herein, we aim to bear evidence to this assertion (c.f. Bennett and Segerberg, 2012).

In our eyes, the concept of participatory coordination may lend further granular evidence to the scholarship on connective action (Bennett and Segerberg, 2012; Bennett et al., 2014). Participatory coordination would entail the expression and publicizing of the motivation to engage in collective action and the collective pooling of resources required for such action to materialize. In making this claim we submit that whilst collective identities constructed through distinction and an emphasis on ideological or socio-economic boundaries might not be pivotal to mobilization in connective action (2012: 744–47), coordinating the motivation to participate may be a key aspect of both collective and connective action.

The dependent variables: motivational and resource coordination

As stated, we conceive of two dimensions to coordination: motivational and resource coordination. Motivation refers to ‘the desire to achieve a goal, combined with the energy to work toward that goal’ (van Stekelenburg and Klandermans, 2010: 179). Motivation is the outcome of the interplay between an individual’s cognitions and emotions pertaining to involvement in collective action and a sense of identification with an aggrieved reference group. Such groups may be galvanized through networked communication. They would comprise multiple social networks whose members become mobilized into action through information they received about their peers (Margetts et al., 2012) rather than strictly on the basis of a strong collective identity. *Motivational coordination* we envisage as peer expression and publicization of information capturing one or more of the following four types of individual motives to partake in collective action: instrumental motives, identity motives, group-based anger motives and ideological motives (Stekelenburg and Klandermans, 2010).

Instrumental motives represent a rational calculus underpinned by a cost-benefit analysis of participation which is distilled into expectations that, on the one hand, others will participate – rather than to free-ride – in large enough numbers to make goal-attainment likely; on the other, one's marginal contribution will raise the odds of success of the collective action. (2010:180). In networked communication, intimations of participant numbers have been described as a key basis for individual assessments of the opportunity to participate in collective action (Margetts et al., 2012:19). Most importantly, the two types of expectations may be the fruit of one's interaction with future participants; one's information about an aggrieved group retrieved from media accounts; and, conceivably also, an upshot of peer exchanges on social media (c.f. Tufekci and Wilson, 2012).

Put differently, individual instrumental motives for participation are not detached from but rather are embedded in and enabled by one's relationship with an aggrieved group. Indeed, identifying with a group – the identity motive – has been a primary predictor of individual participation in collective action. A collective identity shared by an individual is tantamount to a notion of 'we-ness' (Melucci, 1996) derived from a cognizance of common traits, experiences, grievances and goals which fuel the view that 'what *I* want is what *we* want' (van Stekelenburg and Klandermans, 2010: 181). Instrumental and identity motives are interlinked to the extent that solidarity with a group and its members acts as a tipping point in calculations relative to a desired outcome of collective action.

Third, what cements an aggrieved group's commitment to collective action is a sense of injustice described as 'outrage about the way authorities are treating a social problem' (Klandermans, 1997: 38) that affects the group in a perceived unfair way. A cognitively identified state of unfairness can nurture the moral emotion of outrage (Goodwin et al., 2007: 422) which is projected onto the group through *social opinion support*. The latter concept designates 'the perception that fellow group members share the experienced unfairness' (van

Stekelenburg and Klandermans, 2010: 182). Gamson (1992) has emphasized the interactive nature of the process whereby individual assessments pointing to unfair treatment are linked to feelings of injustice and ultimately the development of social opinion support. Consequently, we may expect that group-based anger is fostered and amplified through communication amongst group members.

Lastly, involvement in collective action may be prompted by a moral imperative to safeguard one's values. Values are rank-ordered conceptions of what the world should be like and how we are to act in it. Values are the building blocks of ideological motives for collective action. A challenge to a group's entrenched values may form sufficient grounds for contention as it represents a threat to the worldview of the group (van Stekelenburg and Klandermans, 2010: 183).

These four motives for collective action allow for a more pinpointed differentiation of the drivers of individual participation. However, they have formed the object of some revisions. For instance, it has been proposed that group-based anger and ideological motives can both be qualified as emotional motives. They may be informed by different cognitions but they trigger the same response, anger (Verhulst and Walgrave, 2009: 462). Thus, in assessing the scope for motivational coordination through networked communication we refer to instrumental, identity and emotional motives. Our proposition is that motivational coordination represents an important yet perhaps overlooked mode of organizational coordination (c.f. Bennett and Segerberg, 2012; Bennett et al., 2014) that may capture the interactional development of the requisite motivation through networked communication.

Concurrently, we examined the capacity for the participatory coordination of requisite resources for collective action. The starting point for the crystallization of this second analytical dimension was resource mobilisation theory. Resource mobilisation is, according

to McCarthy and Zald (1977: 1216), a process of aggregation of requisite means for collective action. In resource mobilisation theory (RMT) social movement organisations are the lynchpin of collective action due to their capacity to accumulate and convert material and immaterial resources such as money, labour, facilities or legitimacy (1977: 1220) into purposeful collective action. RMT has been amply criticized in social movement scholarship (see Jasper, 1997; Klandermans, 1997) principally because the notion of resources lumps together a wide gamut of material, cultural and socio-psychological elements such as symbols and emotions which are viewed as quantifiable objects, each with a differentiated utility for goal-attainment (Jasper, 1997: 30–31).

Alternatively, resource mobilisation may be viewed as chiefly a cultural task for SMOs that consists of extracting ‘usable resources from a population’, the most palpable of which is money (1997: 31). If we can now conceive of cases where organisations take a back-seat in collective action, connective action networking (CAN) may constitute the latest avenue for ground-up resource mobilisation. Indeed, as a mode of networked communication premised on sharing of user generated content through trusted social relationships CAN enables the pooling of resources for collective action (Bennett and Segerberg, 2012: 753), arguably including tangible ones such as money, materials, maps, plans of action as well as one’s own time (Jasper, 1997). Thus, rather than referring to an aggregative capacity, resource coordination references interpersonal communication directed at assembling tangible means for collective action. We would advance that the salience of the proposed notion of resource coordination derives from the goal to examine networked communication not just as a means to organize on-site actions in the course of a protest (Earl et al., 2013) but arguably as an equally important avenue for gearing-up for collective action as witnessed in the clean-up operation following in the wake of the London riots in 2011 (Lewis et al., 2011).

