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The Policy Sciences of Social Media

Matthew R. Auer

Twitter, Facebook, and other social media are increasingly touted as platforms not merely for networks of friends and for private diversion, but as vehicles that allow ordinary people to enter and influence the many arenas of public life. On the surface, the disparate and shapeless population of "i-reporters," policy "tweeters," and anonymous news web site "commentators" would appear to challenge the comparatively well-defined cast of professional diplomats, journalists, and propagandists that Harold D. Lasswell identified as policy-oriented communicators. However, to illuminate the roles and impacts of social media in politics and policymaking, insights from Lasswell's "science of communication" must be embedded in Lasswell's broader lessons on value assets and outcomes. A closer look at the so-called democratizing functions of social media in politics reveals the influence of powerful intermediaries who filter and shape electronic communications. Lasswell's insights on the likelihood of increased collaboration among political elites and skilled, "modernizing intellectuals" anticipates contemporary instances of state actors who recruit skilled creators and users of social media—collaborations that may or may not advance experiments in democracy. Lasswell's decision process concept is deployed to discover social media's strengths and weaknesses for the practicing policy scientist.

KEY WORDS: policy sciences, social process, decision process, Harold D. Lasswell, social media, tag clouds, e-communication

Introduction

Harold D. Lasswell, cofounder (with Myres S. McDougal) of the policy sciences, was deeply interested in the "science of communication." Lasswell explored the processes and outcomes of information collection, manipulation, and transmission, and effects on various audiences (Lasswell, 1946a, 1946b, 1948). In the twenty-first century, the proliferation of electronic social media portals, such as Facebook, Twitter, YouTube, and LinkedIn, deployed on laptops and handheld mobile devices, are new, powerful communication tools capable of influencing users' opinions in the realms of politics and policy. Lasswell's science of communication and, more broadly, core concepts from his policy sciences framework can be deployed to clarify how these emerging technologies can and do influence important policy decisions. Mainstream news media endeavor to document the scale and speed of the social media revolution without considering, in systematic fashion, the outcomes and

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effects of this revolution, particularly in the policy arena. To wit, in its 2010 Person of the Year cover story of Facebook founder Mark Zuckerberg, *Time Magazine* declares,

> In less than seven years, Zuckerberg wired together a twelfth of humanity into a single network, thereby creating a social entity almost twice as large as the U.S. If Facebook were a country it would be the third largest, behind only China and India. It started out as a lark, a diversion. . . . We are now running our social lives through a for-profit network that, on paper at least, has made Zuckerberg a billionaire six times over. (Grossman, 2010)

Facebook's breathtaking growth, the sheer number of its users, and the riches and attention garnered by its inventor, while impressive, are less interesting for policy purposes than are the possible and actual consequences of the medium on politics and public affairs.

In examining social media, the present concern considers public affairs, not the private affairs of networks of friends and family. In their early incarnations, Facebook, Twitter, and other social media were especially apt for sharing content of private value, and indeed, much current content is of no particular policy value. However, social media's functions have evolved in that they no longer serve merely as platforms for favorite recipes, videos of family trips, or chatter about the latest office scandal. A recipe for a bomb casing can be as easily uploaded to a popular blog as can a recipe for a pie shell. A YouTube video of a citizen beaten by police during a disputed presidential election (YouTube, 2010) is likely to get more "hits" than a vacationing family's video found on the same portal. And "tweets" about the latest office scuttlebutt seem parochial and trivial when compared with the fallout, on Twitter, after a big city mayor responds lackadaisically to a major winter blizzard (National Public Radio, 2010).

To date, popular media have hinted that their upstart cousins, social media, have influence over politics and policy (Gross, 2011; Preston, 2011; Shane, 2011). Lasswell's approach, particularly his social process and decision process, offers a systematic way to define, categorize, and gauge these consequences. His developmental constructs envisage potential future functions of social media in the policy process. In the sections to follow, social media are defined, and their functions in public affairs are revealed, drawing on data in the field. Lasswell's "science of communication" and its value for functional (as opposed to conventional) analysis are considered. Lasswell's value categories, the social process, decision process, and developmental constructs are arrayed against current and possible future uses of social media in public affairs.

Social Media, Politics, and Policymaking

This essay draws on Harold D. Lasswell's policy sciences to clarify current and possible future functions of social media in public affairs. Social media are electronic communication platforms that convey content generated and exchanged by networks of users (Kaplan & Haenlein, 2010). They are wide ranging in form and purpose. Tang and Liu (2010, p. 1) offer a snapshot of social media functions and

Table 1. Social Media, Circa 2010

Forms of Social Media	Illustrative Platforms
Blogs	Blogspot, LiveJournal
Forum	Yahoo! answers, Epinions
Media sharing	Flickr, YouTube, Digg, Reddit
Microblogs	Twitter, foursquare
Social networks	Facebook, Myspace, LinkedIn, Tribe

Source: adapted from Tang and Liu (2010, p. 1).

popular platforms, circa 2010. The ever-changing universe of media include blogs, microblogs, discussion forums, media sharing sites, and social networks (Table 1).

In the years ahead, we may expect to learn more about how design features of particular social media (for example, Twitter's 140-character limit per message) encourage (or alternatively discourage) particular kinds of speech, and foster open and inclusive (or alternatively, closed and restrictive) discourse, among other concerns. The objective of the present article is to develop a broad Lasswellian map of social media in public affairs into which these more specific research questions may be embedded. Although "social media" and "social network" are used interchangeably in this article, the analysis here should not be confused with social network analysis, whose prominent exponents, like Wasserman and Faust (1994), develop models of relationships among networks of individuals or collections of individuals. Wasserman and Faust's insights may prove helpful in characterizing the structure of networks of users of social media and pathways of information flow (see, for example, Tang & Liu [2010], p. 34). A physical portrayal of social networks is of less interest in the present analysis than is the exploration of the value dispositions, identities, and strategies of actors who generate and use social media content for political and policy purposes.

Not just any web site or mobile phone application is a platform for social media. As the moniker, "followers" suggests (Twitter, in this case) there is a notion of community among users of social media. A reader of an article at CNN.com is not necessarily part of a network involving other CNN web site visitors; if that same reader posts a comment about the article on CNN's blog (or on another blog or on the microblogging platform Twitter), he or she has entered an electronic community where user opinions and values are shared.

Indeed, values and opinions are *shaped* and shared (per Lasswell) because digital posts spawn commentary, sway views, and spur action. Consider, for example, that in the 2008 American presidential election, the Pew Research Center's Internet & American Life Project found that around 20 percent of Internet users posted their thoughts, comments, or questions about the campaign on a web site, blog, social networking site, or other online forum (Smith, 2009). In that same election, 14 percent of Internet users and 11 percent of all adults forwarded or posted someone else's political commentary or writing (Rainie & Smith, 2008). Young people appear to be relatively more likely to use social media to relay personal views or experiences about politics and voting. Almost 50 percent of social network users between the ages of 18 and 29 polled by Pew declared they had used social media to discover

their friends' political interests or affiliations, to receive campaign information, to sign up as a "friend" of a candidate, or to join or start a political group. Thirty-two percent of those surveyed in the 30+ age group indicated they used social media for one or more of these purposes (Rainie & Smith, 2008).

