Cuing Collective Outcomes on Twitter:
A Qualitative Reading of Movement Social Learning

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In this article, we explore the process of movement social learning on Twitter. Previously described as the diffusion and social validation of innovation pertaining to collective outcomes through the practice of retweeting, movement social learning is unpicked with a combination of trace and interview data. We examine language use in retweets associated with the UK's People's Assembly Against Austerity with the aim to form an understanding of how such learning is cued. We argue that retweeters make visible and transmit insights into collective outcomes and ways of attaining them. They maintain a flow of information that sustains a pool of knowledge about the movement. At the same time, they construct a selective discursive environment where the public voicing of conflict can help clarify the scope of participation in a movement.

Keywords: social learning, social movements, social information use, collective outcomes, retweet

This article investigates social learning by social movement actors on Twitter. Learning has remained a comparatively neglected area within social movement research (Kilgore, 1999; Rogers & Haggerty, 2013). Because of the emphasis they place on collective processes and outcomes, social movements are sites of knowledge production standing in contrast to the prevailing modality of learning directed at individual betterment (Hustinx & Lammertyn, 2003). Despite insights into how communication online stimulates group rather than solely individual learning (Ziegler, Paulus, & Woodside, 2014), movement learning on social media has only timidly begun to be explored.

In a previous enquiry, movement social learning designated a network process of information diffusion and social validation (Mercea & Yilmaz, 2018). In this article, we undertake a narrow theoretical development of the foregoing study through a qualitative reading of Twitter data associated with the UK's People's Assembly Against Austerity (henceforth, the People's Assembly) and five exploratory in-depth interviews with participants in that communication. Our aim is to nestle the observational study of Twitter trace data into an experiential understanding of communication that eventuates movement social learning.

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This article seeks to advance research on movement learning on Twitter (see Gleason, 2013), a social platform embraced by various actors involved in social and political protest in the UK over the course of the decade (Dahlberg-Grundberg, Lundström, & Lindgren, 2016; Theocharis, 2012), along the following distinct lines. First, it draws on a previous network analysis of movement social learning in the People's Assembly spanning nine months (from May 2015 to January 2016) to retrieve a purposive sample of retweet dyads for discursive analysis and follow-up interviews. A dyad, or the link between two nodes, is the most basic social unit in a network (Borgatti, Everett, & Johnson, 2018).

Second, we explore retweet dyads discursively to describe the semantic environment articulated through retweeting. Third, we use data visualizations and descriptive statistics to unveil relations between tweet authors and retweeters. We plot retweet activity over time to form an understanding of the flow of information during the study period. Following this, we nest interview findings into the textual, temporal and relational contexts of the communication linked to the People's Assembly on Twitter. We do this in the attempt to continue the theoretical development of movement social learning as a process married to social information use that together diffuse information about and cue collective outcomes.

Theoretical Framework

An ongoing decline of involvement in civil society organizations and political parties (Ekström & Sveningsson, 2017; Gauja, 2015), coupled with dwindling social and institutional trust (Rosanvallon & Goldhammer, 2008), have prompted pronouncements of a crisis of civic participation in contemporary democracy (della Porta, 2013). The erosion of membership levels means that once incubators of participation, concentrating resources and affinity networks that recruited, socialized, and involved citizens in the workings of democracy, these organizations are supplanted by individualized and transient forms of civic engagement, increasingly enabled by the use of Internet technologies and social media (Bimber, Flanagin, & Stohl, 2012; Rollinger & Bunnage, 2015).

A most lamented consequence of this individualization of civic participation is a seemingly diminished capacity of citizens to act together to address the collective problems their societies face (Fenton & Barassi, 2011). This outlook, nevertheless, understates a growing cultural shift from an "allegiant" to an "assertive" mode of citizenship (Jakobsen & Listhaug, 2014) that is critical of the current state of democratic institutions and politics (Graeber, 2013; Jakobsen & Listhaug, 2014), which in turn has rendered social movements a prominent vehicle for civic participation and social change (Baciocchi et al., 2016; Milkman, 2017). Indeed, in mainstream politics, challenger candidates such as Labour's Jeremy Corbyn in the UK, Bernie Sanders and Donald Trump in the United States, or Emanuel Macron in France were supported by grassroots movements canvassing vigorously for them, particularly on social media (Branford, 2017; Lotan, 2016; Shrimsley, 2015).

Social movements have not been shielded from individualization. In the past decade, there have been notable examples of movements able to assemble in the absence of recognizable leadership, organizational infrastructures, or the operational capacity of membership-based parties, trade unions, or civil society organizations (Bennett, Segerberg, & Walker, 2014; Bimber et al., 2012). Instead, as networks of weak ties (Jensen & Bang, 2013)—from the Indignados to Occupy or Nuit Debout—movements in various

democratic countries are characterized by a contingent horizontality of transient rallies, demonstrations and public assemblies propped up by scalable personal communication networks on social media (Bastos, Mercea, & Charpentier, 2015). Personal involvement in the production, curation, and distribution of resources, on social media, can help scale up collective action (Bennett et al., 2014; Mercea & Funk, 2016).

This characterization of recent social movements is disputed notably on grounds that it is devoid of a critical political economy of the dominant social media platforms where prospective protest participants congregate (Dencik & Leistert, 2015). On the one hand, the personal involvement of individual users is liable to being tokenistic, a performative act of "broadcasting personal expression" bound to the regime of visible social connectivity instituted by social media platforms (Miller, 2015, p. 259). On the other hand, the inherent visibility regime thrust upon individuals makes them objects of corporate (Uldam, 2017) or state surveillance (Fuchs, 2013), rendering self-censorship a ready antidote to it (Uldam, 2017, p. 54). By way of illustration, the scope for social validation by prospective protest participants on Facebook was restricted to close-knit groups in the controlled political environment of Hong Kong, where surveillance is a widely recognized threat to activism that carries substantial risks (Zhu, Skoric, & Shen, 2017).

