

Twitter and Public Reasoning Around Social Contention: The Case of #15ott in Italy

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Abstract

This paper addresses the use of Twitter for public reasoning and opinion making around issues related to social contention. It specifically focuses on the Italian chapter of the 15 October 2011 polycentric protest for Global Change. By exploring Twitter streams, the study follows four specific lines of investigation: the positioning of the Italian #15ott hashtagged Twitter stream among other Twitter streams relevant to the protest, conversational dynamics over time, networking and news media dynamics, and processes of meaning construction. The findings show that Twitter usage related to social contention is not only functional to generate alternative information flows with organizational and logistic purposes. It also bolsters processes of public reasoning and opinion making activated not only by collective advocacy actors and media channels but also by individuals not necessarily involved in offline protest action.

Keywords

Twitter, social contention, meaning construction, Occupy Wall Street, Indignados.

Introduction

On October 15th 2011 protestors from all walks of life took to the streets of over eighty countries to protest against the global economic crisis and demand changes in the global economic system.

Transnational social justice activism is nothing new. Since the so-called 1999 ‘battle of Seattle’, polycentric, segmented, networked protest events for global justice have mushroomed all over the world in the form of “protest waves” (Koopmans, 1993). Modular repertoires of contention (Tarrow, 1998) have characterized contemporary transnational protest where organization, tactics, and performances have transferred from place to place and from local mobilization to local mobilization mainly via online and/or mobile communication (namely text messages, mailing lists, websites, and early social media).

However, today’s activism for global change seems new in two aspects: the current socio-political background marked by the global economic crisis, and the use of microblogging platforms of communication to spread information, co-ordinate protest activities, debate on protest issues, and counter, integrate or disseminate mass media coverage of protest events (Seegerberg and Bennett, 2011).

The Italian local involvement in the 15 October 2011 global protest is particularly interesting for two main reasons, one contingent and one contextual: the outcomes of the protest and the country’s booming of microblogging activity. First, Italy was the only country where the 15 October 2011 global protest re-

sulted in violent events, with street destructions perpetuated by several hundreds of activists and clashes between protesters and the police. Second, in a moment in which microblogging is the fastest growing Internet activity all over the world, 11% of the Italian population do microblog, with Twitter being by far the most popular microblogging service (globalwebindex.net). In fact, the 15 October 2011 global protest was widely covered on Twitter by Italian activists, journalists, commentators, and common citizens before, during, and after the protest itself.

By applying a case study approach, the present work aims to investigate the role of Twitter in the discussion around contemporary polycentric collective action. The study is structured on the analysis of the most prominent hashtag in the Italian demonstrations on October 15th: #15Ott. The Twitter hashtag is particularly relevant to the purpose of this study because, by gathering tweets posted by different individuals (e.g., activists, journalists, common citizens), it cuts across the protest space (Segerberg and Bennett, 2011). In other words, it allows one to focus on comments by any individual interested in the events. Given the outcomes of the protest, the use of the Italian hashtag #15Ott did not cease after the demonstration, with new tweets mushrooming in the days after the protest itself. Therefore, the study focuses on over 8000 tweets produced in the thirty days following the protest: from the mid-morning of the 16th of October until the morning of the 15th of November 2011. The following section provides a general background on the polycentric protests for Global Change and specifically introduces the 15 October protest for Global Change in Italy. Next, I review theoretical and empirical contributions on the use of Twitter for protest events and I specifically focus on the study of Twitter streams as channels for public reasoning and opinion formation around the meaning of social contention. The following section introduces data and methods used in the study. The remainder of the paper shows the study's main findings with reference to four primary lines of investigations: the positioning of the Italian #15Ott hashtagged Twitter stream among the corresponding international streams, the shaping of conversation dynamics over time, the development of networking versus news media mechanisms, and the enactment of processes of meaning construction.

The 15 October Polycentric Protest for Global Change and its Italian Chapter

The 15 October polycentric protest for Global Change was launched in late August 2011. Two transnational collective actors first promoted the call for action: the Indignados coalition and the Occupy Wall Street Movement, later to be renamed the Occupy Movement. The former, emerged in Spain in May 2011, had already spread in several European countries particularly affected by the economic crisis (namely, Greece and Italy). The latter was about to take 'to the square'¹. Those collective actors shared at least two main attributes: they drew inspiration from the Arab spring and they mobilized – in broad terms - against economic inequality. On the one hand, as Giugni (2012) suggests: "the upheavals in the Middle East have encouraged citizens in other parts of the world, including the U.S., to take to the streets to show their discontent." On the other hand, as said, transnational polycentric activism for social justice was nothing new. The so-called Global Justice Movement of the late 1990s and early 2000s mobilized on economic equality through hundreds of polycentric protests (Della Porta, 2007). In fact, the new born movement for Global Change can now be seen as a direct descendent of the GJM, emerged in a moment in which the circumstances have become favorable for a new wave of transnational contention.