To investigate participatory coordination, in the empirical study we tackled the following objectives:

1. To map out the communication on the Stop ACTA Facebook outlets and with the Twitter “#ACTA” hashtag in order to probe the scope for motivational and resource coordination;
2. To examine the extent to which motivational communication related to communication directed at pooling together instrumental means for collective action;
3. To scrutinize the time distribution of motivational and resource coordination posts on both platforms;
4. To gauge the ability of the structural markers of a post to predict their coordinational character and impact.

The research design and the independent variables

We propose a layered methodological approach to the study of participatory coordination incorporating content and computer-mediated discourse analysis on the one hand and correlational and logistic regression analysis, on the other. Content analysis was conducted on a probabilistic sample of Facebook and Twitter posts and comments extracted from the data at a 99 per cent confidence level and a confidence interval of +/- 3 per cent (N = 3343). We coded the combined Facebook and Twitter data corpus for the presence or absence of participation motives as well as for evidence of resource coordination (Objective #1). Depending on its semantic complexity, each coding unit was amenable to multiple coding

(see also Mercea, 2013). The coding categories were established with an understanding that online, text-based communication is a vehicle for performing action online as well as for signifying embodied action in an ecology devoid of physical presence (Herring, 2004). Borrowing this epistemological perspective from the computer-mediated discourse analytical (CMDA) approach, we grounded our analysis in its central premises that i) patterns may be present in discourse which may be revealed upon systematic, second-order examination by the researcher; ii) in parsing discourse one may gain access to linguistic as well as non-linguistic acts as texts provide insights into language choice, cognitive and social underpinnings of a statement; iii) CMDA necessarily interrogates technological features of any online platform for their bearing on communicative acts occurring on them (Herring, 2004: 341). A detailed description of the coding protocol can be found in the appendix to this article. Coding commenced with reliability testing by two independent coders on a subsample representing a standard 10% of the sampled units (Neuendorf, 2002; N =339). Resultant reliability scores proved robust and are reported in Table 1 together with frequency counts for the types of coordination encountered.

In addition to the codes for motivational and resource coordination, the occurrence of a ‘like’ associated with a Facebook post and retweets (RT) on Twitter were recorded. There are two types of ‘likes’ on Facebook. ‘Likes’ as endorsements for a fan page which have been used by activists as a heuristic measurement of their support (Caren and Gaby, 2011: 13); and secondly, ‘likes’ for a post allowing users both to signify their support for it (Harlow, 2012: 233) as well as to promote its content through ego-networks (van Dijck, 2012: 168). Our analysis concentrated on the latter type as the key unit of analysis were individual posts.

Recent insights into patterns of content dissemination on Twitter have designated retweets – the republication of a message by other users than its original author – as a source of reference-based ‘information cascades ... [that] alter the metrics of popularity and signal

the value of content both to future viewers and to algorithms that determine search results or recommend content' (Thorson et al., 2013: 3). Whilst Facebook publicly records the number of 'likes' accumulated by a post on a fan page, the capturing of retweets may be limited by the configuration of the Twitter application programme interface (API) or limitations in the software used to gather the tweets (for a comprehensive review see Highfield et al., 2013). Indeed, our data corpus likely did not comprise all the tweets posted in the research period (c.f. Driscoll and Walker, 2014). Nonetheless, we expected the real-time, round-the-clock collection we performed to closely follow the ebb and flow of the Twitter communication as it mirrored developing events (2014: 1759) in the ACTA movement. In light of these constraints, communication on both Facebook and Twitter is discussed in the conclusion with a view to theory-building rather than to making statistical generalizations.

To tackle Objective # 2 we ran a set of bi-variate correlations to assess the degree to which motivational and resource coordination were coextensive as well as to discuss any observed patterns of coordination. In addressing Objective #3 we set out to verify the postulate by Earl and her colleagues (2013:3) that communication on Facebook would peak ahead of a protest as it is geared towards boosting its visibility and fostering participation. Contrariwise, Twitter usage would be higher during a protest and would follow events on the ground. We queried these claims with reference to motivational and resource coordination. Our analytical interest was to provide a needed evidence-based assessment of the apparent distinctions between the platforms. Analysis began with the plotting of the 5 coordination variables in SPSS against a date variable to obtain a measure of the number of times in a day any of the researched forms of coordination occurred. The y axis in the time-series reported in Figures 1 to 6 present a ratio of the per-day occurrence of a coordinational post relative to the total amount of the same type of post.

Finally, using exploratory logistic regression (Field, 2005), we assessed the bearing of the structural characteristics of a post – the date and language of publication, organisational membership of the postee and the frequency of his/her contributions, the retweets and ‘likes’ a post received – on its coordinational character and impact (Objective #4). All dependent variables in the logistic regression analysis were binaries for the presence or absence of a post’s characteristic of interest, e.g. the expression of an instrumental participation motive.

As to the independent variables, the regression model comprised Twitter RT, and Facebook ‘likes’ that were examined as proxies for a post’s impact, i.e. its ability to trigger a public reaction (Bruns and Burgess, 2012: 807; Harlow, 2012). Next, by means of the date variable we performed an additional verification of the relationship between the moment a message is posted and its content. Whilst Earl et al. (2013:4) have shown that tweets published in the course of a protest event are likely to contain locational data, we set out to ascertain the likelihood of a link between the coordinational character of a Facebook or Twitter post and the moment of its airing.

Moreover, we tested for any relationships between the dependent variables and organisational membership, the language of publication and the level of activity of the postees. In line with Bennett and Segerberg’s (2012) terminology, we created an ordinal variable for postees comprising three categories: i) ‘brick-and-mortar’ organisations; ii) network-based organisations and iii) individual contributors for postees who did not identify themselves as or with an organisation. In line with connective action theory, we expected that particularly brick-and-mortar organisations would be marginal to participatory coordination.