This threat is important to recognize as it may ultimately hamper the rapid upscaling of support for collective action on social media (Margetts, John, Escher, & Reissfelder, 2012). These authors argue that information about rising aggregate levels of participation acts as a motivator of individual participation in collective action. This assessment invites renewed scrutiny of visible performative expressiveness on social media in as far as it can contribute to collective outcomes such as protest participation— possibly restricted to closely knit groups in a high-risk context (Zhu et al., 2017)—even when it fails to engender dialogue or deliberation (Miller, 2015). To consider the balance among these possibilities, we revisit the theory of social learning for insights into how individual behavior can be socially cued and validated.

Social Learning

Social learning has been systematically studied as the influence that the group has on the individual (Pratt et al., 2010; Reed et al., 2010). In civic education, social learning theory posits that through social intercourse individuals are able to make public and recognize each other's concerns as they grapple with the issues that mark their shared existence (Wildemeersch, 2014). In social movement studies, learning is a distinctly collective process conceived of as the construction by a group of "taken-as-shared meanings" on which its actions to secure a public good (e.g., universal healthcare, a clean environment, a minimum wage) are predicated (Kilgore, 1999, p. 191; Rogers & Haggerty, 2013, p. 202).

For the individual, social learning occurs as information from a "modeling influence" is relayed in symbolic form, through a social medium (Bandura, 1977). Individuals develop social learning strategies that will reproduce the model of the most successful individuals in a group, the behavior of the majority, or the peer conduct that yields the largest payoffs sought (Hoppitt & Laland, 2013). In other words, such learning strategies are informed by psychological and cultural factors (Mesoudi, Chang, Dall, & Thornton, 2016).

Learning thus constitutes the interpretation of vicarious and symbolic social cues indicative of an exemplary conduct. It entails a combined cognitive and emotional response to social cues that reinforce or

punish individual performance. A particular conduct—for example, participation in collective action—is more likely to command attention, be adopted, and subsequently reproduced if it is valued by a group with whom one associates in interpersonal or organizational networks. A key issue with this conceptualization, however, is that it conflates the conditions, the process, and outcomes of social learning.

To take these in turn, for social learning to occur, there is a putative need for active engagement by stakeholders. Reed et al. (2010) pointedly contend that participation alone in interactions aimed at "collective self-reflection" does not teleologically lead to social learning; nor do social interactions as social learning may be galvanized by the mass media. Equally, social learning may be approached as an outcome such as a change in conduct or attitude. Much effort has been expended to evidence social learning outcomes in evolutionary biology (Mesoudi et al., 2016) and cognitive psychology (Cook, den Ouden, Heyes, & Cools, 2014). However, this research strand has concentrated on the measurement of learning outcomes at individual or aggregate levels, with questions regarding the transmission of information and the creation of the social environment that is conducive to those outcomes, particularly in complex human societies (Rist, Chidambaranathan, Escobar, Wiesmann, & Zimmermann, 2007), left to be addressed elsewhere.

Consequently, calls were made for research exploring interaction that is nested in social networks where actors holding a plurality of knowledge relay information and act to influence the occurrence of learning outcomes (Reed et al., 2010). Network theory has distinctively approached social learning as a diffusion process. From this perspective, social learning entails embracing an innovation (e.g., a new belief or behavior) provided one gains information from her network that testifies to the suitability of the innovation for the individual (DiMaggio & Garip, 2012, p. 96). Accordingly, social learning is more likely to transpire the more information is shared and thereby validated by ties in one's network (Margetts et al., 2012; Messing & Westwood, 2014). Social validation facilitates goal attainment—for example, participation in collective action, whenever network members prop up the mutual motivation for pursuing a goal (Westaby, 2012).

On social media, social validation is a cultural process realized with symbolic social cues such as retweets. Retweets are a proprietary diffusion metric as well as a use practice, a cultural interpretation of social platform functionalities by its users (Gerlitz & Rieder, 2018). Motivations for retweeting are diverse and may vary for the same individual at different times (Macskassy & Michelson, 2011). However, as a use practice, retweeting is tantamount to signaling one's position as a listener who participates in the dissemination of ideas encountered on Twitter, thereby increasing their visibility (Boyd, Golder, & Lotan, 2010; Meraz & Papacharissi, 2013).

This use practice may be regarded as a nonformal learning modality that is not governed by the conventions of educational institutions. Further, it is *expansive* learning in as far as retweeting is an activity that contributes to the pooling of shared knowledge (Aramo-Immonen, Jussila, & Huhtamäki, 2015, p. 1156) and the social validation of the sources of that knowledge (Mercea & Yilmaz, 2018; Stephansen & Couldry, 2014, p. 1221). Shared knowledge would thus represent an emergent network resource that can help participants in the social learning process to develop new insights, capacities, or solutions for goal attainment. At the same time, retweeting is a social process of knowledge curation in as far as it filters out noise such as spam, research on the #ows (Occupy Wall Street) network evinced (Bennett et al., 2014). Conversely, instead

of expansive, nonformal learning, retweeting may be regarded as phatic communication—a speech act whereby one will "express or maintain connection with others in the form of shared feelings, goodwill or general sociability rather than to impart information" (Miller, 2015, p. 253).

Movement Social Learning

Movement social learning on Twitter was investigated as a nonformal mixed-mode social and discursive process of innovation diffusion and social validation of collective outcomes with retweets. Retweets linked clusters in the People's Assembly network by making public and sensitizing discrete actors to the multiple individual concerns with government austerity policy encompassed by the movement (Mercea & Yilmaz, 2018). Retweeting interconnected the UK anti-austerity movement. The earlier study showed that despite observed bottlenecks in the flow of information in protest networks (González-Bailón & Wang, 2016), the mediation of social connections by brokers in the Assembly's heterogenous movement network—comprising the most important UK trade unions, student groups, local activist chapters, and individual activists—together with the mutual development of a rallying discourse around shared concerns, bolstered their close association on Twitter. The Assembly thus stood in visible contrast to the documented disconnect in Europe between trade unions and autonomous citizen movements, such as the Indignados in Spain, who protested public spending cutbacks in parallel rather than in tandem (Peterson, Wahlstrom, & Wennerhag, 2015).