1 The OWS movement officially started in September 17, 2011 with the occupation of Zuccotti Park in New York City.

The mobilization of the 15 October polycentric protest for Global Change was first publicly launched online via independent and mainstream social media. *n-1.cc*, for instance, is a social network loosely used by activists mobilizing within the movement for Global Change (*takethesquare.net*). It was developed in July 2011 by Spanish hackers involved in the Indignados protests and soon became a platform of discussion open to those interested in taking action in the demonstrations. On Facebook, together with the multilingual event '15.O International Mobilization: #globaldemocracy' several monolingual events (e.g. the French 'Révolution Mondiale pour une Réelle Démocratie', the Spanish 'Revolución global: Democracia real YA', and the German 'Echte Demokratie Jetzt') and communities (e.g. the Italian '15 ottobre: un milione di indignati in corteo verso il parlamento') were created to mobilize demonstrations at national and city levels. Clips launching and promoting the call for action were posted on Youtube and Vimeo video sharing social networks. Twitter streams around the protest emerged in late August and grew exponentially a few days before October 15 to further develop during and after the protest. Several hashtags were used to build Twitter streams relevant to the demonstrations, from those formerly implemented to discuss issues relevant to the Occupy Movement (e.g., #occupywallstreet and #ows) to the new ones more closely concerned with the 15 October demonstrations (i.e., #15o and #15oct). In sum, social media became a leading platform to post and gather information on the transnational call for action and to organize local demonstrations.

According to activist records, the October 15 polycentric protest for Global Change took place in over 1,000 cities around the world (15october.net). Participation levels varied from country to country and from place to place. In Italy, activists took to the street in over 20 cities with the biggest demonstration taking place in Rome. There, around 200,000 people participated in the protest (15october.net). The Rome demonstration was primarily organized and mobilized by the so-called 'Coordinamento 15 ottobre', a coalition endorsed by leftist political parties, social movement organizations (among which the leading *Popolo Viola*²), and trade unions. *Coordinamento 15 ottobre* planned a march in the heart of the city, to start from Piazza della Repubblica and summon in Piazza San Giovanni. On the afternoon, part of the activists involved in the rally turned violent while hooded protesters, later to be loosely identified as *Black Block*³, set the city on fire. Cars, shop windows, bank entrances and police vans became the main targets of destruction while clashes between protesters and police occurred in several locations, resulting in over 100 people being injured (*Corriere della Sera*, October 16). According to a communiqué released by the press office of Rome City Council on November 14, 2011, the damage from the rioting amounted to €900,000 (*comunedirioma.it*). According to mass media and activists' records, the protest only turned violent in the city of Rome.

This study is primarily interested in the way in which social media bolstered public discussion on the events occurred during the Italian chapter of the protest. As said, Twitter hashtagged streams cut across the protest ecology, i.e., they may involve different players, from activists to journalists on to citizens merely interested in the events. Hence, by exploring Twitter activity one can raise considerations on the way Twitter is used for processes of public reasoning and opinion formation around instances of social contention with strong impact on the general public.

2 *Popolo Viola* (Purple people) is a social movement emerged in Italy in October 2009, with the main purpose to call for the resignation of the then Italian Prime Minister Silvio Berlusconi. Since 2009, *Popolo viola* has organized several polycentric protests all over Italy, with its leading chapter remaining in the city of Rome.

3 The label 'Black Block' has been traditionally used to identify clusters of anarchist affinity groups declaredly open to police confrontation, blockades and property destruction. They usually wear black clothing and masks (Fernandez 2008: 58-59).

Theoretical Background

Twitter and Social Contention

The intertwined relationship between new media and contemporary protest is a central concern for scholars from both the social movement and the media and communication traditions. After Iran's Green revolution, the debate has centered around the possible consequences of social media on politics. "In general, [...] "real" consequences continued to be measured in terms of prodemocratic institutional outcomes, and "new media" often boiled down to Twitter" (Segeberberg and Bennet, 2011: 198). In fact, among social media in general, Twitter in particular has been associated to recent social movements, protest events, and examples of social contention.

Segeberberg and Bennet highlight how social media are now entering the protest action ecology, i.e., they are becoming part of the protest environment in which they operate (2011: 200). As Christensen highlights, the long lasting divide between techno-dystopians and techno-utopians centers the debate exactly on the role of new media – now social media – in processes of social contention (2011: 156). If, on the one hand, the former warn against the re-emergence of contemporary forms of technological determinism, on the other hand, the latter draw attention to the successful role of social media in the recent uprisings in totalitarian regimes (e.g. Egypt, Lybia). In particular, Gladwell (2010), from the first camp, stresses on the role of Twitter, Facebook and the like, in the generation of ephemeral ties among activists and protesters. He questions the real impact of such weak ties in bolstering processes of social contention and public debate. Gladwell (2010)'s considerations very much recall scholarly work on early twenty-first century social movement coalitions, when it was argued that digitally networked activism was ephemeral (Tarrow, 1998: 176-194, Castells, 2001: 142). And yet, early twenty-first century social movement networks have successfully grown, developed, and transformed. In particular, what it was then called the Global Justice Movement seems to have evolved into the current polycentric Movement for Global Change, mobilized, among the others, by the Occupy Wall Street and the Indignados activist groups (Giugni, 2012).

Morozov (2009a) also highlights the little internal relevance of social media in countries like Moldova where the levels of Internet access and literacy are below the average.

However, while the skepticism brought forward by Gladwell (2010) and Morozov (2009a), among the others, was corroborated by the aftermath of the 2009 Iranian protests and the protest ecology of the Moldovan revolution, the following Arab spring could not but open new threads in the debate.

The claims characterizing optimistic views around the early "Twitter revolutions" (i.e., Moldova and Iran uprisings), the Arab spring, and more recent polycentric protests, have focused on two issues: the successful use of Twitter to make local causes known to transnational audiences, and its importance for mobilization, organization, and information purposes for activists at the local level. First, the protesters' ability to make their cause known to larger audiences means disclosing information to citizens and journalists alike beyond national borders (Segeberberg and Bennet, 2011: 198). Indeed, reliability and representativeness of Twitter streams are always issues to be taken under consideration. However, in a vacuum of information from traditional media (e.g., in cases of social unrest in totalitarian regimes), Twitter streams have become one of the very few available sources of information for local and transnational audiences. In his early analysis of the Arab uprisings Cottle suggests: "New social media, YouTube, Twitter, Facebook, along with online bloggers

and mobile telephony, played a central role in communicating, coordinating and channeling the rising tide of opposition and variously managed to bypass state controlled national media as they propelled images and ideas of resistance and mass defiance across the Middle East and North Africa” (2011b: 293).