There are also indications of increasingly important policy functions performed by social media. Some illustrations point to social media's role in doing nothing less than saving people's lives. Jeff Pulver, an organizer of an annual conference on Twitter, declares that, during the Haiti earthquake crisis of 2010, he was able to "re-tweet" a message posted by a journalist about a humanitarian relief flight held up in the skies over Port-au-Prince. The U.S. Air Force, in command of the capital's airport, had not cleared the plane to land. Shortly after Pulver's forwarded tweet, the Air Force tweeted back, "We're on it" (della Cava, 2010). In that same crisis, the "Text Haiti 90999" program, conveyed on mobile phones, was a joint initiative of the communications company Mobile Accord, the U.S. Department of State and the Red Cross. As of June 2010, the project raised more than $41 million for earthquake relief (Mobile Accord, 2010). In another case, friends, family, and sympathetic Twitter followers of an Omani reporter aboard the "Freedom Flotilla," a vessel that clashed with Israeli Defense Forces in the Mediterranean in 2010, got updates about the reporter's situation via his tweets and Facebook updates (Johnson, 2010). Twitter has also relayed information from democracy advocates to the world and helped demonstrators coordinate their actions during the so-called "Twitter Revolution" in Moldova in 2009 (Radio Free Europe Radio Liberty, 2009; but see Applebaum, 2009). More dramatic still were video uploads, tweets, and Facebook updates from the streets of Tehran as thousands of demonstrators protested disputed presidential elections in 2009. Galvanizing information on social networks included a "viral video" of the shooting death of an Iranian woman, viewed by millions around the globe. It is common knowledge that Facebook, Twitter, text messaging, and other electronic networking tools featured prominently in uprisings in the Middle East and North Africa in 2010 and 2011.

Social Media and Lasswell's Science of Communications

If adulthood for social media platforms is reached once these technologies begin impacting politics and public policy, then tools like Twitter, Facebook, and YouTube are growing up fast. None of these portals were specifically designed for collecting or disseminating information on politics or public affairs. But much as the Internet's present-day functions go well beyond the purposes it was originally designed for (see Abbate, 2000), social media—even Twitter's deliberately cramped messaging platform—are increasingly important in what Harold D. Lasswell described as the "communication process of human society" (Lasswell, 1948). Evidence of this trend, for example, are the half-million followers of tweets transmitted by two, young State Department officials, one of whom goes by the title, "Senior Adviser for Innovation" (Lichtenstein, 2010, p. 26). The *New York Times* reports the pair's tweets, "have

become an integral part of a new State Department effort to bring diplomacy into the digital age, by using widely available technologies to reach out to citizens, companies, and other nonstate actors" (Lichtenstein, 2010, p. 26).

On the surface, these new, "open" communication channels—accessible by virtually anyone with an iPhone, smartphone, or dial-up or high-speed modem—would appear to pose a challenge to Lasswell's framing of who participates in official and journalistic communication streams. In Lasswell's schema, the generators and transmitters of domestic and foreign news and of official policy communications were comparatively few and were professionals versus the seemingly wide-open field of potential "content uploaders" to social networks. However, although Lasswell made a careful taxonomy of:

> Who
> Says What
> In Which Channel
> To Whom
> With What Effect? (Lasswell, 1948, p. 37),

he also insisted, "We are less interested in dividing up the act of communication than in viewing the act as a whole in relation to the entire social process" (Lasswell, 1948, p. 38). Following this advice requires attention to the plausible outcomes and effects of social media in the public arena; and it demands a careful rendering of what, exactly, is revolutionary in the "social media revolution."[1] In the paragraphs that follow, we examine social media and digital public discourse through a Lasswellian lens. Both the social process and decision process are our templates, beginning with the social process.

Social Media and the Power Value

Returning to the tale of the young State Department officials and the task of bringing diplomacy into the digital age: the *New York Times* reports: "Even last year (2009) . . . the State Department was boxed into the world of communiqués, diplomatic cables and slow government-to-government negotiations" (Lichtenstein, 2010, p. 26). To open up and make more participatory the creation and exchange of communications, new applications were adopted, including the "short-message-service" (S.M.S.). Among other things, this tool could be used by volunteers to monitor election results in developing countries (even very poor countries have mobile telephony infrastructure that can support S.M.S.). How might Lasswell's science of communications make sense of the range of "new" actors who participate in social-mediated diplomatic processes—that is, processes mediated by Twitter and other S.M.S.? Lasswell's concept of official communication in the "world community," consists of "three categories of specialists":

> One group surveys the political environment of the state as a whole, another correlates the response of the whole state to the environment, and the third transmits certain patterns of response from the old to the young. Diplomats,

> attachés, and foreign correspondents are representatives of those who specialize on the environment. Editors, journalists, and speakers are correlators of the internal response. Educators in family and school transmit the social inheritance. (Lasswell, 1948, p. 40)

"Editors and journalists" occupy the middle group in Lasswell's communication stream. But is it the case that Twitter, Facebook, YouTube, and various i-reporter sites serve to reduce the significance of the these "middlemen," or as Lasswell referred to them, the message "controllers"? An i-reporter can post messages to blogs, Facebook, and other social media platforms without interference from editors or censors. The same State Department officials who tweet may have their message modified by "followers" who send their own, modified version of the State Department tweet to family and friends. And while Lasswell speaks of educators transmitting lessons in family and school, social media find young people influencing the old (Slaughter, 2009).

Any misgivings about the continuing relevance of Lasswell's labels for participants in communication processes are effectively nullified when one considers his and Myres McDougal's distinction between "conventional" and "functional" analyses. When we examine institutions, the "functional picture," Lasswell and McDougal (1992, p. 389) note, will often be "at variance with conventional images," and so, for example, businesspersons may be associated not only with wealth, but also with skill and enlightenment. Governmental actors not only exercise power; they can generate wealth, dispense respect, and so on. For policy purposes, what counts is not whether Lasswell's editors, censors, and other "communicators" remain relevant as *conventional* occupational categories. The obsolescence of particular jobs is irrelevant if, in fact, the functions performed by these jobs continue to be executed by other actors or institutions. What matters is how systems of communication, and the actors who participate in them, operate in functional terms and to what effect.

As to the matter of young people's ascendance via their use of social media: Lasswell recognized the synergistic possibilities of "youth" and the "communication revolution" in an essay on the prospects of a global "common identity." People sharing the common identity "will take one another into consideration in their decisions and choices" (Lasswell, 1972, p. 8). This "broadening and intensifying" identity, he observed:

> will undoubtedly be affected by the attitudes of the young and the expectations of the old about the orientation of the young. . . . The "youth" appear to have the potential for collective action on the massive scale necessary to break down many surviving perspectives and operating arrangements . . . (Lasswell, 1972, p. 23)

These "operating arrangements" included the "institution of war." Lasswell's essay was penned when young people were demonstrating for peace and questioning authority. Today, a new generation of young people is entering into positions of power and using social media for instrumental purposes related to power. Now and

in the years ahead, policy scientists might explore how a younger, socially networked generation justifies its accumulation and application of power, including coercive power.

Whether policymakers who use social media are young or old, decisions they make about the uses of social media have consequences for power, wealth, respect, and other value outcomes. Critics of the State Department's use of Twitter and Facebook note that the government is at risk of choosing which vendors win or lose in the competition to disseminate policy-relevant information. More ominously, it has been suggested that enemies of the state might recognize particular vendors as being *part* of the state, putting the vendors and their users at grave risk (Lichtenstein, 2010, pp. 26–28). Consider, for example, the State Department's pressure on the founder and CEO of Twitter to postpone scheduled maintenance of the platform so as not to interfere with Iranian demonstrators' and opposition leaders' use of the tool during the 2009 postelection protests (Lichtenstein, 2010, p. 27). Notwithstanding the hype about the openness and accessibility of social media and the disempowerment of "message controllers" (like newspaper editors), *modern-day* controllers, including inventors of social media, executives who purchase and "brand" these inventions, and charismatic personalities with many "followers," are very much part of the crafting and dissemination of influential pronouncements and of news advocacy.

Social Process Sketch of Social Media in the Service of Diplomacy

Competition among users of social media to convey influential messages and the varying motivations of these users are ideal substrates to be explored by Lasswell's social process. The social process is a comprehensive map of both basic, overarching, authoritative structures and rules, and the "particular decisions" that emerge from this architecture (Lasswell & McDougal, 1992, pp. 26–29). The social process is part of a larger framework that policy scientists use to identify participants who interact in particular situations and who use strategies to obtain desired outcomes. Table 2 summarizes fundamental categories of the social process, defines key terms, and offers illustrations relevant to the present inquiry. In introducing "theoretical construct(s)" and "practical uses" of the social process, Lasswell and McDougal write that their own tabular itemization of this concept "make(s) no pretense of either comprehensiveness or homogeneity. . . ." (1992, p. 99). The same proviso applies to the definitions and illustrations shown in Table 2. Readers are directed to Lasswell and McDougal (1992) for an elaborate treatment of the social process.

