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The Structure of Online Activism

Kevin Lewis,^a Kurt Gray,^b Jens Meierhenrich^c

a) University of California, San Diego; b) University of North Carolina, Chapel Hill; c) London School of Economics and Political Science

Abstract: Despite the tremendous amount of attention that has been paid to the internet as a tool for civic engagement, we still have little idea how "active" is the average online activist or how social networks matter in facilitating electronic protest. In this paper, we use complete records on the donation and recruitment activity of 1.2 million members of the Save Darfur "Cause" on Facebook to provide a detailed first look at a massive online social movement. While both donation and recruitment behavior are socially patterned, the vast majority of Cause members recruited no one else into the Cause and contributed no money to it-suggesting that in the case of the Save Darfur campaign, Facebook conjured an illusion of activism rather than facilitating the real thing.

Keywords: social networks; social movements; social media; online activism; Facebook; Save Darfur

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COCIAL media have changed the world. The ability to connect instantly with friends, family, and strangers alike has transformed the way relationships are created and maintained and altered the very structure of our social fabric (Brown 2011; Ellison, Steinfield, and Lampe 2007; Rosenfeld and Thomas 2012). On a societal level, social media create unprecedented opportunities for information flow (Sparrow, Liu, and Wegner 2011), affective expression (Golder and Macy 2011), social influence (Bond et al. 2012), and apparently even democratic revolution (Allagui and Kuebler 2011). Although much has been written on the relationship between the Internet and the civic engagement of individuals and groups (Anduiza, Cantijoch, and Gallego 2009; Dahlgren 2009; Hara and Huang 2011), empirical studies of online activism are surprisingly scarce. Furthermore, these studies are largely limited to analyses of social movement website text and hyperlink data, on one hand (e.g., Ackland and O'Neil 2011; Lusher and Ackland 2011; Shumate 2012), or analyses of interview, survey, or "media ethnographic" data, on the other (e.g., Maireder and Schwarzenegger 2012; Nah, Veenstra, and Shah 2006; Pickerill 2001). Although this work sheds light on collective frames, interorganizational linkages, and the behaviors and perceptions of some activists, the nature and scale of the typ-

ical activist's involvement with social media have remained important but unexplored topics.

In this article, we examine the institutional emergence and evolution of one of the largest activist communities ever established online and offer tentative conclusions about its significance for collective action in a digital age. While recognizing the importance of the Internet as a communication device—and the multiple functions of networks for social movements (Diani and McAdam 2003; Passy and Giugni 2001)—our focus is on the Internet as a means of recruitment and fund-raising. The ubiquitous social network website Facebook offers an unprecedented opportunity to examine both these facets of online activism. Although researchers have increasingly turned to Facebook to learn about friendship networks (e.g., Lewis, Gonzalez, and Kaufman 2012; Wimmer and Lewis 2010), less attention has been paid to the website's role in social mobilization. Causes (http://www.causes.com) is a free online platform for activism and philanthropy that is widely recommended by other activist websites such as Movements.org. Causes's Facebook application allows Facebook users—an estimated 1.15 billion of whom are active each month (http://newsroom.fb.com)—to join, and donate money to, specific social causes (e.g., earthquake survivors in Haiti) or nonprofit organizations(e.g.,

Aflac Cancer Center) called "Causes." Members may also recruit other members to a Cause by sending them invitations to join. In an effort to assess the promise and limits of social media as a tool of social movements, we report herein findings from an ongoing inquiry into the structure of online activism, with particular reference to antigenocide activism (Busby 2010; Givan, Soule, and Roberts 2010). Our empirical focus is the conflict in Darfur, described variously as "genocide" and "war," and the moral movement that it has spurred (de Waal 2007; Hagan and Palloni 2006; Hamilton 2011).

At its height, the Save Darfur Cause was one of the largest Causes on Facebook, with more than 1 million members who had collectively donated more than \$100,000. Our data include the full donation and recruitment history of all current members as of January 27, 2010. In other words, for the 989-day period beginning on May 15, 2007 (the date the Cause was founded), we compiled comprehensive data on who joined when; who recruited whom; and who donated how much, and when (see the online supplement for details). To our knowledge, it is the first data set of its kind in containing precise longitudinal data on the growth and donation activity of a massive online social movement (and one of the largest social movements in U.S. history, rivaling the U.S. civil rights movement) and on the microlevel linkages among its members. We address three basic questions: What was the nature and distribution of Facebook activism in the Save Darfur campaign? How did this behavior unfold over time? How important were social networks to facilitating electronic protest?