The second issue to be considered concerns the use of Twitter as a platform of interaction to mobilize, organize and inform activists and non-activists on contentious events. In relation to this, Bennet and Segerberg (2011: 781) suggest that Twitter streams are channels for individuals to personalize the protest. In other words, Twitter has become one of the alternative ways for individual actors to participate and contribute to the protest communication network. In fact, Twitter hashtags mark Twitter streams topically so that anybody on Twitter can follow conversations centered on specific topics. Such topics are indicated by a hashtag followed by a keyword. As boyd et al. (2010) suggest, this practice recalls the use of tags to categorize online content. Hashtags may be used, for instance, to create buzzes around specific events or issues. Social movement leaders and supporters may use them to report on events or issues. But also others not directly involved in the events may use them to contribute to the general discussion on the subject at stake. In fact, while social media per se are to be considered as one and only one of the factors possibly easing the emergence of protest waves, they certainly play a role in shaping alternative platforms for “public reasoning and opinion formation” (Cottle, 2011a: 27). Let us then focus on the use of Twitter for informal political debates around topics relevant to social contention.

Twitter and Public Reasoning Around Social Contention

Recent empirical studies on the use of Twitter in relation to social contention have started tackling the problem of analyzing Twitter streams. Bajpai and Jaiswal (2011) assembled a sample of 2,452 tweets relevant to the 2010 Thailand Protests. Similarly, Segerberg and Bennet (2011) analyzed a sample extracted from over 100,000 tweets with reference to two hashtags used in the protests against the 2009 United Nations Climate Summit in Copenhagen. As part of the Guardian’s “Reading the Riots” project, a research team from the London School of Economics has recently published the early results of the analysis of 2.6 million tweets relevant to the August 2011 riots in London and other cities in the U.K. (Procter and Vis, 2011). These ground-breaking studies all show evidence of the challenges to be faced in the attempt to analyze Twitter archives specifically relevant to protest events in terms of organizational structures and processes of information sharing among activists. However, if we look at Twitter streams as channels of communication for wider processes of opinion formation within a general public, i.e., made of activists, non-activists, individuals only generally interested in protest events, how can we investigate individual tweets and tweet interactions?

Twitter streams generate networking mechanisms that cut across the users’ own offline social networks. As Segerberg and Bennet (2011: 201) state: “Twitter streams can (although do not always) attract diverse players, from individuals to organizations, and include contributors and followers from afar and in the midst of the action.” However, the question of how such networking mechanisms work in terms of network cohesion and reciprocity is still open. Kwack and colleagues (2010) generated an archive of 106 million tweets to study network structures developed on the Twitter platform. Their analysis shows that Twitter seems more likely to become a news media than a social network as such. In other words, on the one hand, networking mechanisms show relevant homophily and little reciprocity, i.e., Twitter players tend to communicate with other players with similar opinions and overall dialogical interactions are anyway very rare. On the other hand, the classification of trending topics shows that the majority of topics “are headline or persistent news in nature.” (Kwak et al., 2010: 10). Hence, these findings suggest that Twitter streams are

likely to lack strong networking patterns but can become channels for opinion making and public reasoning within online active audiences.

Indeed, Twitter players may take on different roles in the generation and development of specific Twitter streams. They may introduce different links and amplify certain threads via @ replies (Honeycutt and Herring, 2009) and/or RT retweets (boyd et al., 2010). For instance, Kwak et al. (2010: 10)'s study shows that "once retweeted, a tweet gets retweeted almost instantly on the 2nd, 3rd, and 4th hops away from the source, signifying fast diffusion of information after the 1st retweet". In fact, Twitter streams may look very different on the basis of their hashtag management and such differences can be studied in terms of gatekeeping processes. In the case of protest events, for instance, protest organizers may centralize hashtag management around issues related to protest organization and logistic instructions. Conversely, different players may more or less equally hold on Twitter streams, and this is usually the case of post-protest streams.

Given the considerations on the use of Twitter streams in relation to social contention discussed in the previous section, it is interesting to look at Twitter from a related but different perspective. In other words, can Twitter become a platform of interaction for discussions around social contention open to wider audiences? Can Twitter participate in or even improve processes of opinion making and reasoning around protest events of high impact for the general public? How do different players participate in such informal political debate?

Data and Methods

By drawing upon previous analyses of Twitter streams (see, among the others, Bajpai and Jaiswal, 2011; Segerberg and Bennett, 2011) this work applies a mixed-method approach to tweeted messages, specifically focusing on four aspects of Twitter usage: the positioning of the Italian #15Ott hashtagged Twitter stream (i.e., was the #15Ott stream used in the same way as other protest-related streams?); tweeting dynamics over time (i.e., how did information flows fluctuate?); networking structures and news media processes (i.e., who tweeted to whom, gatekeeping dynamics), and processes of meaning construction around social contention on Twitter (e.g., how was protest violence discussed over Twitter streams?)