Further, in online communication, language is often a means for people to avow their attachment to a sub-culture (Barton and Lee, 2013: 68). In our case, we used language as a variable controlling for any possible coordinational patterns attached to a language

community. Finally, we relied on evidence pertaining to a ranking of Facebook postees as high, medium and low-frequency postees (Harlow, 2012) to ascertain whether the volume of postings may account for any coordinational patterns on both Facebook and Twitter. Previous indications point to low-frequency postees often expressing support and encouragement for their collective action with high-frequency postees more often attempting to mobilize their peers into action (Harlow, 2012: 236).

Empirical study

The overwhelming majority of postees on Facebook were individuals (96.5 percent), whilst representatives of networked-based organisations accounted for 3.3 percent of the postees and ‘brick-and-mortar’ organisations for 0.1 percent. On Twitter, organisations were better represented than on Facebook (4 percent of the posts were by brick-and-mortar organisations, 6.5 by network-based organisations) but still made up a small minority by contrast with the number of posts generated by individuals (89.4 percent). On both platforms, the chief example of a brick-and-mortar organisation was the Pirate Party whilst exemplars for networked-based organisations were groups affiliated with the Anonymous hacktivist network or the French group La Quadrature du Net.

We designated low-frequency postees to be those who contributed no more than 2 posts throughout the entire two-week period. These represented the largest cohort – 75 percent on Twitter and 37 percent on Facebook. Medium-frequency postees were next in line with one post a day. They accounted for 20 percent of posts on Twitter and 34 percent on Facebook. Finally, high-frequency postees – with more than 1 post per day – were the least numerous category on both platforms although the discrepancy in terms of the number of contributions was higher on Twitter (3 percent were high-frequency postees) than on

Facebook (30 percent). Thus, although the volume of posts was smaller on Facebook than Twitter, communication among Facebook postees seemed to be more evenly distributed with more people making repeated contributions than on Twitter. Lastly, the most vocal language cohorts on Facebook were the French (36 percent), Dutch (18 percent) and the German (17 percent) whilst at the other end were the Finnish, Luxembourg and Czech groupings totalling less than 1 percent of the posts. On Twitter, English (41 percent) and German (26 percent) were the most used languages, Icelandic, Finnish and Romanian being the least occurring ones (less than 1 percent of posts).

Addressing Objective #1, we noted that resource coordination was significantly more prevalent than motivational coordination in the communication preceding the 9 June 2012 pan-European Stop ACTA protest (see Table 1). Moreover, both varieties of coordination made up just a little over half of the entire communication probed in this study. This general finding was interpreted as evidence that a significant part of the communicative exchanges on social media dealt with the pooling of instrumental resources for collective action and only secondarily touched on the four types of motives for participation scrutinized here.

From among those motives, the most prevalent were instrumental ones followed by identity and ideological motives on Facebook and ideological and identity motives on Twitter. Thus, at first glance and on both platforms, the discourse pertaining to participation in collective action seemed to be deeply imbued with rationality. In relative terms, Facebook proved to be more of an arena for affirming collective identity than Twitter. Whilst this finding could benefit from more ethnographic disambiguation, it may equally be interpreted as evidence that the Facebook ecology is more conducive to the avowal of collective identities; or alternatively, that the absence of definite group boundaries on Twitter makes collective identities a topic of somewhat less prominent concern. Instead, Twitter

communication showcased a significant amount of ideological talk as postees asserted their shared values in the face of the ACTA agreement.

TABLE 1 HERE

Continuing with Objective #2, a set of bi-variate associations were used to assay the relationship between motivational and resource coordination. First and most importantly we observed a small degree of association between the two types of coordination on both platforms. On Facebook, the stronger associations were between instrumental and group-based anger, on the one hand and resource coordination, on the other. These results alluded to participatory coordination as being a rational process infused with a sense of unity as well as dissatisfaction with the conduct of public officials, arguably a significant out-group for the Stop ACTA protestors on Facebook. On Twitter, resource coordination correlated with ideological, instrumental and group-based anger motives whilst not being infused with a shared identity. Thus, although chiefly rational and resource-oriented, the two platforms were distinct motivational arenas.

TABLES 2 AND 3 HERE

Second, a further exploration of motivational coordination revealed no association between instrumental and any of the other motives on Facebook. Identity motives correlated with emotional motives but no association was found between the latter. On Twitter, instrumental motives were associated with identity and ideological motives whilst no statistically significant relationship could be detected among the other motives. These findings reinforced the claim that Facebook and Twitter fostered disparate motivational environments, an assertion further substantiated through a Mann-Whitney U test. The latter pointed to dissimilar population distributions for instrumental and ideological motives on the two platforms.

Objective #3 was tackled first through an exploration of time-based variations in the evocation of participatory motives. The invocation of instrumental motives started on a relatively high note on both platforms before simultaneously diving only to climb up again on Twitter around the end of the first week and stay higher than on Facebook thereafter. Fluctuations in the voicing of instrumental motives were less marked on Facebook although there was a gradual decline in it before the end of the period which stood in contrast to a rising momentum on Twitter.

FIGURES 1 AND 2 HERE

Secondly, at the start of the two week period, identity motives seemed to be evoked simultaneously on both platforms after which they appeared to be polar opposites with identity-talk ebbing on Twitter whilst concurrently flowing on Facebook. At the end of the two weeks, identity motives were expressed with more zeal on Facebook than on Twitter although identity-talk seemed to mount on Twitter in the immediate run-up to the protest. Thirdly, at the onset, group-based anger was vented quite vigorously on Facebook steadily declining thereafter until the eve of the protest when it rose again but not up to earlier levels.