Results

As of January 27, 2010, the Save Darfur Cause included 1,174,612 members who had collectively donated \$90,776 (Fig. 1). Of these members, 949,959 (80.87 percent) were recruited by other members, whereas 224,653 (19.13 percent) had joined independently. The Cause experienced a period of rapid growth immediately following its inception, acquiring over one-fifth of its eventual membership size and one-quarter of its eventual revenue in just the first two months. By the end of 2007, 64 percent of all members had joined,

and 59 percent of all dollars had been donated. The years 2008 and 2009 were characterized by intermittent spikes in donations with no apparent regularity, and most of the Cause's remaining increases in membership were due to new members who were recruited rather than new members who had joined independently (Fig. 2). By the end of the data collection period, membership and revenue had both largely plateaued.

Although recruitment and donation activities were clearly unevenly distributed across time, they were also unevenly distributed across activists. Despite the Cause's longevity and massive size, only a fraction of Cause members ever engaged in any type of "activism" beyond the basic act of joining (Fig. 3). Focusing only on members who joined within the first 689 days (N=1,085,463) so that the proportion of recruiters and donors is not artificially truncated, 72.19 percent of members never recruited and 99.76 percent of members never donated (see the online supplement for details). Of those members who did recruit, nearly half (45.57 percent) recruited only one other person, and of those members who donated, 94.72 percent did so only once. In other words, the vast majority of the Cause's size and income can be attributed to a very small number of "hyperactivists." The most active recruiter, for instance, single-handedly recruited a total of 1,196 new members (0.1 percent of Cause membership), whereas the most generous donor contributed a total of \$2,500 (2.8) percent of funds raised). In fact, by going back in time and removing only the top 1 percent most influential Cause members—including all of their recruits, the recruits of their recruits, and so on, as well as all of their donations, the donations of their recruits, and so on—62.84 percent of Cause membership and 46.54 percent of funds raised disappear. Over time, then, diminishing increases in the Cause's overall size were exacerbated by drastic reductions in donation and recruitment rates: more and more people did less and less (Fig. 4).

Though exceptionally rare, the acts of recruiting and donating were still governed by certain regularities. First, the two behaviors were strongly associated: donors were more than twice as likely as nondonors to recruit, and recruiters were nearly four times as likely as nonrecruiters to donate. Second, Cause members' odds of do-

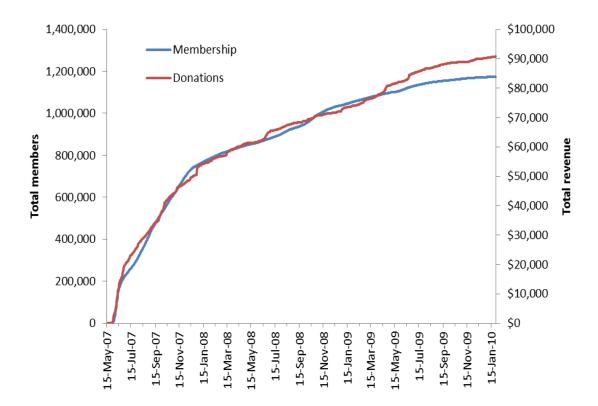


Figure 1: Development of an online social movement. In terms of both members and donations, the Save Darfur Cause experienced a period of rapid growth in the first month after its inception (May 15 to June 15, 2007). Rates of increase began slowing as early as the end of 2007 and had largely plateaued by the end of the data collection period (January 27, 2010).

nating increased by 258 percent, and their odds of recruiting increased by 11 percent if they had joined independently rather than having been recruited—suggesting that the most active members were attracted to the Cause for reasons independent of peer influence. Third, limiting attention to members who were recruited by other members, a member's donating and recruiting behaviors were significantly associated with the donating and recruiting characteristics of that member's recruiter. For every additional member whom a given recruiter recruited, the odds that each of those recruits would donate diminished by 0.5 percent, and the odds that each of those recruits would recruit diminished by 0.04 percent (although estimation of the latter coefficient is particularly imprecise). In other words, mass efforts at recruiting appear to be synonymous with untargeted efforts at recruiting—as opposed to inviting fewer people to join the Cause who were each more likely to participate. At the same time, the more time that elapsed between the recruiter's join date and the date the recruit was recruited, the more likely the recruit was to donate (0.5 percent increase in odds for every day elapsed) and recruit (0.04 percent increase in odds for every day elapsed), suggesting that a delayed invitation was also a more deliberate one. Finally, the odds that a Cause member donated were 610 percent higher if the member's recruiter was also a donor; and while it is nonsensical to assess the association between whether a Cause member recruited and whether that member's recruiter also recruited, members who were part of a *larger* crop of recruits also tended to recruit more new members themselves. (The magnitude of this association is quite small, however: for every additional person my recruiter recruited, the expected log count of my own number of recruits increased by only 0.001.) Full model results, in-