In this article, we extend that initial research along several lines. First, we analyze the most retweeted messages that spanned network clusters in the People's Assembly to explore the following research question:

RQ1:   *How was any plurality of knowledge about participant entities and their concerns articulated in retweeted posts?*

Network analysis and topic modeling previously revealed that retweets publicizing the grounds for opposition to government austerity and cultivating sensitivity toward the hardship inflicted by austerity on various social groups linked disparate actors in the Assembly's network. In this article, we undertake a close reading of the knowledge retweets encapsulated pertaining to collective outcomes such as the participation of various actors in the movement, their concerns, and collective action.

Second, we seek to expand the understanding of movement social learning by distinguishing between social information use and social learning. In evolutionary biology, the former designates a "signaling interaction" that cues a response from observers, either deliberately or inadvertently. In this conception, social learning is social information use that engenders long-term change in behavior (Mesoudi et al., 2016, p. 216). Through public replication, individual social information use can scale, leading to group-wide changes (Danchin, Giraldeau, Valone, & Wagner, 2004). Whereas movement social learning was previously examined at network level as a process of innovation diffusion and social validation (Mercea & Yilmaz, 2018), in this article we further probe the retweets bridging the People's Assembly network for evidence of social information use. Specifically, we asked the following:

RQ2:   *Did retweets cue collective outcomes such as participation in the protest events orchestrated by the movement; or, alternatively, were they used for phatic communication?*

We used in-depth interviews to explore how collective outcomes were cued.

Third, although opposition to government austerity policy was identified as an aspect that featured prominently in retweets (Mercea & Yilmaz, 2018), the argument that social conflict underpins collective learning in social movements (Kilgore, 1999, p. 199; Welton, 1993) was left unexplored in the initial research on the People's Assembly. Conflict was previously described as an upshot of the quest by social movements for social justice (Kilgore, 1999, p. 199). This interpretation, however, may be disputed with evidence from exclusionary, identity-based movements (Simi, Futrell, & Bubolz, 2016). In either context, referencing conflict may be an important aspect of movement social learning, on the one hand, as a means to foster in-group solidarity through distinction from an out-group (McGarthy, Thomas, Lala, Smith, & Bliuc, 2014).

On the other hand, internally, conflict can manifest itself as disagreements among group members that are a fertile basis for consensus building as long as members become sympathetic to rather than dismissive of each other's positions (Greenhow, Gibbins, & Menzer, 2015, p. 595). In this light, we aim to deepen the analysis of movement social learning by examining conflict along its external and internal dimensions:

RQ3:   *How was conflict referenced, and if invoked, did internal and/or external conflicts (e.g., with the austerity-minded Conservative government) render visible new insights on actors in the movement that validated their joint participation in it?*

We used textual and interview data to consider this question.

Lastly, authors of retweeted messages can accede to an informal elite status by amassing large numbers of retweets (Jackson & Foucault Welles, 2016; Meraz & Papacharissi, 2013). Retweeting can thus exhibit a power-law distribution of attention with a few tweet authors garnering a disproportionate amount of interest from other Twitter users (Jackson & Foucault Welles, 2016, p. 403). Theoretically, this context of elite dominance is salient for movement social learning as socially dominant individuals are particularly likely to use social information (Cook et al., 2014, p. 2814). Although the earlier examination highlighted that through cross-referencing authors connected disparate entities in the Assembly, and events it staged at different points in time (Mercea & Yilmaz, 2018), it left the relationship between authors and retweeters unexamined. Specifically, drawing on trace and interview data, we asked the two-pronged question:

RQ4:   *Were authors and retweeters systematically associated with each other and, in the end, did retweeting maintain a flow of content allowing social information use about the People's Assembly to continue over time?*

Data and Methods

This study uses a subset of the People's Assembly Twitter data set (N = 199,440 retweets posted by 48,350 users), covering a period of nine months from May 7, 2015, to January 20, 2016 (see Figure 1). A full description of the data set and the limitations intrinsic to it is provided in Mercea and Yilmaz (2018). The data set contained posts collected via the Twitter Search API, flagged with hashtags associated with

actions instigated by the People's Assembly (#endausteritynow, #nomoreausterity, #JuneDemo, #takebackMCR, #freeeducation, #grantsnotdebt) or that were addressed to its account (@pplsassembly).