Contrastingly, group-based anger on Twitter was initially hardly voiced only to incrementally rise subsequently, reaching a comparably high peak on protest day. Fourthly, ideological-talk started on a higher note on Facebook where it fluctuated sharply thereafter ending up on an ascending path at the end of the first week. In the second week, it oscillated considerably on both Twitter and Facebook, spiking up one day before the protest. Thus, overall, with the clear exception of instrumental and ideological-talk, there were notable dissimilarities in the time-wise articulation of participation motives on the two platforms. Most prominent of the contrasts was that of the enunciation of identity and group-based anger on the day of the protest. Identity was affirmed vividly on Facebook on the day of action

whilst at the same time identity-talk was tanking on Twitter. Finally, a steady build-up in communication pertaining to resource coordination was noted on Facebook whereas on Twitter midway through the two week interval there was a contrasting lull. Resource coordination peaked earlier on Twitter than on Facebook where it was more intense in the second week and ended up on an ascending trend on protest day.

FIGURES 3, 4, 5 and 6 HERE

As to Objective #4 and the relationship between participatory coordination and the structural characteristics of posts, the only predictions relative to the incidence, in general, of motivational coordination on Facebook related to its occurrence which was unlikely to take place on Austrian and Polish groups. On the other hand, the rate of motivational coordination was likely to increase as soon as motives were endorsed through a 'like'. Second, and more specifically, the invocation of instrumental and emotional motives could not be predicted with any of the structural factors. Staying on Facebook, identity motives were less likely to be evoked on the day of the protest than on any other day; and least so on Austrian or Swedish groups. However, they seemed to rise in frequency with the number of 'likes' they collected.

TABLE 4 HERE

Resource coordination appeared particularly unlikely at the beginning of the two week run up, taking a dip at the end of the first week when it was less likely to take place than at any other point in time during the researched two week period. On Facebook, the idea of communication representing an incremental build-up of efforts to take collective action

seemed not to stand up to scrutiny. The data suggested that bursts of activity better characterized participatory coordination. Moreover, the number of ‘likes’ was statistically linked to the expression of identity and ideological motives as well as to resource coordination posts, the results thereby alluding to a particularly significant impact of those posts among the Facebook population. In the last instance, this test pointed to a likelihood of Facebook coordination being focused principally on the pooling of instrumental resources, among a limited number of language groups.

On Twitter (see Table 5), motivational coordination appeared unlikely to take place a week before the protest day but it rose significantly with each post in Japanese, the language of the country where ACTA was signed. Concurrently, it decreased with comments made in Portuguese whilst likely increasing with each retweet. Put differently, overall motivational coordination seemed to be mainly the province of a language community that was not directly involved in the 9 June pan-European protests. However, solidarity events were planned in Japan to coincide with the European demonstrations. More specifically, instrumental and identity motives were unlikely to be invoked above all one week ahead of the protests. However, identity motives were very likely raised on the day of the protest, a finding which suggested that despite the observed dip in identity-talk on Twitter, the evocation of this motive became important for the Twitter contingent on the day of the protest.

Instrumental motives were less likely to be expressed half-way through the two week interval. Likewise was group-based anger which in addition was particularly unlikely to be invoked on the day of the protest. Further, there were more chances of group-based anger being voiced systematically by networked-based organisations. This was the only evidence that organisations, albeit of an ethereal variety, made a significant contribution to participatory coordination. Conversely, ideological inflections were common at several points in time throughout the period, suggesting that those motives had been invoked more keenly

than any of the other ones. In particular, Japanese postees were likely to brandish ideological motives for collective action.

TABLE 5 HERE

As on Facebook, the likelihood of resource coordination decreased towards the end of the first week with another low recorded on 4 June, five days before the protest. Whilst German-writing postees appeared more likely to engage in resource coordination, the opposite was true of Spanish and Japanese postees. Moreover, appeals at resource coordination were unlikely to be retweeted thereby suggesting that such posts may have not been viewed as equally salient to motivational coordination by those involved in the Stop ACTA communication on Twitter. By the same token, motivational posts had a significant positive impact.

Conclusions

At the outset, this article promised to examine the public Stop ACTA communication on Facebook and Twitter with the aim to discern the scope for participatory coordination. The empirical analysis traced a significant amount of activity on those platforms – more than half the posts reviewed – which pertained to participatory coordination in both its motivational and resource-pooling varieties. Significantly, it also signalled that by-and-large participatory coordination was not stewarded by activist organisations and might therefore be regarded as an exemplar of connective action networking. The exception was the assertion of group-based anger by ethereal organisations which are arguably a spinoff of the medium and therefore an embodiment of the organisational affordance of networked communication (c.f. Bennett and Segerberg, 2012).

Resource coordination seemed to be the more prominent form of coordination among the two, a finding which adds further verification to claims that new media are more often than not relied upon in an instrumental manner for the orchestration of collective action (see from Diani, 2000; Stein, 2009; to Theocharis, 2012). In this vein, it has previously been proposed that Facebook may be a vehicle for emergent cooperation by individuals who converge on a Facebook-advertised protest event and make individual contributions to its organisation (Rosen et al., 2010). With the present study, we endeavoured to weigh those inputs for traces of user participation in the propping up of not only instrumental resources but also motivations for collective action.

This investigation is an early attempt at a systematic mapping of motivational coordination with social media. Existing observations of, for example, Facebook usage to express support for collective action or to rally up participants in it are arguably heralds of the phenomenon (Harlow, 2012). Building on that analysis, this article proposed that an instrumental and resource-driven mode of coordination may be at play in connective action on both Facebook and Twitter. Second, echoing the notion of a ‘double articulation of code and politics’ (Langlois et al., 2009: 417), we posit that the ostensible affordance of Facebook event pages to galvanize the formation of affiliative protest networks (see Rosen et al., 2010) may be accompanied by its deployment to boost collective identities and emotions.

As for Twitter, we would propose that future research reflects on the extent to which ideological motives may be a proxy for the expression of solidarity and the development of a shared identity on Twitter, a social network site where social groups are not a predefined technological affordance. Likewise, on the back of these findings, we would invite a renewed probe into the degree to which the articulation of collective identities may vary alongside technological affordances and socio-linguistic practice peculiar to an individual platform (c.f. Bennett and Segerberg, 2012; see Barton and Lee, 2013).