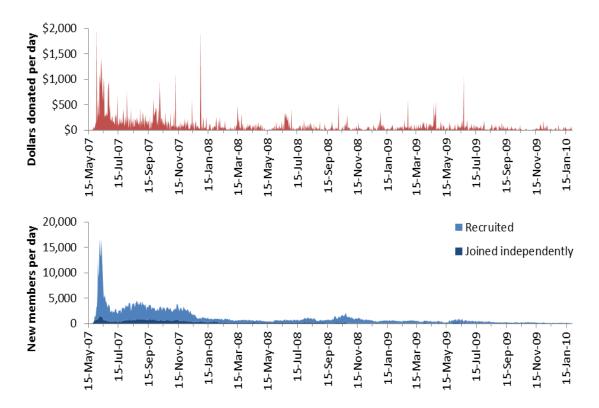


Figure 2: Changes in growth rates over time. Another look at the development of the Save Darfur Cause, presented here as changes in daily rates of (A) dollars donated and (B) new members (as opposed to cumulative dollars and members, as in Fig. 1).

cluding parameter estimates and standard errors, are presented in the online supplement.

Discussion

What are we to make of these patterns? Considering the extraordinary size of this movement (1.2) million members), the influence and accessibility of the world's largest social medium (Facebook), and the moral urgency of the social issue at stake (genocide), the amount and quality of activism that resulted from the myriad online interactions among Cause members were extraordinarily modest. Neither recruitment nor donation results were impressive: most individuals in our data set recruited no one else into the Cause and contributed no money to it. Furthermore, those individuals who contributed in one way (financially or socially) also tended to contribute in the other, and the likelihood of either behavior diminished tremendously over time. Of course, millions of people registered their support by joining the Cause, and the personal significance of this gesture to participants or the symbolic impact of the movement to onlookers is impossible to estimate accurately. However, only a small percentage engaged in any "active and involved" participation beyond the act of nominal membership (cf. Putnam 2000:58); ironically—given the premise of social media on the importance of social connection—in the case of Save Darfur, recruited online activists were the *least* active of all.

One possibility is that the low level of activism we observed is a reflection not of social media but of a general unwillingness to contribute to social causes of any form. Available data suggest that this explanation is implausible. Surveys show that 51 percent of American households donate to charitable causes—often through workplace incentives or other in-person appeals (Toppe, Kirsch, and Michel 2002). Mail solicitations, meanwhile,

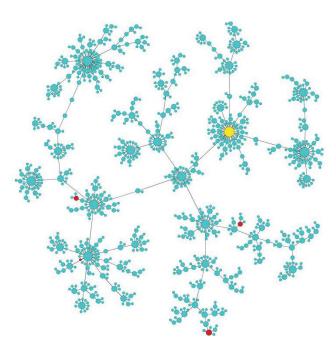


Figure 3: Network structure of online activism. The Save Darfur recruitment network can be divided into 243,916 weak components of members who can directly or indirectly reach each other via social linkages but cannot reach members of other components. Featured is one such component, where edges represent recruitment links, node size is proportionate to the quantity of members recruited, and the original seed recruiter is colored yellow. Of the 1,021 members featured, only 4 (colored red) donated money to the Cause, and the majority (71 percent) recruited no one.

typically generate rates of 2 percent to 8 percent of people donating \$10 to \$50 each (Karlan and List 2007; List and Lucking-Reiley 2002), and the Save Darfur campaign received more than \$1 million through direct-mail contributions in fiscal year 2008 alone (Save Darfur Coalition 2008). So although the average donation amount on Facebook (\$29.06) was comparable to offline donations, the donation rate (0.24 percent) was substantially less and accounted for only a fraction of funds raised by Save Darfur in traditional ways. It seems, therefore, that social media may indeed help activate the interpersonal ties that play such a powerful role in recruitment to offline activism (Schussman and Soule 2005). Conditional on

joining, however, recruits are then susceptible to the same "paradox of community life" that is the subject of classical work on collective action: otherwise socially minded participants have little incentive to contribute because they assume that the millions of other members will (Oliver 1984).²

Results of this analysis should be kept in perspective. The exceptional precision of our behavioral data (on recruitment relations, donation amounts, and accompanying time stamps for both) was offset by the complete absence of de-

recruit than members who were recruited (because the same political "hyperengagement" that caused this high activity likely also drove them to join without needing an external push).