In this investigation, we processed the data for both descriptive quantitative and qualitative analysis. In Mercea and Yilmaz (2018), a social network analysis was carried out to identify authors whose retweeted messages helped broker the Assembly's network. A fast-greedy modularity algorithm for network community detection in "igraph," the R social network analysis package, generated 24 retweet subgroups. The retweets linking those groups were analyzed with the latent Dirichlet allocation (LDA) natural language processing algorithm, which produces a probability distribution of words clustered into topics. These methods yielded a global perspective on the communication among subgroups in the Twitter network of the Assembly.
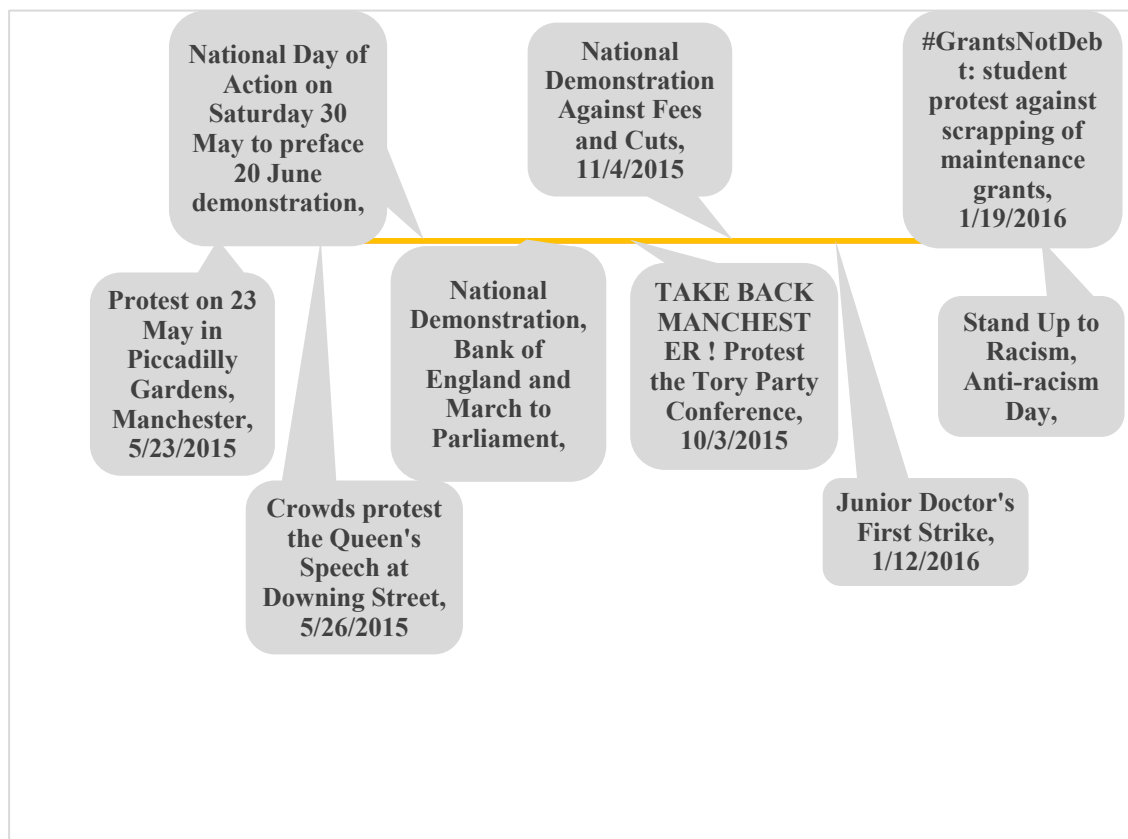
Figure 1. People's Assembly Protest Timeline (May 2015–January 2016).

Conversely, in this article we first undertake a qualitative analysis of retweets. For the purpose, we requeried the data set for retweet dyads, namely an author–retweeter pair and the retweeted post connecting them. We retrieved all retweet dyads (N = 48,792) whose authors (N = 2,627 unique users) and retweeters (N = 11,868 unique users) helped broker the Assembly's network. On average, authors in the 48,792 retweet dyads had the same message retweeted 1.5 times (max = 10, including retweets of the retweet; min = 1 time, SD = 1.02; see Figure 2).
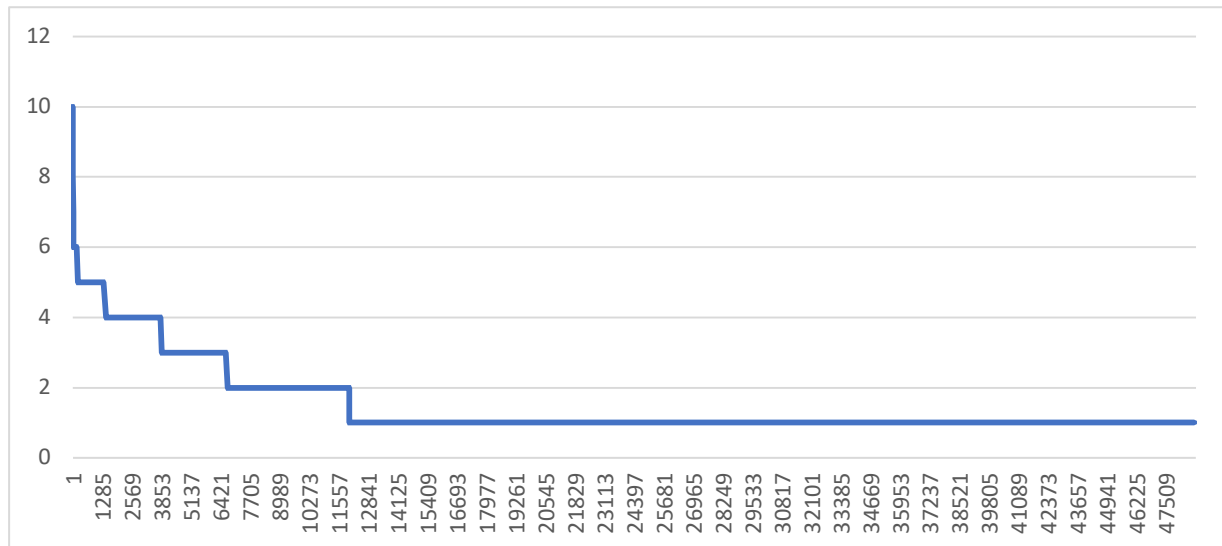
Figure 2. Frequency of retweet dyads in the People's Assembly network (x-axis = number of dyads; y-axis = retweet count).

At the time of data collection, Twitter's APIs did not allow for the reconstruction of retweet cascades such that a link can be confirmed between Account A and Account C if Account B retweeted a post by the former, which in turn was retweeted by Account C (for details, see Bastos & Mercea, 2019). Therefore, retweet dyads were the best suited unit of analysis for exploring author–retweeter relations as they comprise information about the two parties, the retweeted message, and associated meta-data, such as retweet time stamps. We selected the most visible dyads bridging the People's Assembly Network (see Figure 2; *N* = 12,013 or 5% of most retweeted messages in the original data set) for a qualitative, discourse analysis. Alongside this, we probed author and retweeter activity with in-depth interviews.