In the passages that follow, we consider, in summary form, the social process of social media in the public policy realm, with attention to the arena of U.S. digital diplomacy. Major concepts and categories from the social process are denoted by words with capitalized first letters.

A key, comparatively well-organized Participant, the state, makes use of a communication platform that millions of "followers" consult. The followers are organized only to the extent they follow the same Tweeter, and in this respect, they share a common Identity. The Identities and Perspectives of the Tweeters are core concerns

Table 2. The Social Process and Social Media in Public Affairs

Category	Definition	Illustrated in the Social Media of Public Affairs
Participants	Key actors in public affairs, including organized and unorganized actors; individuals and groups; systems of representation or nonrepresentation	Partisan bloggers; Tweeters of eyewitness news at political rallies; followers (of these Tweeters); Facebook page creators focusing on politics and Facebook friends; peer-to-peer sharers of political video
Perspectives	Identities of participants, their demands, expectations, and operating myths	Advocates for democracy in politically repressive countries; loyalists of repressive regimes; operating myth that the Internet is the "world's town square" (see BBC News, 2011)
Arenas	Spatial, temporal, and institutional settings where participants interact	Universality and global reach of social media platforms; diminished importance of geography, distance, and time through mastery of social media
Base values	Assets at one's disposal to secure preferred outcomes; Lasswell's classic "eight values": power, enlightenment, wealth, well-being, skill, affection, respect, and rectitude	Self-importance (respect) by being LinkedIn to an elite; enlightenment and rectitude after viewing an online video of a political demonstration
Strategies	Plans, plots, and tools for achieving goals and objectives	Using computer hacking skills to fortify the power of an autocrat; tweeting locations of political rallies
Outcomes	Culminating events in particular contexts	Well-attended rallies, enabled by Twitter, spur a regime crackdown; well-attended rallies, enabled by Twitter, hasten a regime's collapse
Effects	Post-outcome consequences and long-term changes to institutions	Crackdown on social media inspires new resistance strategies by prodemocracy advocates; crackdown inadvertently harms economic actors who depend on social media; bloggers who pressure regime to quit are empowered and earn respect but also confront challenges of postregime nation building

Sources: Based on Clark (2002); Lasswell (1971a); Lasswell & McDougal (1992).

here. In the age of social media, professional identities are blurred in the communications sent on social networks. Communications are also shaped by users who modify and pass along reconstituted messages; these users have their own particular Expectations and Demands. As the *New York Times* notes:

> Where once there was a pretty bright line between journalist and political operative, there is now a kind of a continuum, with politicians becoming media providers in their own right, and pundits, entertainers and journalists often driving political discussions. (Carr, 2010)

Whether the public recognizes its favorite Tweeter and Facebook personalities as politicians, public administrators, pundits, entertainers, or some combination thereof, the devotees are tuning-in, sometimes with great frequency. Users obtain information about public issues that are important to them, including about the

conduct of official U.S. actors abroad, and followers and friends voice their own demands. These expressed demands are followed by others.

Tweeters endeavor to understand the proclivities of their followers; the two State Department officials frequently blend "official business" with references to popular culture—for example, discussing a high-level meeting on the challenges of containing an unfriendly regime in Iran, combined with tasting notes on a coffee the Tweeter consumed during that meeting (Lichtenstein, 2010, p. 26). Here is Lasswell's triple appeal principle at work, whereby the messenger simultaneously appeals to the viewer or listener's rational, moral, and impulsive divisions of personality (Lasswell, 1932). The Situation or Arena where these messages are conveyed are mediated by sophisticated communication technologies designed for busy people who view content and, almost as quickly, react. Some of the followers "re-tweet" the original message or modify it. A communicative Strategy is in play: Tweeters and re-Tweeters seek to inform, and perhaps, misinform—boundaries that Lasswell and McDougal explore when referring to "permissible" and "impermissible" communication and propaganda (1992, pp. 1200–02). Outcomes, which are endpoints in any specific policy context, include indulging users of social media who feel empowered and enlightened as never before. Effects, which are long-term or second-order consequences, include changes in institutional resources and value outcomes, including, for example, a 2010 State Department decision to cut financing to Iranian dissident groups living abroad offset by that agency's stepped-up investments in social networks for dissidents inside Iran (Lichtenstein, 2010, p. 27).

This brief sketch of the "social process of social media in public affairs"—and more specifically, of the social network-mediated policy work of the U.S. Department of State—underscores what is at stake for that agency and for its customers, including Americans and non-Americans alike. Among other outputs, the social process "map" produced by the policy analyst inspires him or her to think carefully about how policies, strategies, and decisions affect value outcomes, measured as accumulations, or alternatively, deprivations of power, of enlightenment, of wealth, and so on. In choosing to move policy and communication resources into social media, the State Department's decision inevitably rewarded some stakeholders while reducing assistance to others, including actors who were deeply invested in the established ways of doing business, pre-Twitter.

Inside the larger social process of American diplomacy are the specific policy decisions to use social media and the consequences of these decisions. These topics are fodder for Lasswell's "decision process" that contains seven functional categories (intelligence, promotion, prescription, invocation, application, termination, and appraisal). The decision process is an elaboration of "outcomes" in the social process—and in particular, the outcomes of actors striving to accrete and use power (and by extension, to accumulate and use all value assets) (Lasswell, 1971a, pp. 27–28). Definitions and generic examples of these seven "decision functions" in social media and politics are presented in Table 3.

The lasting impact of Lasswell's decision process is apparent in myriad redactions and reformulations, and in some cases, misreadings (see, e.g., Sabatier, 1999).[2] The decision process is constructive for uncovering malfunctions in policymaking

Table 3. The Decision Process and Social Media in Public Affairs

Category	Definition	Illustrated in the Social Media of Public Affairs
Intelligence	The gathering, processing, and dissemination of information relevant to a policy decision	Content found on Twitter, Facebook, YouTube, and other microblogging, social networking, and media sharing sites dedicated to politics and policy, maintained by state or nonstate actors
Promotion	The advocacy of policy alternatives	Blogs, microblogs, forums espousing political views or proposing policy alternatives
Prescription	Norms that reflect public perspectives about who makes and enforces decisions, by what criteria, and by what procedure	Media sharing platforms carrying official pronouncements of public leaders; forums with compendia of rules and regulations; blogs dominated by consistent viewpoints that stabilize readers'/viewers' expectations about particular community norms
Invoking	The provisional characterization of particular acts that are/are not in conformity with a prescription	Spontaneous, microblogged comments about an alleged transgression by a political elite; electronic version of an arrest warrant redacted on a media sharing site
Application	The final characterization of particular acts that are/are not in conformity with a prescription	A resignation speech by a disgraced politician, uploaded to a media sharing site; a court ruling summarized in 140 characters
Termination	The abrogation of a prescription and its implementation apparatus	Rapidly tweeted news of the lifting of martial law; deleting a hyperlink to a state-sponsored Facebook page dealing with employment insurance after insurance program is suspended
Appraisal	The evaluation of decisions	Using a tag cloud to organize and analyze comments by voters leaving the polls; tracking tweets about a presidential decision to use force

Sources: Based on Lasswell (1971a); Lasswell & McDougal (1992).

and there are many such explorations (see, e.g., Mattson & Chambers, 2009; Clark, Willard, & Cromley, 2000; Auer, 1998). However, this same tool allows students to ask "so what" questions, such as: Are social media consequential in political and policymaking arenas? Mainstream media outlets are beginning to grapple with these concerns, too (see, e.g., Applebaum, 2009; Keller, 2010). In the next section, we consider social media as purposeful in making decisions affecting the community, i.e., public policy decisions. We also use a social media tool to test its value in policy appraisal—namely, a "tag cloud" or "word cloud," which is a weighted list of words or terms that, in principle, can provide order to the contents of disparate e-communications.