Thus far, a mutual reinforcement of participation motives at the level of individual cognitions has been revealed (c.f. Stekelenburg and Klandermans, 2010: 181). Herewith, we evidenced a similar process albeit in protest-related networked communication. We have remarked that as postulated by those authors, identity and instrumental motives would be interlinked, albeit in networked communication on Twitter. Additionally, ideological and identity-talk were closely connected on Facebook public outlets, i.e. groups and pages, whilst identity motives fed into emotional motives on the Stop ACTA Facebook groups. Lastly, motivational talk had what seemed as a higher impact than resource-coordination posts on both platforms. Despite their smaller numbers, this was regarded as an apparent sign of the particularly positive reception of motivational posts.

In the two weeks preceding the 9 June Stop ACTA demonstrations, we noted that notwithstanding earlier indications of a general surge in protest-related communication on Facebook in the run-up to it and a peak in activity on Twitter on the day of the protest (Earl et al., 2013), motivational and resource-generating activity saw an early start on both platforms. Resource coordination witnessed a more momentous onset on Twitter than on Facebook where, contrary to expectations, it ended up on an ascending trend which stood in contrast to corresponding Twitter activity. As to motivational coordination, there were dissimilarities in the occurrence of participation motives on the two platforms with Facebook public outlets appearing to be a medium for bursts rather than build-ups in motivational coordination. A sharp illustration of this was that of identity-talk which saw a significant rise on Facebook a day before the protest, only to subsequently become particularly unlikely to occur on the day of the event.

As summarized above, this article produced some evidence of a participatory coordination of motivations and resources for collective action. However, retrospectively, the

notion of participatory coordination may be further qualified by dint of a revisitation of sociolinguistics to take account of the concept of *literacy events*. A literacy event is an instance wherein text informs human interaction and interpretations thereof (Heath, 1982:50). The participatory coordination depicted herein may be viewed as a *literacy event*. That is because, whilst networked communication appeared to stimulate the conveyance of motivations and resources for participation in collective action, a good part of the analysed social media communication did not touch on these aspects. Moreover, the evidence of coordination we identified does not neatly fit into a coherent – either platform-based or cross-platform – pattern.

Ultimately, we would encourage additional probing of our central concept of participatory coordination in order to shed more light on whether online motivational talk and attempts at resource coordination contribute to actual participation in collective action. First, we would invite analyses that employ user metadata to additionally interrogate cross-platform participatory coordination. Second, the evidence we reviewed calls expressly for further empirical research to verify the proposition that social media are a key expedient to the aggregation of individual participants in physical protests (c.f. Juris, 2012). Protest surveys incorporating items for participatory coordination with social media (c.f. Walgrave and Verhulst, 2011) may be a method to be employed for the purpose in research at physical protests.

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Biographies

Dan Mercea is lecturer in media and communications in the department of sociology at City University London. His research has concentrated on participation in contentious politics. In his recent studies, he has focused on the impact of networked communication on individual involvement in physical protest; on notions of shared collective identities among networked participants and finally, on organizational changes among digitally connected activist groups.

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Appendix

Coding Manual

Coding Instructions: If a post allows you to answer any of the questions below in the affirmative then classify it under the relevant code(s). Thus, first ask if any motive is aroused. Subsequently, ask what contribution is solicited/ put forward. Mark positive answers with 1. If there is no positive answer to any of the questions below code 0.

CODE: INSTRUMENTAL MOTIVE

- 1) Is the postee sharing information about the expected benefits of the Stop ACTA protests?
- 2) Is the postee putting forward his/her opinion about the expected benefits of the Stop ACTA protests?

3) Is the postee asking for information the expected benefits of the Stop ACTA protests? Is the postee asking for other people's opinion about the expected benefits of the Stop ACTA protests? 4) Is the postee sharing information about the expected benefits of participating/the cost of not participating in the Stop ACTA protests? 5) Is the postee putting forward his/her opinion about the expected benefits of participating/the cost of not participating in the Stop ACTA protests? 6) Is the postee asking for information about the expected benefits of participating//the cost of not participating in the Stop ACTA protests? 7) Is the postee asking for other people's opinion about the expected benefits of participating/the cost of not participating in the Stop ACTA protests? 8) Is the postee sharing information/opinions about expected participant numbers at an ACTA protest? 9) Is the postee sharing information about the expected costs of the ACTA agreement? 10) Is the postee putting forward his/her opinion about the expected costs of the ACTA agreement? 11) Is the postee asking for information the expected costs of the ACTA agreement? 12) Is the postee asking for other people's opinion on the expected costs of the ACTA agreement?Is the postee sharing information about the costs and/or the benefits of ratifying/preventing the ratification of the ACTA agreement? 13) Is the postee putting forward his/her opinion about the costs and/or the benefits of ratifying/preventing the ratification of the ACTA agreement? 14) Is the postee asking for information on the costs and/or the benefits of ratifying/preventing the ratification of the ACTA agreement? 15) Is the postee asking for other people's opinion about the costs and/or the benefits of ratifying/preventing the ratification of the ACTA agreement?
CODE: IDENTITY MOTIVE 1) Is the postee expressing a sense of shared characteristics with other Stop ACTA protestors? 2) Is the postee expressing a sense of shared experiences with other Stop ACTA protestors? 3) Is the postee expressing a sense of shared goals with other Stop ACTA protestors? 4) Is the postee expressing an overall sense of commonness with other Stop ACTA protestors? (V & W, 2009) 5) Is the postee expressing support for (other) Stop ACTA protests? 6) Is the postee expressing support for the Stop ACTA movement? 7) Is the postee identifying with others involved in the Stop ACTA movement? 8) Is the postee expressing an overall sense of being part of the Stop ACTA movement?
CODE: GROUP-BASED ANGER 1) Is the postee expressing anger about the conduct of public authorities on the ACTA agreement? 2) Is the postee expressing anger about the reaction of public authorities to the ACTA agreement? 3) Is the postee expressing anger about the conduct of public officials on the ACTA agreement? 4) Is the postee expressing anger about the reaction of public officials to the ACTA agreement?
CODE: IDEOLOGICAL MOTIVE 1) Is the postee conveying a sense that his/her values have been violated by the ACTA agreement? 2) Is the postee conveying a sense that society's values have been violated by the ACTA agreement? 3) Is the postee conveying a sense that extant norms have been violated by the ACTA agreement? 4) Is the postee conveying a sense that the ACTA agreement is based on illegitimate values?
CODE: RESOURCE COORDINATION 1) Is the postee offering financial support for upcoming Stop ACTA protests? 2) Is the postee offering material resources to be used in upcoming Stop ACTA protests? 3) Is the postee offering her/his time to assist with activities in the Stop ACTA campaign? 4) Is the postee asking others to help with activities in the Stop ACTA campaign? 5) Is the postee asking for financial support for upcoming Stop ACTA protests? 6) Is the postee asking for material resources to be used in upcoming Stop ACTA protests? 7) Is the postee asking for directions to the site of Stop ACTA protests? 8) Is the postee offering directions to the site of Stop ACTA protests?Is the postee asking for information about plans relating to Stop ACTA protests? 9) Is the postee offering information on plans relating to Stop ACTA protests?