Computer-mediated discourse analysis (CMD; Herring & Androutsopoulos, 2015) lent itself to the exploration of the interactive production and circulation of meaning through speech acts. The recognized structural constraints of (re)tweets—short microblog posts of up to 140 characters in length at the time of data collection—compelled us to adopt utterances as the unit of analysis. In CMD, an utterance is "a sequence of one or more words that is preceded and followed by silence (space) or a change in communicator" (Herring & Androutsopoulos, 2015, p. 131).

When examining utterances, we were interested in the intentional production of meaning. Consequently, we sought to identify and describe the communicative goals (Herring & Androutsopoulos, 2015, p. 134) expressed or performed through language, in utterances. We looked for utterances prompting collective outcomes—for example, eliciting or demonstrating sensitivity toward the concerns of participant groups in the Assembly, or taking a stance toward a particular actor (Zappavigna, 2011), such as the UK government. We considered the tone of those utterances and the image given off by word choices (Herring & Androutsopoulos, 2015; Jackson & Foucault Welles, 2016).

In the reporting of the research findings that follows, we omitted user handles from direct quotes. Although we only inspected data posted via Twitter's public services, we did not deem the social benefits (Markham & Buchanan, 2012) of revealing the identities of individual users who became subjects of this research to be outweighing the need to protect their subjectivity (Metcalf & Crawford, 2016). In all cases where we applied this decision, we replaced the actual handle with a generic "@user" placeholder. On the other hand, we regarded this proviso as not applicable to the Twitter handles of public actors such as trade unions, political parties, members of the UK parliament, or activist groups and organizations. Finally, we used descriptive visualizations to explore the data (Kennedy & Hill, 2017).

The research interviews took place between July and October 2018. The decision to allow more than a year to elapse since the original study was grounded in the aim to incorporate Research Question 2 and 3 in the analysis and employ interviews with a cross-section of participants in the Assembly to discuss them. We selected the top 200 dyads and contacted the 116 unique accounts they comprised to elicit author/retweeter views (Salmons, 2016) on the activity we observed in our data set. Of those accounts, 19 Twitter handles were no longer in use, and 77 accounts did not respond to our interview invitation. The remaining 20 account owners replied to our requests; of them, five agreed to an interview. Four of them were author–retweeters; one was a retweeter only. We regarded this interviewee subset as an "extreme instance" (Lindlof & Taylor, 2002, pp. 128–129) of author/retweeters that we expected would allow us to undertake an initial "critical test" of the research questions posed in this study. As we indicate below, the interviewees embodied the organizational diversity of the anti-austerity movement.

We envisaged the interviews as an opportunity to tap the experience and perspective (Lindlof & Taylor, 2002) of authors and retweeters, to thereby develop a convergent interpretation of actions that facilitate movement social learning and the reasons for them. These interviews, although small in number, were sufficient for the purpose of a theoretical development of movement social learning that we will continue to test empirically. We ultimately use them to propose possibilities (Baker & Edwards, 2012)— namely, for advancing the line of enquiry sketched out with the research questions. We carried out open coding to tease out the intersubjective and cultural knowledge of authors and retweeters and used first-order concepts thus obtained to reflect on the findings from the computer-mediated discourse analysis.

Research Findings

Various actors lent their names to the mobilization against austerity championed by the People's Assembly (Mercea & Yilmaz, 2018). They ranged from trade unions to parties, to public figures and informal groups from across the UK. Exploring Research Question 1, we observed that while retweets (RTs) evoked a common stance of opposition to austerity policy, the expression of support for collective action extended across a spectrum from endorsement to active involvement in it.

Retweeted messages painted the movement as inclusive of multiple interests and actions that would contribute to the same collective outcome (i.e., challenge austerity policy; see Table 1). Interviewees corroborated this interpretation. Interview Participant 3 (IP3), who described herself as "an activist working on my own because of my [itinerant] lifestyle," said of the participants in the Assembly: "I think they come

from all sectors of society. I wouldn't . . . identify them with any particular group. . . . I see them as people who care about injustices, inequalities."

Table 1. Examples of Retweets Depicting the Inclusiveness of the Anti-Austerity Movement.

"RT @ColchesterTuc: Friends from Labour, Greens, Trade Unions, SWP, students and Left Unity all involved. @pplsassembly #solidarity"
"RT @WOWpetition: WOWcampaign will be at the @pplsassembly fighting for sick, disabled and carer's #welfare #disabled"
"RT @natalieben: Saturday's Demonstration Is Only the Beginning—Together, We Can Defeat Austerity http://t.co/ZVACR2sFAR @pplsassembly"

Cuing Collective Outcomes

The retweeting was tantamount to phatic communication in as far as it displayed connections among actors in the movement (RQ2). Retweets expressed solidarity among individuals, groups, and organizations that represented those interests, or similarly, endorsed actions they staged collectively as well as separately, in different parts of the UK or online (e.g., through e-petitions). Additionally, names of headline speakers from friendly political parties, unions, and activist organizations were cited to elicit wide participation, or to demonstrate wide-ranging involvement in the movement. Some of the speakers would in turn post messages announcing their engagement. Their attendance at several of the protests staged by the movement displayed continuity and coherence in collective action.

Interviewees confirmed they retweeted posts by various actors in the movement, their concerns, and upcoming actions. Retweeting cued awareness, solidarity, and/or participation in the movement. A social media campaigner, IP4, who was never a member of a party or activist organization, tweeted and retweeted "content directly from their [People's Assembly's] page or mentions of their activities by my followers . . . to spread awareness of the issues of austerity and direct democracy." A member of a public workers' trade union, IP5, echoed IP4. He depicted his retweeting as relatively limited in scope, but driven by an assessment of the "relevance [of a post] to my followers." A leading political figure in the UK, IP1, recounted how retweeting was a means to raise the profile of actions by the Assembly and its members: "Most of my tweeting [about the People's Assembly] would have been about upcoming events. . . . When they [NGOs] are saying 'Oh, big event Saturday, everybody welcome' . . . I tweet something like 'hope to see you all there.'"