Peer-to-Peer Citizenry and the Decision Process

Possible outcomes from uses of social media in public affairs range from the widely praised, e.g., a Text Haiti humanitarian relief campaign, to inconsequential, e.g., posts on a political blog that no one consults, to the potentially destructive, e.g., tweeted bomb-making tips. To be systematic in appraising policy-relevant decisions

involving social networks, all parts of Lasswell's seven-component decision process should be deployed. A comprehensive application of the decision process that covers the full range of interactions among social media, politics, and policy is beyond the scope of this article. Instead, we consider the decision process as a heuristic for classifying social media's functions in policy arenas, generally. Readers are directed to Lasswell (1956a) for a concise introduction to the decision process.

The intelligence, promotion, and appraisal categories of the decision process are examined as a suite because of the seven functions; they are the most open and accessible to users of social media. Virtually anyone with policy analytical training and who owns a smartphone or has access to a web browser can collect and study information on digital platforms, post opinions on blogs, and, at least provisionally, evaluate policies. In contrast, prescription, invocation, application, and termination in *official* policymaking arenas are specialized functions dominated by (though not exclusively populated by) official actors.[3] The roles and impacts of social media in these two suites of functions are considered below.

Intelligence, Promotion, Appraisal, and Social Media. The impacts of social networks in public affairs are perhaps most obvious in the execution of the intelligence and promotion functions. Lasswell defined intelligence as "the gathering, processing, and dissemination of information for the use of all who participate in the decision process" (Lasswell, 1971a, pp. 28–29). "Criteria" he presented for the effective application of intelligence and the other functions were not to be used "in pedantic fashion" but instead to draw "a working sketch of the possibilities" (Lasswell, 1971a, p. 85). These criteria are suitable for testing the adequacy of social media for intelligence purposes. Consider the criterion of "dependability." By dependable, Lasswell meant "credible." Tests of credibility include whether purported statements of fact are "representative of the best available," whether qualified experts can vouch for the facts, and whether first-person observation is involved (Lasswell, 1971a, p. 85). One may conjecture that the reliability of e-communications, weighed against these demands, often fall short. At a minimum, fact-checking and accuracy are not inherent expectations of social media outlets such as Twitter and Facebook.[4]

To date, there is little available scholarship either supporting or challenging conjectures about the dependability of social media for policy-oriented intelligence purposes. While the accuracy of information on the Internet has received attention (e.g., Kunst, Groot, Latthe, Latthe, & Khan, 2002; Sunstein, 2006; Economist, 2010), social networking tools like Facebook, Tribe, Myspace, and Twitter have not been subject to comparable tests. Privacy concerns about social media more so than information accuracy have generated negative press.[5] However, considering the seamless integration of Facebook and Twitter icons on news sites and on the homepages of policy think tanks (see, e.g., http://www.aspeninstitute.org/; http://www.cfr.org/), international organizations (see, e.g., http://www.fao.org), and the fact that the *very first* word (and link) on the U.S. Department of State web site is "blog" (http://www.state.gov/ retrieved April 11, 2011), it would seem incumbent on policy scientists to pose Lasswell's dependability criterion with rigor. Influential social media sites that "spin" news for both promotional and entertainment

purposes might draw particular interest considering that, for example, in the fall of 2011, Comedy Central personality Stephen Colbert ranked ninety-fourth among Twitter accounts with the largest number of followers, with more than 2.1 million (Twitaholic, 2011).[6] According to a Rasmussen poll, almost 21 percent of respondents said that the Comedy Central shows "The Colbert Report" and "The Daily Show" were at least somewhat influential in shaping their political opinions, and one in three respondents believe that these shows were taking the place of traditional news outlets (Rasmussen Reports, 2009). Twitter followers of conservative cable show host Glenn Beck (whose program's tagline is "the fusion of entertainment and enlightenment") number in the hundreds of thousands. Cable television, but also social media have given platforms to political agitators who, in prior years, would have been pushed to the margins in the dominant two-party political system. In his *Politics at the Periphery*, G. David Gillespie redacts a conservative journalist's condemnations of mainstream media during the 1992 presidential campaign: "The media regard the two-party system as sacred, though the Constitution says nothing about it. (Libertarian presidential candidate) Marrou wants to restore our freedom. This is why he will be consigned to the oblivion of a minor candidate" (Gillespie, 1993, p. 178). However, by the midterm elections of 2010, political voices insisting on "a return to the Constitution" were the battle cry of an insurgent Tea Party movement whose leaders relied more often on social media to organize angry constituents than on coverage by mainstream media (Daniels, 2010). Politically motivated users of social media may appraise the "dependability" of social media content using a decidedly different metric than that used by policy scientists, namely, is the information dependable in the ideological sense (i.e., is it ideologically pure and consistent with the participants' dominant belief system)? For ideologues, "credibleness" might be determined by gut-level sensibilities and appeals to impulse rather than fact-based persuasion and appeals to reason.

Apart from dependability, Lasswell's criteria for judging intelligence include comprehensiveness, selectivity, creativity, and openness (Lasswell, 1971a, pp. 87–88). As with dependability, social media are challenged by the comprehensiveness and selectivity tests. By definition, tweets, even compiled tweets on a matter of vital public import, are unlikely to meet the policy scientist's demands for comprehensiveness, including detailed sketches of Lasswell's all-inclusive "five intellectual tasks": goals, trends, conditions, projections, and alternatives. Meanwhile, social media are open communication channels; they are not selective, by design. Twitter, Facebook, and many other social networking tools are replete with, by any measure, content that is not of vital concern to the community.

It is "creativity" and "openness" where social media's strengths are most apparent, including in policy arenas. Wikipedia's (2010a) list of social networking sites contains more than 200 platforms varying in purpose, but, in aggregate, offering a wide array of creative opportunities for uploaders and users of content. Certainly, social media invite "new objectives and strategies" (per Lasswell's creativity criterion) for addressing any number of public concerns through the various forums found on these sites. (Whether intelligence and promotion shared on these platforms are "realistic" [per Lasswell] is another matter.) Finally, many social networks

measure up to Lasswell's "openness" criterion. This standard calls for eliciting "cooperation in obtaining intelligence." The ever-present i-reporter buttons, blogs, and comment fields on news web sites are indicative of the potential advantages these portals offer to publicly minded citizens and lay reporters compared with traditional news gathering and official intelligence institutions.

However, it is the very openness of these tools that create the dependability and selectivity problems described above, and no less urgent, a blurring of intelligence and promotion outcomes. Promotional copy on social networks is great in volume, and the type of promotion occupies a continuum from the overt, including ordinary advertising, to the surreptitious, including seemingly "raw" and unadulterated information leaked (or stolen) from the hard drives of the "ruling few." To illustrate the latter, consider a powerful, graphic video transmitted by WikiLeaks in 2010 of a 2007 U.S. military action against suspected Iraqi insurgents (who, apparently unbeknownst to U.S. forces, included Iraqi journalists). WikiLeaks used Twitter to seek help in decrypting this video (Cohen & Stelter, 2010). "Collateral Murder," the title of an edited version of the WikiLeaks video, creates another challenge for the viewer. Its full context is not revealed—a return to the "comprehensiveness" problem discussed above. The viewer does not know what decisions preceded the order to engage the suspected militants and the rules of engagement are not explained. WikiLeaks calls itself "the first intelligence agency of the people" (WikiLeaks, 2010). Here are advocates who, in their words, collect and dispense intelligence—a test of the boundaries between the intelligence and promotion functions, fostered by new, electronic media. Other values at stake include well-being and rectitude: in 2010, in another WikiLeaks case, the organization posted approximately 92,000 secret and classified materials dealing with U.S. military involvement in Afghanistan. In some of the documents were names of Afghan informants who, conceivably, could become targets of reprisal (Schmitt & Savage, 2010).[7]

