The popularization of digital media technologies in the People’s Republic of China has led to the liberalization of public discourse and provided the citizenry with new opportunities for political advocacy. This article employs content analysis of newspapers and blogs to test information regime theory and finds considerable evidence of a transformation in the properties of political communication. Chinese Communist Party-led institutions, however, have responded to new challenges with legal and technological measures designed to control and guide political expression. The authors consider evidence that suggests new media have empowered China’s “netizens” and diminished the state’s ability to set the public agenda and shape political preferences.

Introduction

In the last two decades, the People’s Republic of China has experienced the extremely rapid proliferation of information and communications technology (ICT) that has given rise to new social networks with unprecedented power to counter the might of China’s adaptive propaganda state (Brady, 2008; Castells, 2009). Some scholars studying the transformation of political communication in China have noted the ability of the state to consolidate and control media power through the commercialization of mainstream media (Esarey, 2005; Stockmann & Gallagher, 2011; Zhao, 2008). Others have hailed the power of the new media technologies to liberalize political discourse and facilitate public supervision of the Chinese Communist Party (Yang, 2009a; Zheng, 2008). Recent efforts by the authoritarian state to grapple with the challenges that new media pose to information control suggest, however, the necessity for new approaches to consider how popularization of the Internet is changing Chinese politics. We examine empirical evidence concerning the political effects of digital communication as a test of information regime theory and find that China’s information revolution has radically transformed the relationship between state and societal actors.
For policy makers steeped in the Leninist tradition of information control, the state’s role is to manage information flows in China’s media-rich society. While ICTs are essential to economic development, they empower networks of communication that threaten the party’s political hegemony. According to the white paper on “China’s Internet Situation,” released by the State Council Information Office in June 2010, more than 380 million Chinese have accessed the Internet, or roughly 29% of the country’s population. Some 233 million people use cell phones to go online, and China has 220 million bloggers. The 2010 white paper asserts that the Internet has opened a direct line of communication between the government and the people whereby the opinions of the public receive unprecedented consideration. Of Chinese Internet users, 66% have expressed their views on upwards of one million Web forums, and 60% of netizens report that they have used the Internet to express opinions intended to “supervise” [iandu] government activities.

Unlike regimes such as Cuba or North Korea, the Chinese government has invested heavily in the promotion of e-government and e-commerce projects that have increased business opportunities and information transparency concerning laws and regulations. More than 80% of all national and local government agencies have Web sites, although the functionality of these sites remains low in comparison to sites maintained by European governments (Wu, 2009, p. 74).

Despite the ostensible embrace of ICT-enabled political communication, the state has tightened control over the Web through restrictive laws, employed computerized filters to screen and eliminate certain content, and increased monitoring by government personnel and Web site operators. Guoguang Wu has characterized Chinese Internet management as a “trinity” that includes “Internet industrial development, legitimate regulation of digital communications, and political censorship” (Wu, 2009, p. 74). The latter, Wu asserts, is by far the most capable.

At central and local levels, the state censors Web traffic to ensure healthy social values, deter gambling, eliminate porn, punish swindlers, and excise the unhealthy views of religious cults, ethno-nationalists, and democratic reformers. Laws require Web sites to reproduce content from official news organizations. This regulation creates a barrier to news production by corporate Internet service and content providers, although compliance is far from complete.

Party leaders do not welcome challenges to the political establishment. Concerted efforts by influential netizens to pressure the government to change policy have encountered harassment. Police monitor online dissent. In isolated cases, bloggers and social activists have been subjected to physical violence or imprisonment. Thousands of government employees disguise their real identities and post anonymous commentary online to guide public opinion toward positions favored by the CCP leadership (Bandurski, 2008). The state has attempted to register the real names of users of BBS Web sites and major Web portals, and it has required the installation of software on computers at schools and Internet bars around the country to prevent access to Web sites with politically sensitive, religious, and pornographic material. A central governmental attempt to require the installation of “Green Dam Youth Escort” software to restrict access to “unhealthy” Web sites for all computers sold in China was, however, called off in the face of criticism by China’s netizens, international businesses, and the U. S. government (Office of the United States Trade Representative 2009; Yang 2009b).
The commentary of Chinese establishment intellectuals, such as Beijing University scholar Tang Kechao, suggests that the Internet has weakened information control, with the effect of breaking the party-state’s monopoly on political mobilization (Tang, 2009). According to Dong Guanpeng, media strategy advisor for the Chinese State Council, more than 80 local government officials have become the target of concerted criticism by netizens and one third have lost their positions due to the exposure of their misconduct online (Zeng, 2009). Scholars have also documented a sharp increase in large-scale “mass Internet incidents” [daxing wangluo qunti shijian] that involved one million or more visits by users. In 2003, two such events occurred. By 2009, the number of large-scale mass Internet incidents had risen to 12. These mass incidents have contributed to the abolition of the custody and repatriation system for migrant workers, the halting of state-sponsored urban development projects, the overhaul of the criminal justice system to reduce abuse of inmates in prisons, the reconsideration of a murder case involving the slaying of a local official, and the investigation and dismissal of numerous local party leaders (Tong & Lei, 2010, pp. 13–17).