Similarly, IP2, a volunteer in a disability organization, said she would retweet with the aim to "just have facts out, basically; [to] have facts out and give voice to [my organization], and to give voice to all of them. . . . Anything from People's Assembly I would retweet."

Putting forward facts about austerity that were either omitted from or misconstrued in public discourse was thus another important form of knowledge pooling that equally motivated IP1 and IP2 to retweet. The transmission of statistics, for instance, amounted to bearing witness to the hardship of austerity afflicting vulnerable groups and, secondly, guarding proven evidence from being distorted for political ends, as IP3 put it. According to IP1, "[retweeting] sometimes . . . simply gets factual information flowing."

Additionally, IP2, IP3, IP4, and IP5 shared an approach to retweeting content about the People's Assembly which was predicated on ideological affinity with left-leaning progressive politics. The strength of ideological affinity, nurtured over an extended period, was a heuristic that moderated the need for social validation. As IP2 and IP3 asserted separately:

> I sort of moved to the stage of following people if they seem to have a similar political ideology, and I know that's not really good to do that. But that was what I did instinctively. (IP2)

> I probably retweeted people that I shouldn't have retweeted . . . a few people behaving badly in the People's Assembly doesn't put me off supporting the People's Assembly. If I identify an organization that I have respect for, I'm quite happy to retweet any event that I see without hesitation. (IP3)

Likewise, IP1 would retweet posts by individuals and organizations she knew and trusted. Contrastingly, however, if a direct relationship was absent, she would fall back on social validation through proxies who were not directly involved in the relevant retweet cascade. As IP1 put it, "If I'm a little bit doubtful about it [a tweet], I might sometimes say, 'This is a story that someone told me,' so I release myself from not saying I trust every single word in this box."

Second, RTs were used to provide insights not only into the range of participants and their specific concerns but also the scope of mobilization. References to large-scale mobilization in support of collective action conveyed knowledge about expected levels of participation (see Table 2).

Table 2. Examples of Retweets Indicating Expected Levels of Participation in Protest Events.

"RT @user: Still on a post-election downer? Stop moping & organise. Join 50k+ march on the 20th June London Contact @pplsassembly"
"RT @SteveT_Unite: 53k now signed up to join the @pplsassembly national demo against austerity #LDN20/6—join us!"
"RT @TheStudentAssem: Mirror poll: 74% say they're angry enough to protest against austerity. Come join the @pplsassembly protest tomorrow"

Not only phatic, the circulation of information about involvement in the movement was complemented by appeals to harness a collective, disaggregated capacity of Twitter users to contribute personal ideas for the enactment of collective action (see Table 3). Retweets illustrated how vernacular meaningmaking was an interactive process cued as a means to attain goals such as protest participation.

Table 3. Examples of Retweets Exposing Internal Conflicts in the Movement.

"RT @pplsassembly: March to #EndAusterityNow on 20 June at Bank, London. What will you be marching for? http://t.co/ydQdbF8Nlm"
"RT @SteveT_Unite: 47k already signed up for the @pplsassembly national demo LDN20/6. What are you doing to #fightback—sign up now!"
"RT @pplsassembly: Sat June 20: National Demo to tell the new government #EndAusterityNow. What's your message?"

Conflict in Movement Social Learning

Third, we pondered Research Question 3. Although prima facie, the movement seemed to rally a left-leaning progressive alliance, retweets were equally used to question relations among actors in the movement and the act of participation itself. Interviewees spoke of a movement where members had leveled criticism at each other without relations among them breaking down. By way of an explanation of how internal conflict is a common experience that exposes movement actors—sometimes in challenging ways—to the diversity among their ranks, IP2 remarked that actors may sometimes spar, for instance, over limited resources such as the attention of a public figure in their midst who could champion their causes. In her words, "It can get fractious at all times . . . yes [there can be] a bit of infighting between different causes [but] everybody is after the same objective."

Though confrontational and/or disparaging in tone, conflict-referencing retweets specifically attested to a discursive environment that encompassed a plurality of organizations negotiating their participation in the public domain of Twitter (see Table 4). We deemed the retweet exchanges among critical voices and censured parties we observed as social information use to the extent that they delineated the scope of participation in the movement. The following thread depicts relations between the People's Assembly and UKUncut, an informal group protesting tax avoidance and public spending cutbacks.

Table 4. Examples of Retweets Exposing Internal Conflicts in the Movement.

"RT @user: For background on how @pplsassembly will try to dominate and neutralise anti-tory protests read this"
"RT @user: Why not support @UKuncut protests on May 30 @pplsassembly instead of calling your own day of action. What the fuck you play at"
"RT @pplsassembly: @user @UKuncut we are supporting all protests—including the PCS demo and Ukuncut"

In retweeted messages, also on display were individual experiences that exposed intersections in the experience of hardship induced by austerity among sections of the movement. Concerns—with weak job creation, in-employment poverty, the underfunding of the NHS, the scrapping of student grants, the tightening of disability benefits and other in-work benefits, environmental degradation—reverberated with a sense of alarm begetting or explicitly calling for collective action.

Table 5. Examples of Retweets Showing the External Conflicts of the Movement.