²An obvious parallel can also be drawn to the psychological concept of diffusion of responsibility (Darley and Latané 1968): the greater the size of the movement, the less personally responsible each participant may feel for contributing. We would expect this problem to be particularly pronounced for the Save Darfur Cause, given (1) the tremendous size of the movement and (2) the transparency of this size to all members (it is posted on the Cause home page).

¹In fact, Schussman and Soule's (2005) findings fore-shadow two of the central results of this analysis: (1) that many more members were recruited to the Cause than joined independently (given that "being asked to protest" was the strongest predictor of participating in protest in their study) and (2) that those members who joined independently were nonetheless more likely to donate and

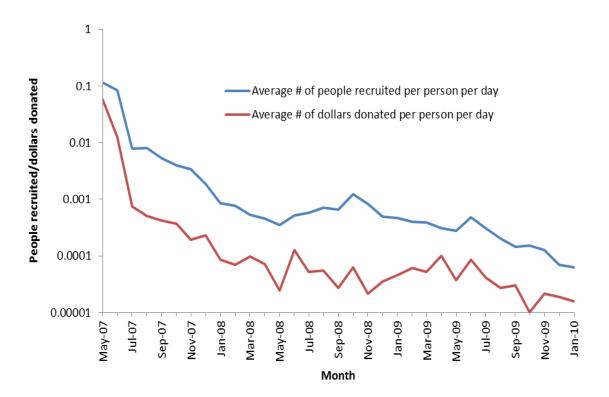


Figure 4: Decline of individual participation shown via a final portrait of the evolution of the Save Darfur Cause, here represented as daily rates of per-person activity (averaged over each month to enhance visibility) as opposed to daily rates of overall increases (as in Fig. 2). The y axis is in logarithmic scale.

mographic information on Cause participants or even their geographic locations. Importantly, our findings also pertain to only a single social movement using a single online platform. First, this means that our results may suffer from selection bias—a familiar limitation to scholars of social movements and social networks (Lim 2008; Siegel 2009)—given that not all Facebook users joined the Cause and only Facebook users were eligible to join. Second, these results cannot speak to "riskier" or "costlier" forms of online engagement than recruitment or financial donation (McAdam 1986). Finally, it is possible that the individuals in our data set contributed to Save Darfur in other meaningful but unobserved ways, and design elements that amplified network signals (Bond et al. 2012) or more deeply embedded Cause members in webs of like-minded others (Kim and Bearman 1997) may have resulted in deeper and more enduring patterns of contribution. Yet more data-driven research is needed to ascertain the exact determinants of successful online activism in all its many forms (Earl 2006). Conversely, given the unprecedented size and increasing representativeness of Facebook users compared to the U.S. population (Wilson, Gosling, and Graham 2012), the possibility of selection bias is minimized relative to other studies. Furthermore, the vast majority of prior research has "selected on the dependent variable" by focusing on cases of online social movements that were "successful," leading to a potentially inflated sense of the importance of social media for political activism (e.g., Tufekci and Wilson 2012). By instead examining a movement that should have been successful, we hope to maximize the scientific contribution of this single case study (Yin 2003:39-42) and help pave the way for future, more systematic research at the intersection of social movements, social networks, and contemporary information and communications technology (cf. DiMaggio et al. 2001).

In conclusion, our analysis reveals an inverse relationship between broad online social movement mobilization and deep participation. Despite the chorus of voices touting the transformative (and even democratizing) potential of social media, when it came to recruiting for—and donating to—the Save Darfur Cause, the most popular social network site in the world appears to have hardly mattered. If our data are any guide, Facebook is less useful a mobilizing tool than a marketing tool (Donovan and Henley 2010): although it enabled more than 1 million individuals to register their discontent with the situation in Darfur, it largely failed to transform these initial acts of movement participation into "a deep and sustained commitment to the work" (Land 2009:220). In other words, rather than upholding the notion of social media as gateways to civic engagement, our findings support the notion that "the fast growing support and diffusion of protest enabled by the Internet is followed by an even faster decline in commitment" (Van Laer 2010:348). Facebook, in the case under investigation, proved a "weak-tie" instrument par excellence (Granovetter 1973; Kavanaugh et al. 2005).