In response to tight controls on political expression, Internet users have grown savvy at expressing themselves through political satire, spoofing, and ironic uses of politically correct language (Esarey & Xiao, 2008; Rosen, 2009). The practice of egao, or the artistic adaption of official media products as a form of parody, is one example of cultural and political subversion that has led to popular acclaim and eventually, to attempts by the state to restrict the practice by requiring creators to apply for licenses (Gong & Yang, 2010; Meng, 2009).

Despite state efforts to induce self-censorship and guide public opinion, the popularity of instant messaging services such as QQ, the university student social networking site Xiaonei (www.xiaonei.net), search engine and RSS aggregation tools such as Baidu (www.baidu.com) and Zhuaxia (www.zhuaxia.com), and Bulletin Board Systems (BBS) has changed the lifestyles and worldviews of Chinese Internet users. According to data from early 2008, 80% of Chinese Web sites host BBS forums for which the total number of daily page views tops one billion, with 10 million new posts every day. BBS sites provide access to wide-ranging perspectives on a plethora of topics.

The number of Chinese bloggers has grown exponentially since the mid-2000s. Unlike the BBS forum, which in some cases restricts access by users to members of a readily identifiable community, a blog is typically run by one person and is publicly accessible via search engines. While most blog content is personal in nature, an increasing number of bloggers who write about public affairs have become opinion leaders in dynamic and interactive virtual communities. Since 2009, microblogging services have also exploded in China. According to the Yiguan Think Tank, the number of registered microblog users in 2010 reached 75 million, as compared to 8 million users in 2009.

Although state attempts to control content on the Web are largely effective, the ability to manipulate political discourse is challenged by interconnectivity that allows information to circulate widely and the use of online spaces to organize and mobilize like-minded activists. These interlinked networks of communication are globally connected (MacKinnon, 2008), increase rapidly in size, have no fixed boundaries, and are capable of resisting state efforts to dominate information flows by circumventing blockages through reconfiguration (Castells, 2009, pp. 21–23). ICTs dramatically reduce the cost of
accessing and distributing political information and have demonstrated the potential to facilitate political contention.

**Information Regime Theory**

In light of the ongoing debate over the political effects of digital media in China, we propose analyzing changes in political communication via the lens of information regime theory. Our goal is to determine whether digital communication has fostered a new Chinese information regime. The concept of an information regime has been used by Bruce Bimber to explain the effect of the evolution of information on the structure of elite political organizations in the United States. Bimber (2003) identifies an information regime as "stable relationships among information, organizations, and democratic structure," (p.18) characterized by the following conditions:

1. A set of dominant properties of political information, such as high cost; 2. A set of opportunities and constraints on the management of political information that these properties create; and 3. The appearance of characteristic political organizations and structures adapted to these opportunities and constraints. (ibid.)

Bimber asks "when, if ever, the properties of information and communication have changed abruptly, and then inquiring how such changes influenced politics" (p. 20). Related considerations that affect political outcomes are: What kinds of information are particularly valuable, or costly to acquire, and for whom? How does access to information, or its restriction, increase the power of political elites? It should be stressed that information regime change is conceptually different from political regime change, which is change of the formal and informal rules that structure the interaction among political leaders, government, and society. An information regime change transforms the way people access and utilize information about politics.

When applying the concept of an information regime to the case of contemporary China (1949–present), it is necessary to recognize that the relationship between information, organizations, and political actors in Chinese history is much different than that relationship in the United States and that these differences powerfully affect outcomes. Operationalization of the concept must also account for differences in economic development, information technologies, and political institutions. While the Chinese communication environment has changed considerably over time, we maintain that it is possible to identify truly significant changes to information properties as corresponding to different information regimes.

**Information Regimes**

Since the founding of the People's Republic of China, political communication has experienced three major transformations, the first of which occurred after the establishment of a national propaganda system dominated by the Chinese Communist Party (CCP). What can be seen as the country's first information regime was that of the Soviet-style propaganda state from 1949–1978. Strategies toward managing political information in People's Republic of China reflected the Leninist principles. The CCP, as
the vanguard party, had the right to determine what information was appropriate for the masses, cadres, and state leaders. Newspapers, magazines, and radio served as the mouthpieces of the party during the country's socialist transformation. Information was characterized by a state-dominated propaganda system (including schools, research institutions, film studios, even sports teams). The primary causes of Information Regime I were the availability of print and broadcast media for political mobilization and the state’s ability to dominate all media outlets. In addition, China’s Marxist-Leninist-Maoist ideology and geopolitical situation placed the country in the Soviet camp, politically, and made a Soviet-style system for information control attractive. The propaganda state aided state building through both political mobilization and the use of coercion.