Segerberg and Bennet (2011: 199) underline two drawbacks in the current scholarly debate on the study of Twitter use for mobilizing and organizing purposes during protests: the tendency to look at Twitter as a "stand-alone" platform, isolated from the remaining media ecology, and the propensity to extract Twitter from the broader political context. Bajpai and Jaiswal (2011: 1) add: "despite the abundance of dialogue, there is currently a marked absence of theoretically informed frameworks which can be utilized to qualitatively evaluate the various claims attributed to the Twitter platform in the context of protest events". Hence, in line with these considerations, this study will look at Twitter as part of the media ecology of a democratic country. Yet, the paper's focus shifts the attention from the use of Twitter for mobilizing and organizing purposes in protest events to the use of Twitter streams for the construction of informal political debate around social contention.

The primary data collection task for this study involved assembling tweets relevant to the 15 October protest for Global Change in Italy. Concerning the first line of investigation (i.e., the positioning of the Italian #15ott hashtag among other international hashtags before, during, and after the protest), a spreadsheet was created to gather quantitative information on the development of three hashtagged streams relevant to the protest (Hootsuite.com). The time-period covered by this part of the study is 15 September – 15 No-

vember 2011. Concerning the following three lines of investigations specifically focused on the use of the #15ott Twitter stream after the protest (i.e., changing dynamics over time, networking versus news media mechanisms, and processes of meaning construction), 8,041 #15ott hashtagged tweets were logged (Twapperkeeper.com). The time-period covered by this second part of the study is 16 October – 15 November 2011, namely the first month following the protest.

Analysis and Findings

Twitter Streams Relevant to the 15 October Protest for Global Change: #15ott, #15oct, and #15o

As said, social media soon became the primary channels to gather information on the 15 October polycentric protest for Global Change. In particular, on Twitter two hashtags emerged as most prominent in preparation for, during, and after the demonstrations: the multilanguage #15o and #15oct hashtags. By mid-September Twitter streams with reference to these two hashtags counted between 100 and 400 tweets a day. By the beginning of October they reached around 2000 tweets a day. A specifically Italian stream related to the protest started on October 7 with reference to the new Italian hashtag #15ott. #15ott then became the major point of reference for Italian citizens interested in the demonstration.

By investigating the development of Twitter streams related to protest events, one can raise preliminary considerations on the specific use of those streams by Twitter users. In other words, by looking at the development of Twitters streams over time one can infer when and in relation to what purpose Twitter interactions were more or less relevant. In fact, while streams with reference to the two international hashtags #15o and #15oct started long before the polycentric protest, the Italian #15ott only counted a relevant number of tweets (174) on the day prior to the protest, i.e., October 14. Figure 1 shows the development of the streams related to the three mentioned hashtags (i.e., #15o, #15oct, and #15ott) over a two-month period, from September 15 to November 15.

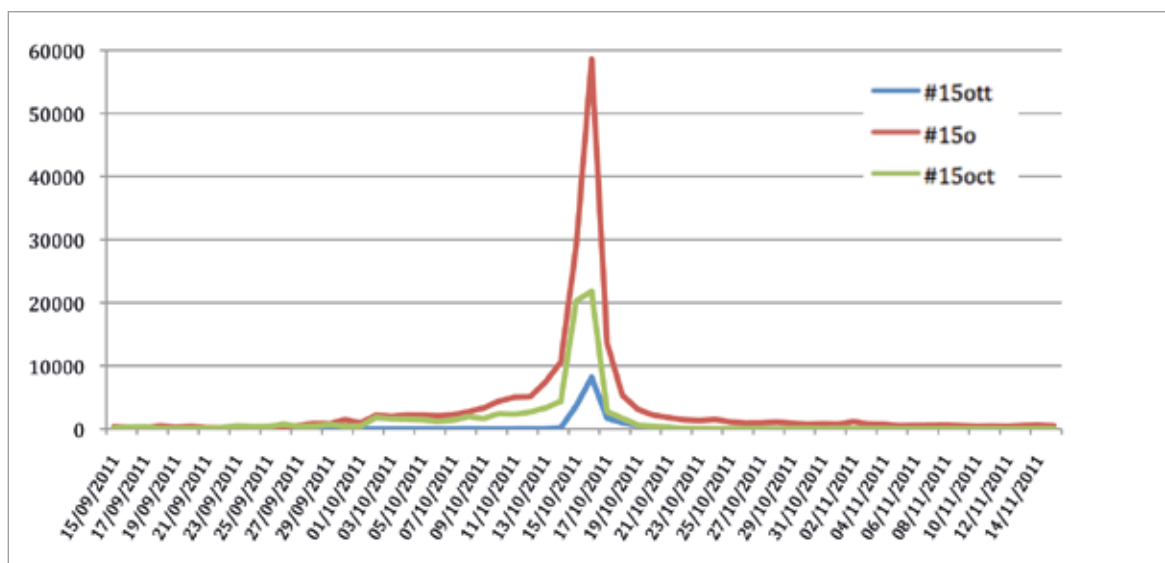


Figure 1: Absolute number of tweets with reference to the hashtags #15o, #15oct, and #15ott posted every day over a two-month period (September 15 - November 15) (Hootsuite.com)

Figure 1 shows the absolute number of tweets posted per day with reference to the three hashtags respectively, showing that the international #15o hashtagged stream was the most popular one before, during, and after the protest. All three hashtagged streams reached a pick of tweets on the day after the protest, i.e., October 16. In fact, on that day, #15o counted almost 60,000 tweets, #15oct reached almost 22,000 tweets and #15ott counted almost 10,000 tweets. Overall, the three Twitter streams followed the same trend over the two-month period shown in Figure 1 but it is interesting to focus on the percentage of tweets posted per day over that same period.