Because uploaded material is disparate (in its origins and dependability) and unfiltered, there are likely to be mixed promotional outcomes when another of Lasswell's criteria is considered: integrativeness. Integrative approaches, Lasswell argues, forge broad understandings among competing interests about particular problems or solutions (Lasswell, 1971a, pp. 88–89). In promotional processes, social media could serve to coalesce interests, strengthen voices that otherwise might be diffuse or poorly organized, and create a sense of dramatic tension—consider, for example, the augmenting effects of Twitter and Facebook in the disputed presidential elections in Iran and in Moldova in 2009 and in popular uprisings in the Middle East and North Africa in 2010 and 2011. However, Lasswell warns that integrativeness can lead to overintensity; promotional activities can become so feverish, they provoke coercive responses—either by the aggrieved or by powerful actors who feel threatened (Lasswell, 1971a, p. 89).[8] Social media can create lack of integration in political and policy arenas in unexpected ways. WikiLeaks posted thousands of classified diplomatic cables in the fall of 2010. The Obama administration and various mainstream public media outlets wondered aloud whether particular policy efforts might be jeopardized, including U.S. counterterrorism operations (CBS News, 2010). However, in the short term, the most damaging effects of the leaked cables

involved not so much risks to national security (power deprivation) as personal embarrassment and loss of face, following the revelations of political leaders' unflattering assessments of one another (respect deprivation). Lasswell notes that integrative solutions find parties coalescing sooner rather than later in the promotion process; for diplomats, this may be hard to achieve when, as the *New Yorker* coined it, ostensible allies become "frenemies" in the WikiLeaks era (Widicombe, 2010).

WikiLeaks' posts have generated much discussion on blogs, tweets, updates on Facebook, and comments on YouTube about the roles and responsibilities of social media and the Internet. In these particular cases, do the commentators' reflections form a kind of policy *appraisal*—one of Lasswell's seven decision functions? As with the intelligence function, the individual and aggregate online "reactions" of users are of limited value for policy appraisal. The qualities of viewer posts about "Collateral Murder," for example, are distinctive for their immediacy, not for their lasting impact nor dependability. They are impressionistic, not authoritative. Also, because of their instantaneousness, many e-communications on matters of public import are more likely to tap impulses than reason.[9] In the WikiLeaks cases, and others, users may be providing material for pre-appraisal; however, compilations or summations of reactions and reflections should not be confused with the disciplined work of systematic appraisal. Exceptions may include instances when comments and posts have embedded links to conventional evaluations and assessments. To illustrate, a link in a tweet to a Government Accountability Office report might improve the "dependability" and/or "selectivity" of the content of that tweet. However, the limits of social media for policy appraisal are very apparent if the principal measure of "quality" is whether and to what extent social networks make reference to traditional or official forms of appraisal. The question is whether there are inherent features and attributes of social networks that make them indispensable for appraisal.

Prescription, Invocation, Application, Termination, and Social Media. Is it possible for social media to participate in the official promulgation of community norms? To date, examples of official policy prescription on social networks are rare, as are examples of invocation and application. Nevertheless, considering the expanding functions of social media, it is reasonable to project roles they could play in prescription and enforcement. To do so, it is necessary to separate real possibilities from exaggerated promises. Excitement about the possibility of the Internet playing a major role in, for example, public elections and referenda has given way to concerns about voter fraud and correct recording of votes (Nevo & Kim, 2006). For users, there are also risks of being seduced by the power and sophistication of the technologies themselves, leading to confusion about the functions these platforms perform in policy processes. We consider this latter problem first with attention to the prescription function.

For social networks, prescriptive roles could be performed in official arenas, such as in Congress, as well as in nonauthoritative situations where, nevertheless, participants' expectations about rules, procedures, and practices are stabilized and common interests are advanced (Lasswell, 1971a, pp. 90–91). If lawmakers or their staff members exchange marked-up drafts of legislative bills on open or even

password-protected social networks, these activities most closely fit a Lasswellian conception of prescription. However, in reaching wider audiences who are the natural constituencies of most social networks like Facebook, Myspace, and Twitter, lawmakers are more likely to use these technologies for decision functions other than prescription.

Sourcewatch (2010) listed 19 senators and 51 house members as authors of "newsworthy tweets" in 2010. If the primary audience of the lawmakers' tweets are constituents and organized interests, more often than not, the tweets are for promotional and, conceivably, intelligence purposes. If the lawmaker uses social media to search for and identify archival material (consider video uploaded on YouTube) or other information for the purpose of drafting legislation, then an intelligence function is performed by these technologies. In these instances, we circle back to concerns about the quality and validity of content on various electronic media. If Twitter's comparative advantage is to document "people emoting" and if blogs indiscriminately blend verifiable facts with conjecture (that sometimes pass for fact), is society advantaged by a lawmaker who relies on these tools to draft bills or by public agencies that use them for writing regulations?[10]

Consider the prospects of using Flickr, the photo- and video-sharing web site, for invocation. When a county sheriff posts images of cars speeding through a particular stop sign at a particular intersection, perhaps the purpose is promotional (letting citizens know, "we're watching you"). However, for any given law offender caught on camera, an image uploaded on Flickr forms evidence of a specific, concrete transgression. The latter is invocation.

In contrast, if the many public regulatory and natural resource management agencies that monitored British Petroleum (BP)'s remotely operated video of the Deepwater Horizon spill (BP, 2010) also used these images to coordinate their own roles in responding to the crisis, then the technology (in this case, the Internet) is involved directly in intelligence and indirectly in invocation and application functions. The Haiti earthquake illustration is relevant here as well. "After the Sept. 11 terror attacks in 2001 . . . New York City first responders spent millions to synchronize their communications systems. But during Haiti's disaster, everyone was tuned to the same channel, and it was called Twitter," declares Twitter enthusiast Jeff Pulver (della Cava, 2010). If true, then Twitter could serve meaningful invocation and application functions.

These illustrations indicate a trend. Much as platforms like Twitter and Facebook are especially adept at documenting and disseminating people's immediate impressions, conceivably these same technologies are most salient for invocation during times of crisis when response times are short. The challenge for the invoker, then, is sorting critical information from junk on social networks. Despite Pulver's enthusiastic praise for Twitter's role in coordinating help for post-earthquake Haiti, it is not clear whether and to what extent first responders and other key actors were able to efficiently filter out low quality information. Skimming the contents of hundreds of tweets is probably not adequate to the task at hand. It is still the case that Lasswell's middleman—the "controller"—in the communication process is needed, or at any rate, is longed for by users of these technologies, particularly in moments of

great import to the community. A later section in this article considers whether innovations in digital communication, including web-based applications like Wordle and TagCrowd, might provide this key filtering function. First, however, we consider whether social media might mediate the termination function in policy decisions.

As is true of prescription, invocation, and application, what may appear to be social media's roles in termination are more often about the collection, processing, diffusion, and promotion of e-communications. Consider an example of termination in a case involving an unofficial prescription, namely a decision to end a popular public affairs program on cable television. In 2004, Jon Stewart appeared on *Crossfire*, a current events program on CNN featuring hosts with dueling political ideologies. His indictment of the show, during his interview, indirectly led to the show's cancellation.[11] A Wikipedia entry on this episode reads,

> Following his appearance, transcripts and live stream footage were released on the Internet and widely watched and discussed. The episode itself had 867,000 viewers (the average number of viewers *Crossfire* had per episode in the previous month was about 615,000). As of April 12, 2008, the 13 minute 30 second clip had over 3,960,873 views on iFilm, making it the third most popular video of all time on that web site. (Wikipedia, 2010b)

Condemnations of *Crossfire* by Stewart fans who watched the original airing of the episode were probably too few in number to cause the show's cancellation. It was the viral viewings on other web sites and social network-mediated word-of-mouth about Stewart's denunciations that imperiled the program's future. In this case, as in the other illustrations above, the power of social media and the Internet has more to do with intelligence and promotion than with termination, at least directly. Here, information and opinion, powerfully channeled, and quickly diffused, led to a consequential decision about a long-running cable show.