Table 1: Motivational and Resource Coordination on Facebook and Twitter				
Code	Total Frequency (N=1843)	Facebook Frequency (N=763)	Twitter Frequency (N=1080)	Krippendorff's Alpha
Instrumental motives	280	81	199	.86
Identity motives	142	57	85	.85
Group-based anger motives	70	23	47	.90
Ideological motives	219	43	176	.97
Resource coordination	1132	559	573	.84
Note: The number of coded units (N=1843) is smaller than the total sample size (N=3333) because 45% of the posts were coded as non-occurrences of the designated forms of coordination. See appended coding instructions for a detailed description of the coordination codes.				

Table 2: Bivariate associations of coordination variables on Facebook						
Variable	Motivational coordination	Instrumental motive	Identity motive	Group-based anger motive	Ideological motive	Resource coordination
Instrumental motive	-	-	.009	.039	.025	.099***
Identity motive	-	.009	-	.086**	.151***	.058*
Group-based anger motive	-	.039	.086**	-	.041	.065*
Ideological motive	-	.025	.151***	.041	-	.042
Resource coordination	.122***	.099***	.058*	.065*	.042	-
Note: *** p<.001; ** p<.01; * p<.05. Reported statistic: Spearman's Rho						

Table 3: Bivariate associations of coordination variables on Twitter						
Variable	Motivational coordination	Instrumental motive	Identity motive	Group-based anger motive	Ideological motive	Resource coordination
Instrumental motive	-	-	.062**	.008	.045*	.091***
Identity motive	-	.062**	-	-	.031	.019
Group-based anger motive	-	.008	-	-	.010	.070**
Ideological motive	-	.045*	.031	.010	-	.101***
Resource coordination	.156***	.090***	.019	.070**	.101***	-
Note: *** p<.001; ** p<.01; * p<.05. Reported statistic: Spearman's Rho						

	Table 4: Logistic regression models predicting coordination character of Facebook posts (block entry method, Exp (B))					
	Motivational coordination	Instrumental motives	Identity motives	Group-based anger motives	Ideological motives	Resource coordination
	N=1347	N=1347	N=1347	N=1347	N=1347	N=1347
Date	-	-		-		
26.07.2012						.416*
27.05.2012						.465*
28.05.2012						.283**
29.05.2012						
30.05.2012						.547*
31.05.2012						.410*
01.06.2012						
-						
04.06.2012						
-						
09.06.2012			.286*			
Postee	-	-	-	-	-	-
Brick-and-mortar organisation						
Network-based organisation						
Individuals						
Frequency	-	-	-	-	-	
High						.484***
Medium						.432***
Low						
Language		-		-	-	
Austrian	.142*		.101*			9.244*
Danish						10.022*
Polish	.165*					14.149*
Swedish			.051*			6.658*
Likes	1.152***	-	1.208***	1.207*	1.153	1.124*
Model	R ² =.064(Nagelkerke)	R ² =.038(Nagelkerke)	R ² =.155 (Nagelkerke)	R ² =.404(Nagelkerke)	R ² =.153 (Nagelkerke)	R ² =.117 (Nagelkerke)
Sig : *.05, **.01, ***.001	$\chi^2=48.142$, df= 32, p<.01	$\chi^2=18.594$, df= 32, n.s.	$\chi^2=63.190$, df= 32, p<.001	$\chi^2=33.304$, df= 32, n.s.	$\chi^2=51.776$, df= 32, p<.01	$\chi^2=122.945$, df= 32, p<.001

	Table 5: Logistic regression models predicting coordination character of Twitter posts (block entry method, Exp (B))					
	Motivational coordination	Instrumental motives	Identity motives	Group-based anger motives	Ideological motives	Resource coordination
		N=1984	N=1984	N=1984	N=1984	N=1984
Date						
26.05.2012					3.011*	
27.05.2012					2.801*	
28.05.2012						
29.05.2012						.185***
30.05.2012						.552*
31.05.2012	.281***	.248***	.247*	.182*		.122***
01.06.2012						.337***
-						
03.06.2012					3.034*	
04.06.2012						.188***
-						
07.06.2012					3.690***	
08.06.2012						
09.06.2012			2.352**	.063*		
Postee						
Brick-and-mortar organisation		-	-		-	-
Network-based organisation				5.344***		
Individuals						
Frequency						
High		-	-	-	-	-
Medium						
Low						
Language						
German		-	-	-		2.622**
Spanish						.264*
Japanese	4.947**				5.952*	.316*
Portuguese	.082*					
Retweet	1.265*	-	-	-	-	.619**
Model	R ² = .147 (Nagelkerke)	R ² = .083 (Nagelkerke)	R ² = .157 (Nagelkerke)	R ² = .141 (Nagelkerke)	R ² = .160 (Nagelkerke)	R ² = .305 (Nagelkerke)
Sig : *.05, **.01, ***.001	$\chi^2=205.374$, df= 37, p<.001	$\chi^2=80.009$, df= 37, p<.001	$\chi^2=95.232$, df= 37, p<.001	$\chi^2=57.065$, df= 37, p<.01	$\chi^2=148.237$, df= 37, p<.001	$\chi^2=476.520$, df= 37, p<.001