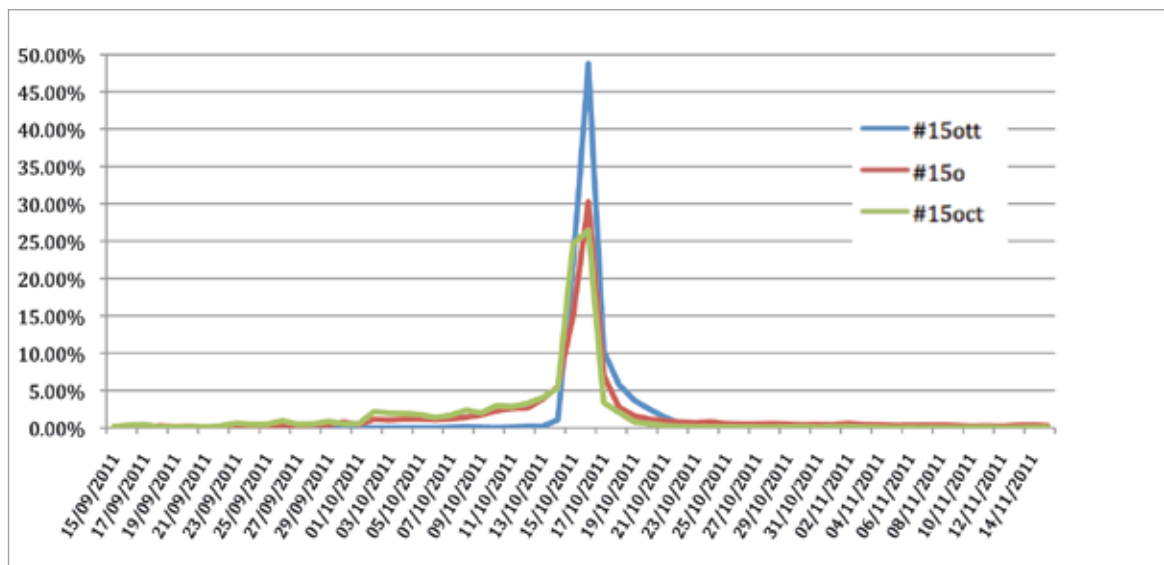


Figure 2: Percentage of tweets with reference to the hashtags #15o, #15oct, and #15ott posted every day over a two-month period (September 15 - November 15) (Hootsuite.com)

Figure 2 clearly shows the underlying difference between the Italian #15ott hashtagged Twitter stream and the Twitter streams marked with the international hashtags #15o and #15oct. In fact, almost 60% of the Twitter stream related to the Italian chapter of the protest occurred in the first two days following the events, as compared to around 37% of the tweets in the #15oct stream and around 30% of the tweets in the #15o stream. This means that the Italian Twitter stream related to the protest was primarily used to discuss about the outcomes of the events rather than for organizing and mobilizing purposes prior to the protest. This is a trend shared by the three streams shown in Figure 2 but in the Italian case this trend is definitely stronger than in the other two. This seems to suggest that the #15ott hashtagged stream only became active when it turned into a channel of interaction for public reasoning and opinion formation around the events. In other words, #15ott really went live when the protest became known to a wider public. And this primarily happened when photos and shootings of the violent events were exposed on both new and mass media channels.

The following part of the study specifically draws attention to what happened in the #15ott hashtagged Twitter stream in the days following the protest. In fact, the analysis focuses on the 8,041 tweets posted with reference to the #15ott hashtag from the morning of October 16 to that of November 15.

4.2. #15ott Twitter Stream: Changing Dynamics Over Time

Figure 3 shows the portion of the #15ott hashtagged Twitter stream covered by the following analysis.

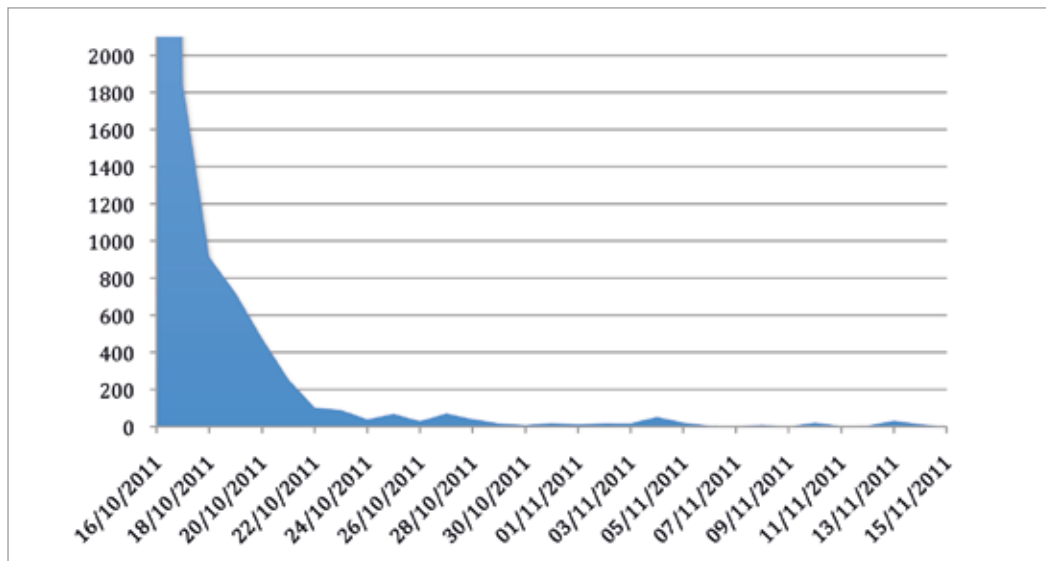


Figure 3: Absolute number of tweets with reference to the hashtag #15ott posted every day from the mid-morning of October 16 to that of November 15.