"RT @jameswjacobs: Tory welfare cuts would hit poorest third of UK families, research shows […] #EndAusterityNow #JuneDemo"
"RT @Harryslaststand: It's not about economics but ideology b/c Tory austerity has made nearly 100k kids homeless #CPC15 #EndAusterityNow"
"RT @labourlewis: On Nov 4 I'll be supporting students marching 4 #FreeEducation as they tell the Tories to stop cutting grants #GrantsNotDebt"

Taking aim squarely at the Conservative government, retweeted concerns with austerity policy displayed the many facets of the opposition to it. Language use evoked an external conflict with the government. Protest was projected as a collective outcome prompted by an appreciation of the deleterious effects of the government's austerity policy; the suffering endured by many social groups affected by it and the negative emotions fueled by the punishing consequences of the policy on those groups. Both the abstract implications and the subjective experience of strain caused by austerity were expressed in the retweets. Contemplating Research Question 3, we saw external conflict as a key aspect of social information use. Reasons for opposition to government austerity were made public for others to see, appreciate, and ultimately act on concertedly.

A Communication Elite?

Fourth, to consider Research Question 4, we checked the relationship between authors and retweeters. The null hypothesis that there would be no relationship between authors and retweeters in retweet dyads was confirmed (Cramer's V =.005, p > .05). Put differently, authors were retweeted by a wide range of retweeters. At the same time, 55% (N = 1,449) of authors (N = 2,627 unique users) had retweeted a message at least once. Altogether, author–retweeters retweeted almost a quarter (23%, N = 11,348) of the posts in the dyad data set.

Relating these findings back to Research Question 4, we concluded that there was a plurality rather than a self-referential elite of authors and retweeters. An important number of tweet authors also played a part in bridging the movement network not solely as producers (Mercea & Yilmaz, 2018), but also as disseminators of messages. These author-retweeters fostered a discursive environment that resonated with network members. They, moreover, actively developed social links among movement members with retweets. Interviewees exemplified the latter activity—IP4 recalled closely following posts about the Assembly by the Green Party. Describing them as "motivating," he remarked that he was "encouraged by the solidarity [the posts] had shown." In the "hope [to] help the movement," he went on to "retweet articles, videos, or petitions and notices of demonstrations or campaigns" run by the Assembly and its affiliates. This was true of IP5 and IP1, also. A prolific author-retweeter, IP1employed retweeting to raise the visibility of actors in the anti-austerity movement or the progressive field, more widely:

> Sometimes . . . you are hoping that [a] person . . . will get more followers, more attention
> as a result . . . [you are] encouraging and hoping for a person to grow, [for] that person
> to have more of a voice and [to be] socially catapulted by being retweeted by me.

    We furthermore determined that retweeters were active around key protest events orchestrated by the movement. Retweeting ebbed and flowed in close alignment with the protest events. Retweeters circulated messages posted as early as March 2015, two months before data collection for this research began. As can be seen in Figure 3, at peak activity, posts were retweeted on average more than four times (see also Table 6). Moreover, retweeters maintained a regular, albeit uneven, flow of information throughout the period (see the "freq" line in Figure 3). Illustratively, a retiree, user1 in Table 6 was the most active retweeter. He posted continuously, producing the largest number of retweets in two consecutive months at the start of the period (May–June 2015) and in the latter part of it (September–October 2015).
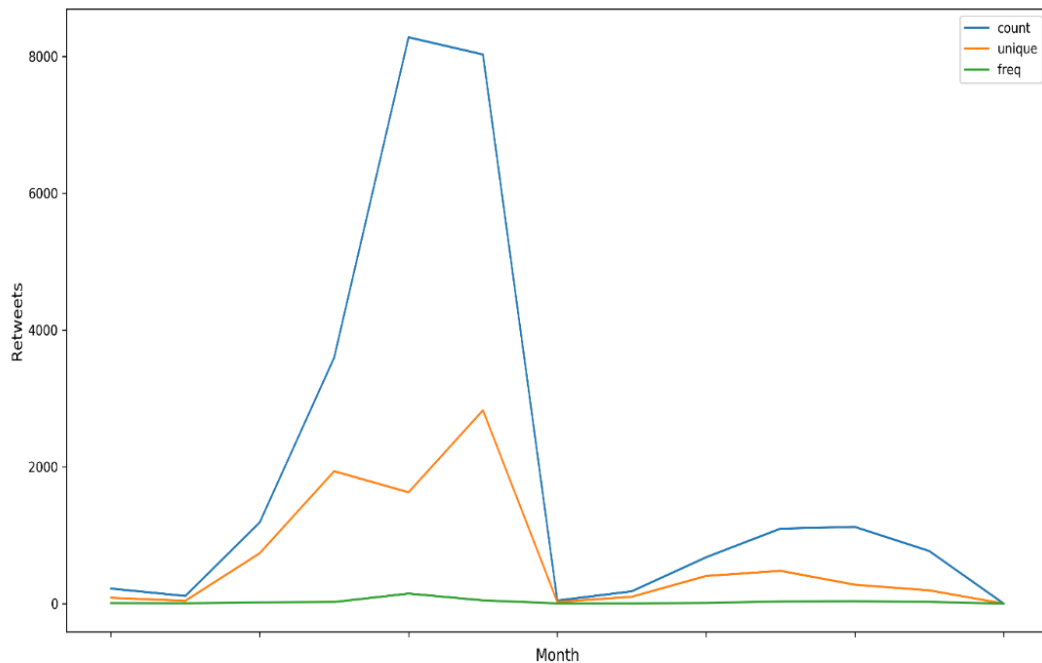
Figure 3. Timeline of retweet activity (May 2015–January 2016).

Table 6. Monthly Retweet Count and Top Retweeters (May 2015–January 2016).

Month	RT count	Unique RTs	Top RT-ers	Frequency
May	9,063	1,681	user1	185
June	9,206	2,947	user1	87
July	206	59	pplsassembly	9
August	29	27	user2	2
September	578	349	user1	8
October	3,747	1,877	user1	38
November	2,425	1,300	user 3	20
December	64	53	redtiki2015	5
January	1	1	lolavisiual12	1

Reflecting on Research Question 4, the retweeting that spanned several protests would have been instrumental to enabling social information use in as far as it sustained the circulation of content associated with the movement. Over the observed period, this diffusion activity kept in place a pool of knowledge that connected the movement (see Mercea & Yilmaz, 2018).