References

- Ackland, Robert and Mathieu O'Neil. 2011. "Online Collective Identity: The Case of the Environmental Movement." Social Networks 33:177–90.
- Allagui, Ilhem and Johanne Kuebler. 2011. "The Arab Spring and the Role of Icts." *International Journal of Communication* 5:1435–42.
- Anduiza, Eva, Marta Cantijoch, and Aina Gallego. 2009. "Political Participation and the Internet: A Field Essay." Information, Communication, and Society 12:860–78.
- Bond, Robert M., Christopher J. Fariss, Jason J.
 Jones, Adam D. I. Kramer, Cameron Marlow,
 Jaime E. Settle, and James H. Fowler. 2012.
 "A 61-Million-Person Experiment in Social Influence and Political Mobilization." Nature 489:295–98.

- Brown, Lauren Sophie. 2011. "The Presentation of Self in Digital Life." Honors thesis, Department of Sociology, Harvard University.
- Busby, Joshua W. 2010. Moral Movements and Foreign Policy. Cambridge: Cambridge University Press.
- Dahlgren, Peter. 2009. Media and Political Engagement: Citizens, Communication, and Democracy. Cambridge: Cambridge University Press.
- Darley, John M. and Bibb Latané. 1968. "Bystander Intervention in Emergencies: Diffusion of Responsibility." *Journal of Personality* and Social Psychology 8:377–83.
- de Waal, Alex. 2007. War in Darfur and the Search for Peace. Cambridge: Global Equity Initiative.
- Diani, Mario and Doug McAdam. 2003. Social Movements and Networks: Relational Approaches to Collective Action. Oxford: Oxford University Press.
- DiMaggio, Paul, Eszter Hargittai, W. Russell Neuman, and John P. Robinson. 2001. "Social Implications of the Internet." Annual Review of Sociology 27:307–36.
- Donovan, Rob and Nadine Henley. 2010. Principles and Practice of Social Marketing: An International Perspective. Cambridge: Cambridge University Press.
- Earl, Jennifer. 2006. "Pursuing Social Change Online: The Use of Four Protest Tactics on the Internet." Social Science Computer Review 24:362–77.
- Ellison, Nicole B., Charles Steinfield, and Cliff Lampe. 2007. "The Benefits of Facebook 'Friends': Social Capital and College Students' Use of Online Social Network Sites." Journal of Computer-Mediated Communication 12:1143–68.
- Givan, Rebecca Kolins, Sarah A. Soule, and Kenneth M. Roberts. 2010. The Diffusion of Social Movements: Actors, Mechanisms, and Political Effects. Cambridge: Cambridge University Press.
- Golder, Scott A. and Michael W. Macy. 2011. "Diurnal and Seasonal Mood Vary with Work, Sleep, and Daylength across Diverse Cultures." Science 333:1878–81.

- Granovetter, Mark. 1973. "The Strength of Weak Ties." American Journal of Sociology 78:1360– 80.
- Hagan, John and Alberto Palloni. 2006. "Death in Darfur." Science 313:1578-79.
- Hamilton, Rebecca. 2011. Fighting for Darfur: Public Action and the Struggle to Stop Genocide. New York: Palgrave.
- Hara, Noriko and Bi-Yun Huang. 2011. "Online Social Movements." Annual Review of Information Science and Technology 45:489–522.
- Karlan, Dean and John A. List. 2007. "Does Price Matter in Charitable Giving? Evidence from a Large-Scale Natural Field Experiment." American Economic Review 97:1774–93.
- Kavanaugh, Andrea L., Debbie Denise Reese, John M. Carroll, and Mary Beth Rosson. 2005. "Weak Ties in Networked Communities." The Information Society 21:119–31.
- Kim, Hyojoung and Peter S. Bearman. 1997. "The Structure and Dynamics of Movement Participation." American Sociological Review 62:70–93.
- Land, Molly Beutz. 2009. "Networked Activism." Harvard Human Rights Journal 22:205–43.
- Lewis, Kevin, Marco Gonzalez, and Jason Kaufman. 2012. "Social Selection and Peer Influence in an Online Social Network." Proceedings of the National Academy of Sciences of the United States of America 109:68–72.
- Lim, Chaeyoon. 2008. "Social Networks and Political Participation: How Do Networks Matter?" Social Forces 87:961–82.
- List, John A. and David Lucking-Reiley. 2002. "The Effects of Seed Money and Refunds on Charitable Giving: Experimental Evidence from a University Capital Campaign." Journal of Political Economy 110:215–33.
- Lusher, Dean and Robert Ackland. 2011. "A Relational Hyperlink Analysis of an Online Social Movement." *Journal of Social Structure* 12, Article 5, http://www.cmu.edu/joss/content/articles/volume12/Lusher/.
- Maireder, Axel and Christian Schwarzenegger. 2012. "A Movement of Connected Individuals: Social Media in the Austrian Student Protests 2009." *Information, Communication, and Society* 15:171–95.