By the mid-morning of October 16 all Italian TV channels had widely diffused images of the events, mainly street destruction perpetuated by hooded protesters, fires in several sites of the city of Rome, burning cars, protesters throwing “sanpietrini” (cobblestones) and fire extinguishers at police officers, police officers using tear gas canisters against protesters and finally strong clashes between protesters and police. The major Italian daily newspapers had produced their first coverage of the events through editorials, reportages and first-person narrations. In other words, in the morning of October 16, the Italian public opinion had been widely exposed to the events. In fact, starting from that morning until November 15 a total of 2495 twitterers took part in the revitalized #15ott Twitter stream to discuss about the events. In line with other studies interested in conversational dynamics on social media, the analysis shows that the conversation was particularly active in the first three days following the protest, until October 18 when the number of tweets posted per day was still around 1,000. Between October 18 and October 21 the figure progressively decreased from around 1,000 to around 200. After October 21, the absolute number of tweets per day constantly decreased and by the end of October no more than 50 tweets were posted per day. This certainly shows two attributes of Twitter streams relevant to public reasoning and opinion making around protest events of strong impact for the general public. First, it provides evidence on the booming real-time usage of Twitter streams to discuss and comment on events relevant to the public opinion. Second, it shows that Twitter streams of this sort are not durable conversational and interactional tools.

Let us now focus on other changing dynamics over time, namely in the use of links to redirect to external sources of information and in the shift towards new hashtags. In the first ten days after the protest the numbers of tweets containing links rose from 55% (1,132 of the 2,060 posted from the mid-morning of October 16 until the night of the same day) to over 88% (fully 45 of the 51 tweets posted on October 24). In other words, twitterers increasingly pointed each other to different sources of online information in a moment in which such sources of information were constantly increasing. In line with the results provided by Segerberg and Bennett (2011: 210), the analysis shows that the percentage of tweets containing links increased as the stream diminished in volume.

The use of additional hashtags other than #15ott also increased over time. By October 24, the average was reached of over two additional hashtags per tweet. This indicates that the #15ott stream ramified towards other Twitter streams, marked with old and new hashtags. The main dynamic here is that the number of tweets containing multiple hashtags rises with the longitudinal development of the stream. In other words, while the original stream shrinks and loses ground over time, public reasoning around the events shifts towards more specific, narrowly focused Twitter streams.

#15ott Twitter Stream: Players, Networks and News Media Processes

Overall, the #15ott hashtagged Twitter stream was fairly participatory since the top ten twitterers only account for 16% of the tweets. In fact, 80% of the tweets were made by 44% of the twitterers. However, a consistent number of twitterers (59%) only tweeted once in the stream. Overall, one could then say that the stream had a distributed, crowdsourced management pattern.

But who are the players involved in the #15ott hashtagged Twitter stream? Interestingly enough, out of the ten top twitterers only two are collective actors: Zero81 and Global project. The former is a university collective from Naples (zer081.org) and the latter a multimedia platform developed by Italian media activists (globalproject.info). The remaining top players in the stream are individuals whose Twitter profiles do not indicate any direct affiliation to organizations or advocacy actors as such. However, by searching the publicly available Twapperkeeper archives one can retrieve information on specific twitterers' participation in different Twitter streams. In fact, all top individual twitterers involved in the #15ott hashtagged Twitter stream also take part in several other streams more or less related to the transnational movement for Global Change. The most common hashtagged streams are those marked by the transnational #ows and #occupywallstreet but also #occupy, #occupytheworld, #occupyboston, #occupyphoenix, #occupyoakland. However, other three sets of streams are commonly participated by the #15ott top twitterers: streams marked by #egypt, #tahir, and #libya hashtags, hence discussions centered around the Arab spring; streams marked by the #londonriots hashtag with reference to the August 2011 London riots, and streams hashtagged with the title of different Italian political or close-to-political TV programs, namely, #serviziopubblico, #annozero, and #vieniviaconme. This seems to raise a set of considerations on the profile of top twitterers in Twitter streams relevant to public reasoning on social contention of high impact for the general public. First, under such circumstances the individuals who take part most actively are likely to be already active participants in other streams relevant to informal political debates. Second, as Segerberg and Bennet (2011: 199) suggest, Twitter is to be considered within the media ecology and not as a stand-alone interactive platform. In fact, politically active twitterers are also likely to exploit traditional mass media channels to collect information on and discuss about social contention and political issues in general.

Concerning in-stream networking mechanisms, the top ten conversations - understood as exchanges of at least one @reply or mention in each direction between any two twitterers - involve 16 players. They are mostly individual twitterers, a part from infofreeflow and occupybologna, the first being a collective blog (infofreeflow.noblogs.org) and the latter the Bologna chapter of the OWS movement (occupyitaly.org). The shape of such top interactions prevents one from describing real networking mechanisms cutting across the stream. In fact, only two of the involved players participate in more than one conversation. In line with Kwack et al. (2010)'s results, this finding suggests that Twitter streams related to social contention and characterized by crowdsourced management patterns, are more likely to enact news media mechanisms rather than real networking processes among the twitterers.

In fact, one can focus on RT and linking patterns within the stream to investigate specific news agenda mechanisms. 3,527 tweets in the analyzed portion of the #15ott hashtagged Twitter stream are retweets, hence almost 44% of the sample is made of tweets constantly retweeted by different players. During the first ten days after the protest, the percentage of RT even reached an average of 61%. Given the crowd-sourced management pattern characterizing the stream it is difficult to define this dynamic as a gatekeeping process. Perhaps, the only case in which the stream was being manipulated occurred on October 20, when two players constantly retweeted a tweet posted by zero81, generating over 700 retweets.