Termination by e-referendum is already a possibility since referenda are present on electronic platforms in some communities. There are also ways that electronic media can directly and decisively end the programmatic extensions of public policy. Consider the final step in the process of terminating e-government services; the end is as simple as taking a relevant URL offline or removing a button or tag from a web site.

Termination, Lasswell notes, "deals with the claims put forward by those who acted in good faith when the prescriptions were in effect, and who stand to suffer value deprivation when they are ended," and moreover, "In societies where innovation is rapid, new structures are often needed to cope with claims of the expropriated . . ." (Lasswell, 1971a, p. 29). Rapid innovation can create special challenges for decision makers who control the termination function. Social media present potentially efficient ways to invoke and apply prescriptions, as large numbers of users tap into the same network. Imagine, for example, Facebook-like networks with embedded accounts for tracking Social Security benefits. However, if and when the prescription is cancelled, these beneficiaries, all linked together in a single network, become a potentially powerful, aggrieved voice.[12]

Navigating the e-Communications Rapids: An Appraisal

In preceding sections, and using Lasswell's criteria for intelligence, we considered the trade-offs for the reader and viewer of user-generated electronic media made available without the journalistic demands for fact-checking, corroboration, and editing. Every uploader of content is his or her own master, and every consumer of that content experiences the privileges and pitfalls of access to immediate and raw commentary, imagery, and would-be news in the potential absence of community standards for dependability, comprehensiveness, and selectivity.

Another downside is the sheer volume of copy and the navigation of effervescent content. "Rapidly developing stories" carried on e-news sites—key sources for users of social media—amount to ever-changing drafts. New drafts may contain more "dependable" copy but may not include acknowledgments of errors or "errata" issued in conventional print editions. Inaccuracies are demoted to rumors or disappear altogether in the next—or even the same—news cycle. *USA Today* observes that a disadvantage of Twitter is ". . . TMI: too much information, and an inability to accurately decipher its meaning" (della Cava, 2010). Indeed, "information" is a presumptuous catchall for the disparate content and uncertain value of tweets and other social media content. One social networking expert observes that tweets involve "a lot of joking and goofing and just plain mistakes . . ." (della Cava, 2010). This is not "informing" (particularly if there are mistakes of fact) nor is it necessarily a basis for promoting knowledge or understanding. The dilemma may be more accurately described as "TME"—"too much e-communication" rather than too much information.

Blogs and i-reports are not accompanied by the equivalent of nutritional labels nor, in some cases, are user instructions provided. The same is true of newspapers and network news. However, the major broadsheets earn distinction for dependability, comprehensiveness, and selectivity based on reputation, secured over time, and by the cumulative impressions of readers. Perhaps comparable reputational or (respect) accumulations or losses will emerge for the many social media platforms, helping to clarify user expectations about where to turn for information, thoughtful opinion, or unfiltered e-communication.

In the meantime, readers and viewers are challenged by the "TME" problem. Lending order and making sense of the glut of messages, images, and video would appear to be increasingly urgent tasks particularly if social networks become default vehicles for shaping and sharing policy intelligence and promotion in an open, public, decision process.[13]

Tag clouds are, in principle, a tool to lend order to e-communications. According to Rivadeneira, Gruen, Muller, and Millen (2007):

> Tagclouds are visual presentations of a set of words, typically a set of "tags" selected by some rationale, in which attributes of the text such as size, weight, or color are used to represent features, such as frequency, of the associated terms. (Rivadeneira et al., 2007; see also, Sinclair, 2008)

Frequency of words in a given communication, with recurrent terms made more prominent by a large font size, prominent font style, or color, is the most common application of a tag cloud. The purpose is to distinguish or otherwise rank words in, for example, blogs, speeches, or articles. Tag clouds have become a preferred interactive tool for some social media sites (Strohmaier, 2010).

Tag clouds would appear to provide a kind of rapid appraisal tool for the policy analyst endeavoring to make sense of a dynamic, high-volume stream of communication. Tag cloud technology tends to be easy to use, requiring little more than copying and pasting text into a text field, clicking "go," and waiting a few moments for the results. Interfaces for tag clouds are found on multiple web sites.

Consider an application to a case with the fast-moving, surge-of-interest qualities mentioned above. On Tuesday, June 22, 2010, General Stanley A. McChrystal, President Obama's top military officer in Afghanistan, paid an urgent visit to the White House. Hours earlier, the president's aides learned of disparaging remarks made by the general and the general's staff about Mr. Obama and other top officials. Those remarks were to be published in a popular magazine the following day. According to the *New York Times*, as of the morning of the meeting, the president "had not made up his mind" about the general's fate (Cooper, Shanker, & Filkins, 2010). A policy analyst following this story might endeavor to make a tag cloud of available blogs, Twitter feeds, or news articles so as to measure the national mood, or at any rate, to learn more about the impressions of direct participants in the case, of pundits, or of ordinary citizens.

Social media educator and blogger Rodd Lucier recommends using Wordle, a tag cloud generator, to examine "combine(d) news articles" and to make "compelling summaries" of political speeches, articles, and other texts (Lucier, 2008). Wordle's interface made the following tag cloud from the combined text of the *Wall Street Journal's* 1,119-word, "Decision to Dismiss McChrystal Came Swiftly" (Weisman, 2010) and the *New York Times*' 1,594-word, "McChrystal's Fate in Limbo as He Prepares to Meet Obama" (Cooper et al., 2010) (Figure 1).

The Wordle interface randomly selects layout, font, and font color; the results are generated within seconds. In this case, the layout style was "Any Which Way" (selected randomly by the interface) in black and white Coolvetica font. Plainly, this output tantalizes the eye but at the expense of order and clarity.

Wordle affords the user some control over the presentation of data. For example, one may select for alphabetic ordering and horizontal layout. These preferences, combined with a calmer font (Gnuolane Free) produce Figure 2.

Even with these improvements, the incremental advantages for the intelligence or appraisal functions are limited. The shortcomings have little to do with graphics or the user interface. The problems are analytical rather than aesthetic or technical. The context is virtually indecipherable: an observer unfamiliar with the case might surmise that General McChrystal and President Obama had a meeting, but even that conjecture is uncertain. Additional tests of the interface, for example, to explore whether the *Wall Street Journal*'s editorials on the sacking of General McChrystal contain comparatively prominent (and hence more frequent) adjectives or nouns critical of the Obama administration—a reasonable expectation considering

Figure 1. Tag Cloud of the General McChrystal Case.

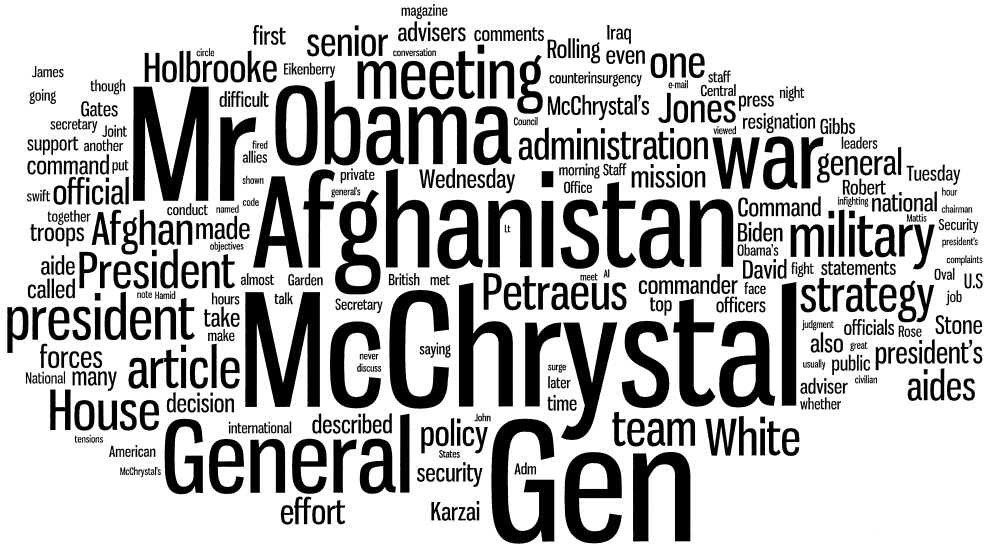

Figure 2. Second Tag Cloud of the General McChrystal Case.

the ideological leanings of that publication's editorial staff—prove unrevealing when laid side by side with Wordle images of *New York Times* editorials on the same subject.