- McAdam, Doug. 1986. "Recruitment to High-Risk Activism: The Case of Freedom Summer." American Journal of Sociology 92:64– 90.
- Nah, Seungahn, Aaron S. Veenstra, and Dhavan V. Shah. 2006. "The Internet and Anti-war Activism: A Case Study of Information, Expression, and Action." Journal of Computer-Mediated Communication 12:230–47.
- Oliver, Pamela. 1984. "'If You Don't Do It, Nobody Else Will': Active and Token Contributors to Local Collective Action." American Sociological Review 49:601–10.
- Passy, Florence and Marco Giugni. 2001. "Social Networks and Individual Perceptions: Explaining Differential Participation in Social Movements." Sociological Forum 16:123–53.
- Pickerill, Jenny. 2001. "Environmental Internet Activism in Britain." *Peace Review* 13:365–70.
- Putnam, Robert D. 2000. Bowling Alone: The Collapse and Revival of American Community. New York: Simon and Schuster.
- Rosenfeld, Michael J. and Reuben J. Thomas. 2012. "Searching for a Mate: The Rise of the Internet as a Social Intermediary." *American Sociological Review* 77:523–47.
- Save Darfur Coalition. 2008. Uniting Voices: Save Darfur Coalition 2008 Annual Report. Washington, DC: Save Darfur Coalition.
- Schussman, Alan and Sarah A. Soule. 2005. "Process and Protest: Accounting for Individual Protest Participation." *Social Forces* 84:1083–1108.
- Shalizi, Cosma Rohilla and Andrew C. Thomas. 2011. "Homophily and Contagion Are Generically Confounded in Observational Social Network Studies." Sociological Methods and Research 40:211–39.
- Shumate, Michelle. 2012. "The Evolution of the HIV/AIDS NGO Hyperlink Network." Journal of Computer-Mediated Communication 17:120–34.
- Siegel, David A. 2009. "Social Networks and Collective Action." *American Journal of Political Science* 53:122–38.
- Sparrow, Betsy, Jenny Liu, and Daniel M. Wegner. 2011. "Google Effects on Memory: Cog-

- nitive Consequences of Having Information at Our Fingertips." *Science* 333:776–78.
- Toppe, Christopher M., Arthur D. Kirsch, and Jocabel Michel. 2002. "Giving and Volunteering in the United States: Findings from a National Survey." Washington, DC: Independent Sector.
- Tufekci, Zeynep and Christopher Wilson. 2012. "Social Media and the Decision to Participate in Political Protest: Observations from Tahrir Square." *Journal of Communication* 62:363–79.
- Van Laer, Jeroen. 2010. "Activists Online and Offline: The Internet as an Information Channel for Protest Demonstrations." *Mobilization* 15:347–66.
- Wilson, Robert E., Samuel D. Gosling, and Lindsay T. Graham. 2012. "A Review of Facebook Research in the Social Sciences." Perspectives on Psychological Science 7:203–20.
- Wimmer, Andreas and Kevin Lewis. 2010. "Beyond and Below Racial Homophily: Erg Models of a Friendship Network Documented on Facebook." American Journal of Sociology 116:583–642.
- Yin, Robert K. 2003. Case Study Research: Design and Methods. Thousand Oaks, CA: Sage.

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Kevin Lewis: Department of Sociology, University of California, San Diego. E-mail: lewis@ucsd.edu

Kurt Gray: Department of Psychology, University of North Carolina, Chapel Hill. E-mail: kurtgray@umd.edu

Jens Meierhenrich: Department of International Relations, London School of Economics and Political Science. E-mail: J.Meierhenrich@lse.ac.uk