Figure 1: Motivational and Resource Coordination on Facebook

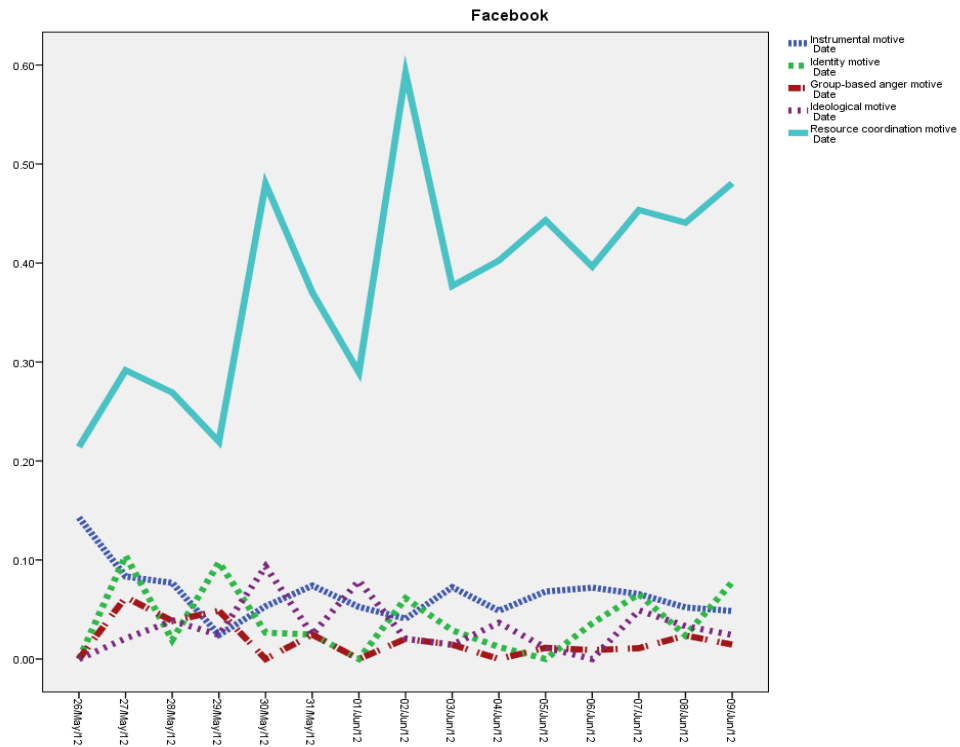


Figure 2: Motivational and Resource Coordination on Twitter

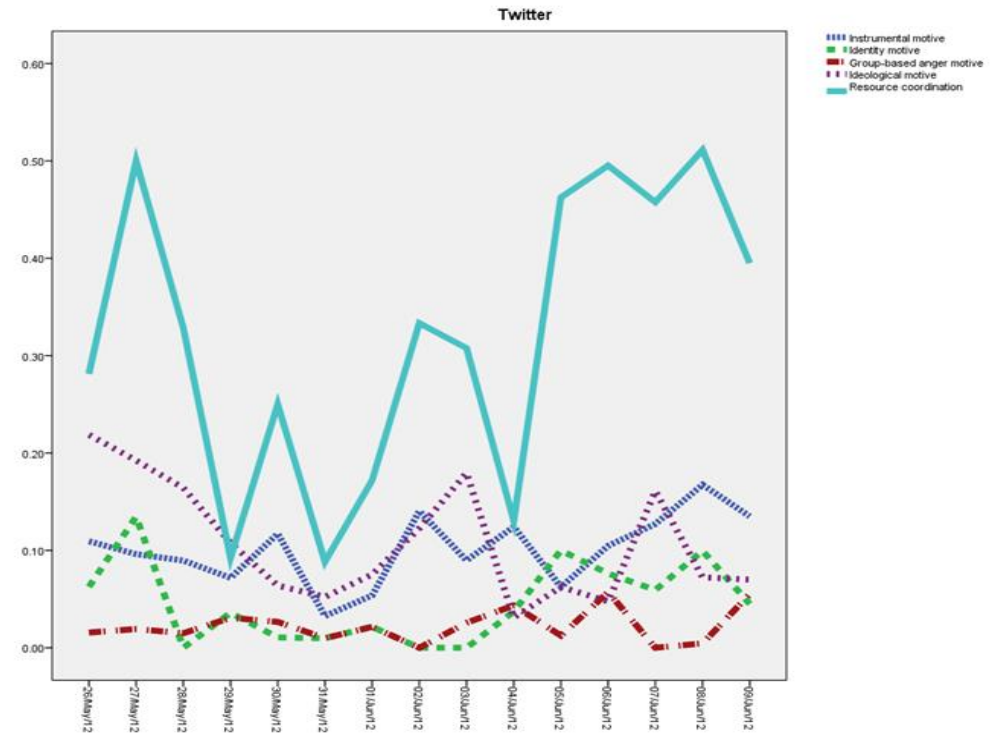


Figure 3: The articulation of instrumental motives on Facebook and Twitter

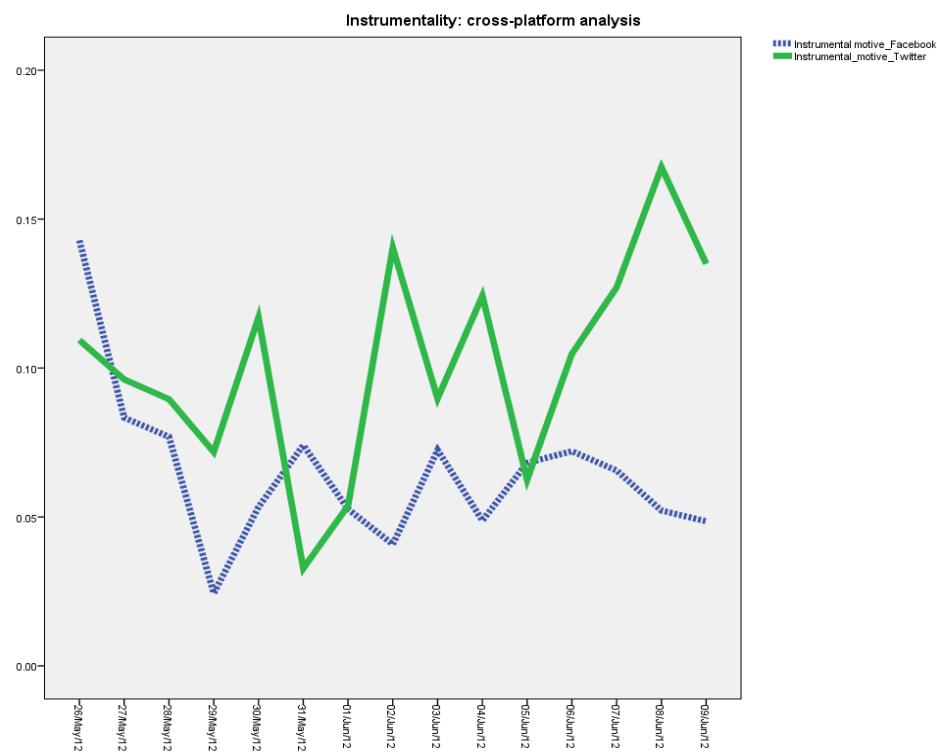