Policy scientists have substantial doubts about reductionist methods in policy analysis (Ascher, 1987; Brunner, 1991). However, in the case of tag clouds, the problem may be more severe still as information is not merely reduced, it is disintegrated. Conditioning factors that shape prominent features of the story are missing. In the McChrystal case, the user cannot discern the importance of, for example, how the pressures of command, or bureaucratic in-fighting, or different

institutional cultures may have influenced the crisis. The tag cloud uncovers only what is literally expressed in the data set. As one anonymous referee of this article noted, the disaggregated outputs from Wordle are no less typical than the results of virtually any type of content analysis; available tools generate inventories of "props" not "plots."

Conceivably, tag clouds' value could be enhanced in the company of other tools for communication analysis. Possible amendments might include Yule's Characteristic *K*, which measures the likelihood that two nouns (symbols), chosen at random from a sample of text, will be the same nouns. Consider a prospective application of Yule's *K* to disparate blogs covering a topic of particular urgency. A finding of a relatively high *K* would indicate a high frequency of relatively few nouns. This would imply a honing in, by different bloggers, on the same or similar symbols. G. Cleveland Wilhoit (1969, p. 318) found just such a high *K* in tracking news reportage during international crises, with reporters concentrating on "symbols of national community (*U.S., American, nation's, nation*, and *national*)." Conceivably, Wordle and other tag clouds could provide a visual aid to supplement outputs of Yule's *K* and other measures of language richness in communication systems.[14]

Concluding Remarks

Wordle's tag line is "beautiful word clouds" and it is a self-described "toy" for generating such clouds. Its limitations for understanding the contents of complex communications—and for policy research, generally—must be understood in this context. Nevertheless, we are reminded of various social media platforms founded for one set of purposes that evolved to meet many other demands. Even now, per the "Top 20 Uses of Wordle," users are encouraged to use the platform for analytical purposes that go well beyond the crafting of beautiful images (Lucier, 2008). Consider, for example, a World Bank consultant who uses a tag cloud to "show what the Twitter community has been saying" about a new Bank initiative (Barton, 2010). Inventors of tag clouds, and specialists who are savvy at using these devices, are increasingly likely to enter the hallways of power and wealth to promote various organizational and societal aims. In addition to other cases mentioned in this article, founders of social media tools have been involved in projects ranging from optimizing the use of Facebook for political campaigns to paying policemen in Afghanistan via mobile phones (see, e.g., Lichtenstein, 2010).

To document the emerging influence of inventors of powerful, multifunctional social networking tools is to rediscover a facet of Lasswell's "skill revolution"—the: ". . . probable shift of the dialectic of development from the class struggle to the skill struggle. . . . Intellectuals would appear in every coalition and make articulate the sub-myth of every ally" (Lasswell, 1965 as quoted in Brunner, 2007, p. 193).

In one variant of the skill revolution, what Lasswell alternately called the "permanent revolution of modernizing intellectuals" and the "unnamed revolution," specialists collaborate directly with the state, with opinion makers, and with professional appraisers of policy:

> They often become consultants of public officials and private associations on public policy, the assumption being that they can assist in evaluating the significance of specialized knowledge for the options open to decision makers in the public and civic orders. (Lasswell, 1965, pp. 87–8; see also Brunner, 2007, p. 197)

Lasswell's "modernizing intellectuals" form coalitions with state actors to advance disparate policy objectives and value outcomes. Consider, for example, that James Eberhard, founder of Mobile Accord, was a principal participant in the Text Haiti 90999 program. His efforts were in the service of securing well-being. However, at a symbolic level, he was engaged in promoting American humanitarian values and of justifying the instrumental uses of American power and wealth.

By inventing and using social media, early adopters in organs of power, like the U.S. Department of State, have immediate and proximate aims, whether to promote free and fair elections, move funds to NGOs, or share and coordinate information among first responders. Although these communication platforms have features of "openness," allowing users to edit and amend messages they receive, skilled generators of content can get their messages "out in front." Consider the two State Department officials who are advocates for social media and diplomacy: In 2010, their work included developing a social networking strategy for the U.S. Government's first special representative to Muslim communities. According to one of the officials, key to the strategy was the identification of:

> "influencer" Muslims on Twitter, on Facebook, on the other major social-media platforms. And we, in a soft way, using the appropriate diplomacy, reach out to them and say: Hey we want to get across the following messages. They're messages that we think are consistent with your values . . .

Here are rich data for any student of Lasswell: the uses of diplomacy and propaganda as strategies for enlightening, persuading, and ultimately, reinforcing the "vocabulary of the ruling few"; the allusion to (and conceivably, illusion of) shared values and common purposes; the courtship of society by state via symbol specialists armed with advanced technologies. The official's remarks also suggest that, despite the oft-mentioned democratizing and "me the people" functions of social media, not just anyone on Twitter or Facebook is instrumental to an effective communication strategy. "Influencers"—Tweeters with numerous followers and Facebook personalities with thousands of "friends"—are vital actors. These key actors are Lasswell's "controllers" in the communication stream. They may also become unwitting players in what Lasswell ominously termed, the "Gnostic Revolution." In the latter, public faith in scientific positivism and Enlightenment values wanes and a demoralized citizenry becomes susceptible to fundamentalism and the fulminations of various pretenders to power (Lasswell, 1965). The concern here is that value outcomes from "friending" on social media may prove unfulfilling when compared with value indulgences gained from conventional friendships. If friends of prominent Facebook personalities feel "used" by the latter—if followers discover that their online friends are shills for the "ruling few"—both the friendship sours and the state loses respect.

Our primary objective here is not to repeat the old saw that new technologies yield both good and bad outcomes. Early, anecdotal evidence about the uses of social media make that fact plain enough. Instead, our aim is to use Lasswell's contributions on the science of communication, on social process, and on policy decision making to document the emerging influence of social media in the public policy domain. Taking Lasswell's advice, we examine these technologies in the larger contexts of the social and decision processes that determine value outcomes in state and society. We find that social media are used now, and likely, in the future, to mediate public understanding of important events, trends, and decisions. Appraising the contents of e-communications carried on social media is aided by criteria such as dependability, selectiveness, and comprehensiveness (where social media tend to be at a disadvantage) and creativeness and openness (where social media show more potential). The consequences to various participants of using social media in public affairs are, as Lasswell might urge, dependent on the context, and the context is serviceably mapped with the social and decision process concepts.

We offer provisional, analytical maps of social media in the professional lives of diplomats and other policy-oriented professionals, and we consider where these actors and their work fit into the "developmental constructs" of contemporary and possible future political order. Among the findings are indicators that architects of social media platforms and skillful users of these tools are recruited by powerful elites, and the motivations for the collaborations may or may not advance human dignity, depending on the context. Hence, the U.S. Secretary of State might persuade the owner of a popular microblogging platform to postpone site maintenance, thereby allowing microbloggers in Iran to keep up pressure on an oppressive regime. In contrast, state officials in China might hire hackers to infiltrate e-mail accounts of dissidents or search for and block messages containing symbols deemed threatening to state legitimacy and one-party rule. We also discover that the actors in Lasswell's stream of communications, when considered in functional rather than conventional terms, remain as relevant for analytical purposes today as in the days of wartime foreign correspondents and official propagandists. Critically, the assumption that unfiltered intelligence (or advocacy masquerading as intelligence) flows directly, unmolested, from the uploader to the viewer is challenged by the reality of powerful intermediaries and "influencers" who are the modern-day "controllers" that Lasswell envisaged, in functional terms.