Nearly three years down the line, interviewees averred they continued to re/tweet messages about the People's Assembly, albeit less intensely than in 2015–16. However, IP3 expressed regret at this development, which she attributed to the rise of Momentum, a grassroots movement of Labour activists who support Jeremy Corbyn's leadership of the party. Her assessment was that the People's Assembly was ideologically absorbed into Momentum, which in turn received more funding, more political backing, and more media interest. As she put it, "It's probably not fair, really, because . . . back in 2015–16 the People's Assembly to me were the only group that was standing up against wrongs on housing and things that were going wrong in London."

At the same time, IP2 pointed to the Assembly and Momentum as separate movements with distinct goals. Whereas the People's Assembly remains active to this day, she likewise saw Momentum as a successor of the former. In her view, Momentum had been focused on getting its candidates elected to leadership positions in the Labour Party and had not embraced the disability cause in the same determined way as the Assembly. To this contrast IP2 attributed a readiness to continue to retweet Assembly posts. She said, "People's Assembly . . . were fabulous with us and anything from People's Assembly I would retweet. Momentum seems to have taken over a bit. . . . They're not very good with disabled people. The People's Assembly were far, far better for disabled people."

This account suggested that retweeters may make self-interested contributions to social information use. For example, IP2, and all the other interviewees, showed a commitment to circulating information regarding a broad social movement that embraced and gave voice to the primary concerns they represented.

Discussion and Conclusions

The retweet data explored in this study represents a distinct subset of retweets that connected the People's Assembly on Twitter from mid-2015 to early 2016. Our inquiry concentrated on the discursive underpinnings of the retweet connectivity and its experience-based characterizations by some of the

participants in it. Retweet dyads helped distribute knowledge that made visible the grounds for association and cooperation among actors in the People's Assembly network on Twitter and the goals of their collective action. Such activist appropriation of social platforms has been edifyingly theorized as generative of organization in seemingly amorphous crowds (Bennett et al., 2014). Contrariwise, it was critiqued for foregrounding the individual and weakening the group as activist organizations regress to visible but impermanent networks on social media (Milan, 2015; Poell, 2014). In this section, we highlight how our analysis of movement social learning can take this strand of social movement scholarship forward.

To summarize the main findings, we have submitted evidence of how cues pertaining to sensitivity toward concerns by participant entities in the anti-austerity movement, solidarity, and joint collective action amounted to social information use. At a discursive level, social information use entailed the display of "outcome expectations" (Chiu, Hsu, & Wang, 2006)—for example, the attainment of solidarity or the scaling of involvement in the actions of the anti-austerity movement. The relationship between movement social learning and social information use we thus posit is one where the latter is a discursive basis for the former. If movement social learning is a process of innovation diffusion and validation, social information use represents the designation as innovation of collective outcomes and possible pathways to their attainment, at the discursive level.

Experimental research into political participation has posited that information about high levels of participation in collective action can further increase participant numbers (Margetts et al., 2012). Retweets cued this strategic outcome by disseminating information about expected high levels of participation in anti-austerity protests. They moreover circulated knowledge about the range of participants in the protests and relationships between them. Retweets that pointed to fractures in the austerity movement were used strategically to reassert commonality of purpose.

Motivated by a mix of individual and collective objectives to publicize their own cause (e.g., disability rights), as well as those of deserving others, retweeters represented a plurality of users who disseminated posts about the movement over time. They maintained a flow of information that extended over many months, offering evidence of how activist communication can be sustained—if not slowed down (Poell, 2014, p. 728)—on a social platform. Thereby, retweeters maintained a common and public pool of knowledge about the movement.

Interviewees did so beyond its heyday, tracking its evolvement and its intersection with Momentum, the Labour activist movement. For four of them, retweeting was a modality of social information use, a signaling interaction whereby they solicited the attention of their followers to content that elicited a behavioral response such as growing more aware of the movement and its agenda—or what were described as the correct facts about them: lending support to the movement or participating in its actions. That is, those interviewees enlisted retweeting as a use practice for prompting social learning. Expectations of the fifth interviewee were more modest because of the perceived limited scope of his retweeting.

An important ensuing theoretical question is how the flow of information in a broad movement can be sustained to enable movement social learning that bridges the movement. By virtue of the choices retweeters make as to what posts to circulate, they can construct an ideologically selective discursive

environment. A potential answer that bears further investigation may lie with the public voicing of conflict in as far as such expressiveness clarifies the scope of participation in a movement, its values, organization, or collective identity. As shown, the retweets that bridged the Assembly's network on Twitter displayed both the range of participants in the collective action choreographed by the anti-austerity movement and conflicts among them.

There are notable limitations to this study. A larger corpus of trace data spanning various types of social movements over a greater length of time, and more interviews would widen the scope of inferences (Teddlie & Tashakkori, 2009) on movement social learning. A larger number of interviews provides greater guarantees of theoretical saturation (Baker & Edwards, 2012). As to the trace data, we see the analysis of quotes—retweets that are accompanied by commentaries by retweeters—as a fertile avenue for further research. Quotes were introduced by Twitter in the first half of 2015, but were not retrieved with the code used to mine the Twitter Search API in the original study (see Mercea & Yilmaz, 2018, for details). Finally, we examined a diverse—albeit by-and-large ideologically progressive—movement. Whether and how retweeting sustains the diffusion of a plurality of knowledge in more or indeed less ideologically cohesive movements is an important topic for further comparative empirical analysis.

This investigation concentrated on the process of movement social learning. It highlighted the important place of social information use in the process. The extent to which expected collective outcomes cued through social information use are realized by tweet authors, retweeters and their followings needs to continue to be investigated systematically. For example, this could be done with experimental designs for insights into individual attitudinal or behavioral change, and at scale, with panel studies.

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