Figure 4: The articulation of collective identity on Facebook and Twitter

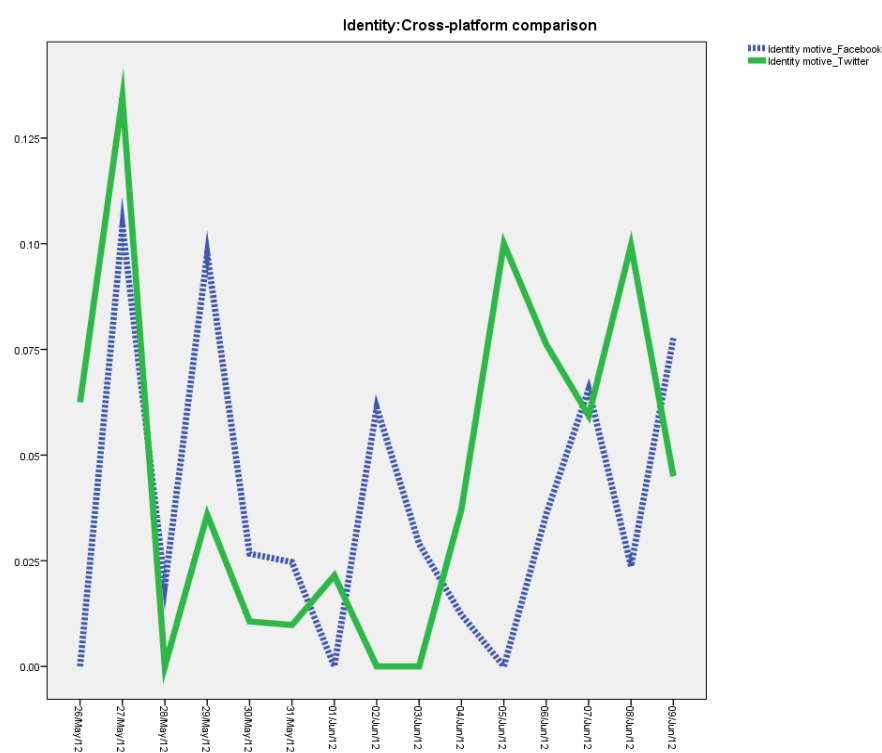


Figure 5: The articulation of group-based anger on Facebook and Twitter

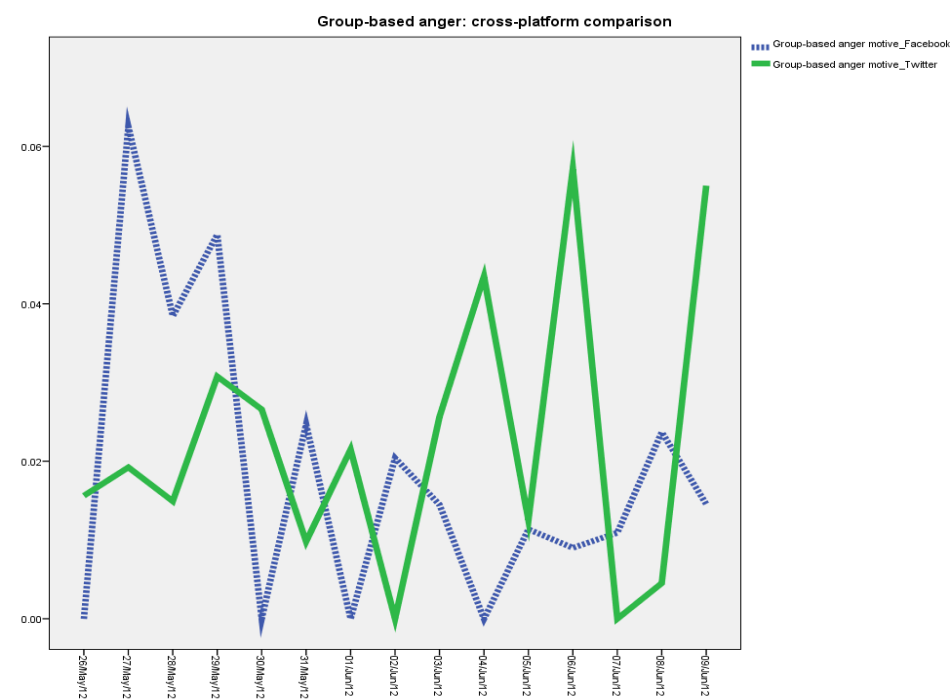


Figure 6: The articulation of ideology on Facebook and Twitter