Concerning linking practices, within the analyzed portion of the #15ott hashtagged Twitter stream, over all 65% of tweets contain hyperlinks to other sources of information. Again, such a diffuse dynamic prevent from talking of gatekeeping mechanisms. Rather, the finding seems to suggest that most of the players involved in the #15ott hashtagged Twitter stream participated in the stream by providing alternative sources of information on the protest. In fact, RT and linking practices are amplifying mechanisms enacting news media processes rather than conversational interactions among Twitter users.

The following section will specifically focus on the processes of meaning construction underlying the #15ott hashtagged Twitter stream. By looking at the content of the most relevant hashtags, linked external sources, and words within the stream, it will attempt to describe how the #15ott stream became functional to structure a topically informed political debate around the Italian chapter of the 15 October protest for Global Change.

#15ott Twitter Stream: Processes of Meaning Construction

As said, the use of additional hashtags in the #15ott Twitter stream increased over time. Overall, the sample contains 16,305 instances of additional hashtags. But let us now specifically focus on the 10 top hashtags, which constitutes 23% of such instances, namely #indignati, #15o, #napoli, #roma, #15oct, #balckbloc, #occupyrome, #notav, #indignados, and #occupybologna.

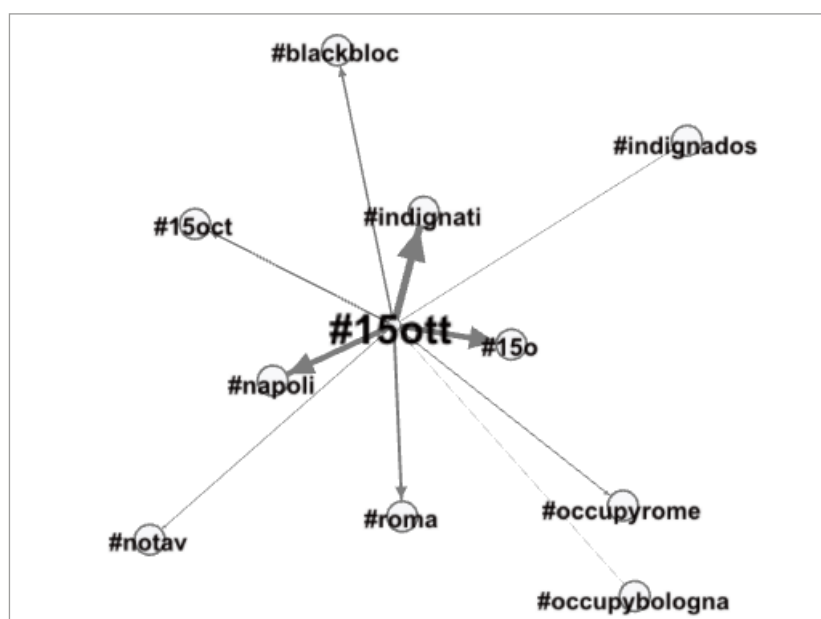


Figure 4: #15ott egonet network with the 10 most frequent additional hashtags

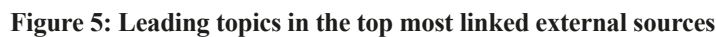
Figure 4 shows such top hashtags laid out as nodes of the #15ott egonet network. The nearer the hashtag and the thicker its edge to #15ott, the more related its stream to the #15ott stream. The figure shows that one can identify three layers of the conversation developed on this Twitter stream in relation to the Italian chapter of the 15 October protest. One layer develops along the positioning of the protest as part of a transnational reality. As said, the international hashtags #15o and #15oct, but also the originally Spanish #indignados, transpose the conversation on transnational Twitter streams where interactions are more likely to be diffused and loosely related. Conversely, the second layer redirects the conversation towards specifically contingent events. In other words, hashtags like #roma, #napoli, and #blackbloc bolster the emergence of streams narrowly focused on factual events occurred on October 15 and the following days. #roma, for instance, tags tweets concerned with the Rome protest and its outcomes. #napoli marks tweets dealing with police searches in Naples among activists involved in the Rome riots. #blackbloc specifically centers the conversation on the identity of the hooded protesters who set Rome on fire in the day of the protest.

The third layer develops around the Italian collective actors more or less directly involved in the movement for Global Change, and therefore in the 15 October protests. In fact, #occupyrrome and #occupybologna tag streams centered on the Rome and Bologna chapters of the Occupy Movement, respectively. Similarly, #indignati tags those tweets concerned with the Italian involvement in the Indignados mobilization. The use of #notav in the #15ott stream is particularly interesting because it directly relates the long lasting Italian mobilization against the construction of the Turin-Lion TAV (high-speed rail system)⁴ to the newborn movement for Global Change. This seems to suggest that in current public reasoning on social contention the most different actors tend to be framed as part of a common multi-issue and multi-level mobilization.

Let us now draw attention to the processes of meaning construction enacted by the extensive posting of hyperlinks to external sources of information. The sample contains 5,244 occurrences of hyperlinks with the 10 top URLs providing 42% of such occurrences. However, one of the top links is an URL retweeted 729 times on the same day by two only users, hence it was excluded from the analysis. The remaining top external sources range from posts on personal blogs, to articles on online alternative media (i.e., peacereporter.it, looponline.info), on to columns published on online local newspapers (i.e., iltempo.it), twittered comic strips, posts by high-profile bloggers (i.e., Frankie.tv) and posts by low-profile bloggers. Two considerations need to be raised here: first, these top external sources of information are extremely varied in terms of genre, text, and reliability levels. Second, interestingly enough, none of them is related to any national mainstream media.