We conclude by noting that Lasswell's concepts help probe the value dispositions of users of social media and illuminate the outcomes of processes mediated by social networks. However, widespread mastery of the technologies themselves is necessary to ensure that social media remain squarely in the overarching endeavor of promoting human dignity for all. Perhaps there is hope in that so many citizens of the planet are already skillful users of social media.

Matthew R. Auer is Dean of the Hutton Honors College and Professor of Public and Environmental Affairs at the School of Public and Environmental Affairs at Indiana University, Bloomington, IN 47405, USA.

Notes

1. On the "social media revolution," see Carvin (2009) and Levy (2007).
2. See Auer (2007) for a review and critique of reformulations of Lasswell's decision process concept.
3. This article focuses primarily on social media, politics, and policy formation in state-dominated settings—for example, in the arena of official diplomacy. Lasswell's decision process is applicable in both official and unofficial or "everyday" situations. Regarding the latter, and as Michael Reisman argues in *Law in Brief Encounters*, a "microlegal" system operates at the societal level, governing myriad human interactions and relations (Reisman, 1999). These forms of "real law" may be more salient, on a day-to-day basis, than official laws of the state. So while this article applies concepts such as prescription, invocation, and application to situations where power elites traditionally dominate, one can easily apply Lasswell's toolkit in informal settings—the very arenas where one might expect social media to prove influential (consider the ubiquitous reportage on "sexting," bullying via Facebook, and other e-mediated tests of societal norms).
4. Indeed, Twitter's "Terms of Service" declares: "We do not endorse, support, represent or guarantee the completeness, truthfulness, accuracy, or reliability of any Content or communications posted via the Services or endorse any opinions expressed via the Services" (Twitter, 2010).
5. Lasswell's anticipation of privacy concerns in the Information Age is striking. He writes, "Although the issues are not in principle new, a data-rich world can have individual records of unheard-of detail promptly available. . . . It is conceivable that human beings will undergo general revulsion against the invasions of privacy that become more common as man's auxiliary brains are put to more and more detailed use" (Lasswell, 1971b [reprinted from Lasswell, 1965], pp. 192–93). Facebook's various missteps in tinkering with that site's privacy settings and poorly vetted changes to Facebook's information-sharing policies have earned scorn from users. In 2010, Facebook ranked among the bottom 5 percent of private companies in the American Customer Satisfaction Index (Newman, 2010)—an ironic distinction considering that that same year, Facebook was among the most frequently visited web sites (Google, 2010).
6. President Obama's Twitter site ranked fourth with 7.34 million subscribers in the spring of 2011 (Twitaholic, 2011).
7. In appraising the credibility of the WikiLeaks material, the *New York Times* declared: "It is sometimes unclear whether a particular incident is based on firsthand observation, on the account of an intelligence source regarded as reliable, on less trustworthy sources or on speculation by the writer. It is also not known what may be missing from the material, either because it is in a more restrictive category of classification or for some other reason" (New York Times, 2010). These disclaimers underline the difficulty that a mainstream media organization has in relying on non-mainstream outlets for information, and also, the *Times*' ambivalence about the lack of comprehensiveness in its own intelligence function.
8. In the Iranian case, posts to electronic social networks, including Facebook, helped fuel antigovernment protests that led to an intense crackdown on demonstrators, and over the long term, severe restrictions on activities by potential "troublemakers" in universities and nongovernmental organizations. Comparably harsh responses to political activity via social media were common in 2010 and 2011 in the Middle East and North Africa. For example, so as to interfere with Egyptian social networkers' role in planning a major antigovernment rally, the Mubarak regime temporarily shut down Internet service in January, 2011. Fearing an Egyptian-style social media-enabled popular revolution, Cameroon suspended Twitter service in the spring of 2011 (Keita, 2011). Elsewhere, in China, in 2009, the state's chief censor and propaganda official, Lu Changchun allegedly directed "patriotic hackers" to attack Google's web site; apparently, Mr. Lu had googled himself and found sites that criticized him (Sabbagh, 2010). Lasswell (1971a, p. 92) writes of "nonprovocativeness" as a criterion for effective policy invocation; such "initiatives impose no more deprivations than are required (e.g., officials are nonabusive)." Particularly in this latter case, drawing on Lasswell (1930/1977, pp. 173–203), Ascher and Hirschfelder-Ascher's observation seems especially apt that: "the fundamental causes of stress and personality deformation" lie "largely in the deprivation of respect and human dignity" (Ascher & Hirschfelder-Ascher, 2005, pp. 163–4).
9. The author is indebted to an anonymous reviewer who notes that e-communications are not only more likely to excite impulses than reason but also to reinforce preexisting preferences. That same

reviewer notes that impulsive responses to stimuli can lead subjects to make rash and poorly informed decisions. Conceivably, e-communications could reinforce the Dunning–Kruger effect—the phenomenon whereby unskilled or incompetent individuals are overconfident about their abilities in the very areas where they lack knowledge or make poor choices.

10. Even actors with preponderances of power and knowledge are susceptible to missing or distorted information carried on social media. In 2010, the U.S. Department of Agriculture fired and quickly offered to rehire a mid-level official, Shirley Sherrod, after excerpts of a speech by Ms. Sherrod appeared in a drastically edited form on a conservative blog. The excerpted speech presented a distorted view when compared with the unabridged presentation. The episode revealed weaknesses in the White House's strategy to "avoid distractions." The strategy backfired, transforming a blog entry authored by, in the *New York Times*' estimation, an "activist-journalist hybrid" into a multiday distraction from core policy concerns (Carr, 2010).
11. Stewart's complaints revolved around some of the same concerns considered in this article, namely the conflation of entertainment and "fact" and advocacy dressed up as intelligence. This is not a new field of enquiry in that explorations of the deliberate amalgamating of fact and fiction go at least as far back as I.A. Richards' (1929/2009, p. 262 *passim*) *Practical Criticism*; Richards wrote of the "fusion (or confusion)" between verifiable facts and fictions. A dramatized rendering of the tension between news and advocacy was portrayed in the Oscar-winning drama, *Network*. Whereas the latter considers the hazards of news advocacy by mainstream media, the present concern poses comparable questions about social media. The author is indebted to an anonymous reviewer for pointing out historical treatments of these subjects.
12. So far, we have considered the role of social media in policy termination in the context of responsible and responsive government. However, Lasswell also developed far less optimistic projections for the human condition, and one can imagine a role for electronic networking tools in these contexts, too. In the unspeakable revolution (or "transhumanity")—one of the plausible futures (or "developmental constructs") Lasswell envisaged for the composition and exercise of power by the ruling few—policy termination would be the privilege of "super-gifted men," or genetically superior individuals (Brunner, 2007; Lasswell, 1956b, pp. 976–77; Lasswell, 1965). Lasswell's frightening unspeakable revolution is further animated by the possibility of social media, or more precisely, antisocial media, playing a facilitating role. Today's enthralled accounts of a single network (in this case, Facebook) "wiring together a twelfth of humanity" and "merging with the social fabric of American life" (Grossman, 2010) takes on a dark hue when reimagined as a tool of pure control.
13. For the policy analyst striving to make best use of e-communications on matters of public interest, the challenge is not merely the sheer volume of copy to collect, sort through, and interpret. It is also the *rate* of production of that copy and how e-communications themselves actually become part of the story. In *Death to the Dictator!* (Moqadam, 2010), which examines the disputed 2009 presidential election in Iran, the author writes, "Cellphone cameras, Facebook, Twitter, the satellite stations: the media are supposed to reflect what is going on, but they seem, in fact, to be making everything happen much faster. There's no time to argue what it all means—what the protesters want, whether they're ready to die" (Moqadam, 2010, p. 67).
14. The author is indebted to Ron Brunner for pointing out possible applications of Yule's Characteristic *K*.

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