Figure 5 maps the leading topics covered by these external sources of information.

⁴ No Tav is an Italian social movement active since 2002. Its main goal is to oppose the construction of the Turin-Lion high-speed rail system. The reasons behind this opposition are related to the environmental and economic impact that such rail system would have on the territory (notavtorino.org).



all'Inferno **black block** contronarrazione corteo crimine
distruzione distruggere fatti forza **giornata** incendiare invidia **italia** tal
mudarra manifestanti **manifestazione** maroni meda **piazza**
piazza san giovanni police **polizia** rabia capaci **riflessione** **rome** carpienne
scontri successo **vendola** venta **video** vignetta **violenza**

Figure 6 shows a word cloud of the 35 most frequent words used across the sample. The bigger the word in the cloud, the more conspicuous its frequency in the sample. The cloud was created by excluding the most common words in the Italian vocabulary, along with hashtags and Twitter usernames. The cloud shows that the texts posted by #15ott twitterers was very much focused on the violent events occurred in Rome on the October 15 protest, with a special interest in the so-called Black Block who set the city on fire. The leading words *violenza* and *polizia*, (violence, and police) together with *distruggere*, *scontri*, *all'inferno*, *rabbia*, *sanpietrino* (to destroy, clashes, to hell, rage, cobblestone) provide evidence that in the days following the protest twitterers were primarily interested in discussing both protest violent tactics and police's strategies of repression. Words like *giornata*, *manifestazione*, *corteo*, *manifestanti*, *piazza*, *piazza San Giovanni*, *Italia* and *Italy* (day, demonstration, rally, demonstrators, square, San Giovanni square, Italy) also ground the discussion on the very events of October 15. Conversely, words like *contronarrazione*, *cronaca*, *media*, *verità*, *video* and *vignetta* (counter-narration, journalistic account, media, truth, shooting and comic strip) shift the conversation on the coverage of the events by mainstream media. To conclude, words like *maroni*, *vendola*,

and politica (Maroni⁵, Vendola⁶, and politics), reframe the stream in the institutional political context.

In sum, hashtags, hyperlinks, and textual outputs in the #15ott Twitter stream all suggest that twitterers interested in discussing the Italian chapter of the 15 October protest for Global Change, enacted specific processes of meaning constructions around a series of relevant topics. Overall, data show that the stream fluctuated from more abstract issues, such as the positioning of the Italian mobilisation within the transnational movement and the identification of the Italian local chapters of the protest, to more contingent issues like the violent events occurred in Rome and their outcomes and the biased coverage of the events by the mainstream media. Finally, part of the stream included elements of the institutional political context by recalling specific politicians involved in the commentary of the Rome events.

Discussion and Conclusion

By exploring Twitter streams and their dynamics, this study sheds light on processes of public reasoning and opinion formation around social contention. Hence, the analysis here presented is primarily exploratory. It specifically focuses on the Italian chapter of the 15 October 2011 polycentric protest for Global Change for two reasons: its impact on the Italian public opinion and the increasing level of Twitter activity registered in the country. The four lines of investigation developed in the analysis are functional to explore how public reasoning around social contention develops on Twitter streams after social protest of high impact for the general public.

By exploring the longitudinal positioning of the Italian #15ott Twitter stream among the corresponding international #15o and #15oct hashtagged streams, the first line of investigation showed how the impact of the Rome riots of October 15 was mirrored by the booming Twitter activity on the day of the protest and the following three days. Such trend was not equaled in the two international streams taken for comparison.

The following three lines of investigation specifically focused on the #15ott stream. First, it was possible to ascertain that the top players in the stream were neither collective advocacy actors nor institutional organizations or news media channels. Most of the top players in the stream were individual twitterers already involved in streams centered on other informal political debates. By looking at changing dynamics over time it was then possible to highlight two specific patterns: within the #15ott hashtagged stream both the percentage of tweets containing links and that of tweets containing additional hashtags increased over time, as the stream diminished in volume. Hence, on the one hand as the stream developed longitudinally, twitterers increasingly posted additional sources of information as the availability of those sources was still constantly increasing. On the other hand, over time, the #15ott stream ramified towards other Twitter streams. In other words while the original stream was losing ground, public reasoning around the events started shifting towards specific sub-topics.

Second, the analysis of @replies and RT retweets practices within the #15ott stream provided evidence of the crowdsourced management of the stream and showed that such practices worked more as amplifying mechanisms enacting news agenda processes rather than conversational interactions among Twitter users.

5 Roberto Maroni was the then Italian Minister of the Interior.

6 Nichi Vendola is the leader of Sinistra Ecologia e Libertà, an Italian left-wing political party.

Finally, the analysis of the underlying processes of meaning construction enacted within the #15ott stream focused on three specific types of content: hashtags, linked external sources, and tweets' textual content. This part of the analysis showed how, by closely looking at twitter streams and their constitutive elements, it is possible to map the development of meaning construction around different topics relevant to the stream's primary concern (in this case the Italian chapter of the 15 October polycentric protest for Global Change). The findings showed that the stream embraced different issues, from abstract to contingent topics of discussion and that it outsourced to the most varied external sources of information alternative to the mainstream media.

In sum, the study shows that public reasoning around social contention in Twitter stream does involve individual players and develops around the construction of specific lines of meaning construction. Despite being constantly related to the mass media agenda setting, individuals' involvement occurs via the exchange of information on online alternative channels. What is still to be ascertained is how Twitter streams can affect the levels of offline participation in corresponding processes of public reasoning, opinion formation and, eventually, traditional and less traditional forms of political participation.

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