Information Regime I, however, imposed very high human costs. To give but one example, media exaggeration of the abundance of harvests in 1958 led to over-procurement and over-consumption of grain that contributed to the worst famine in world history. Although few dared to oppose CCP rule directly—with the exception of during the Cultural Revolution period when young radicals attacked certain party leaders—society under totalitarian rule was never completely quiescent. Recent scholarship concerning the Mao Period suggests that tight information control may have contributed to the power and reach of rumors as outlets for political resistance (Smith, 2006, 2008).

**Media Commercialization and Information Regime Change**

In the 1980s, China gradually moved toward becoming a market economy. Media commercialized and became self-supporting financially. State-owned print and broadcast media grew to depend on advertising revenues and, with few exceptions, were completely weaned from state subsidies. Chinese media were given financial incentives for self-censorship and punished when they did not comply with state directives. Mass media produced more nonpolitical and noncontroversial news and emphasized entertainment, especially tabloid-style “metro” papers [*dushibao*]. Institutional reforms in the media industry led to Information Regime II.

As Table 1 illustrates, decentralization of political control over media allowed local governments to remake the power of the propaganda system after the viscidities of Mao-era campaigns. "Party papers" proliferated as the “mouthpieces” of local party committees. The number of newspapers in the 1980s increased by a factor of eight and the number of televisions grew by nearly a factor of 10—growth made possible by corporate-style management of new state-owned media. The commercial transformation of China’s media industry prompted the state to create new institutions capable of overseeing the political content, such as the General Administration of Press and Publications (GAPP) and the State Administration of Radio, Film and Television (SARFT), while local government possessed primary authority over day-to-day media operations (Zhongguo guangbo nianjian, 1987, p. 38).

State management of the press took place with assistance from party committees that sought to encourage “professional guiding thought” [*yewu zhidao sixiang*]. “Media evaluation small groups” [*yueping xiaozu*] were created to monitor media to ensure compliance with the CCP’s content directives. Although commercialization raised advertising revenues, it also facilitated the repackaging of propaganda to make it more attractive to consumers (Barmé, 1999; Brady, 2008). Contrary to the predictions of some scholars
(Gilley, 2004; Lynch, 1999), the state’s power to influence public opinion through the commercial media actually increased over time, as the reach of mass media grew.

Information Regime II aided economic development and control of politically sensitive information, which inhibited public support for opposition movements, such as the China Democracy Party. It enabled the CCP to suppress information about democratic opposition and generate popular support for privatization of state-owned enterprises that left tens of millions without good jobs, retirement pensions, or health benefits.

At the same time, commercialization changed the incentives for a small subset of media that recognized freer, less doctrinaire reporting could be profitable. When the political opportunity structure permitted, greater media freedom emerged, although local rather than central officials were challenged by investigative reporting. Strict adherence to the party line did not always trump the public’s right to know about matters, particularly when the risk of repression for reporting that could anger the state was low and public demand for news was high. Most Chinese communication scholars agree that commercialization strengthened public support for CCP rule (Brady, 2008; Stockmann & Gallagher, 2011; Zhao, 2008).

Digital Communication and Information Regime Change

The Severe Acute Respiratory Syndrome (SARS), discovered in Guangdong province in late 2002, posed a threat to the CCP leadership in the midst of a power transition, with the appointment of new Party Secretary and President Hu Jintao. State propagandists feared that panic over the spread of the epidemic could lead to social instability. After a period of media freedom concerning SARS in early 2003, the Propaganda Department ordered media to cover up the spread of the disease that ultimately infected 8,421 people worldwide, 784 of whom eventually died. When the military doctor, Jiang Yanyong, leaked information about suppression of facts concerning the epidemic to foreign media, the news circulated back to China via the Internet, prompting the central government to confess the severity of the situation and punish ranking officials as scapegoats (Esarey, 2005).

During the spring and summer of 2003, a public outcry over the murder of recent college graduate Sun Zhigang, who was detained in the city of Guangzhou for not carrying residency documentation, prompted the central government to reform regulations governing migrant workers (Liebman, 2005). The Sun Zhigang incident proved to be the first of a growing number of large-scale Internet mass incidents that have pressured the state to make major political concessions (Tong & Lei, 2010). The incident was also the harbinger of the demise Information Regime II and signaled the emergence of an age in which digital communication has influenced political outcomes.

Citizen Empowerment in Digitized China

Bimber’s study of information regimes in the United States suggests that Internet technologies empowered organizations, with poor and modest organizational and financial resources, to mobilize supporters to a greater extent than would have been possible through traditional means, such as making phone calls or paying for advertisements in mass media. Civic groups with more resources could invest
heavily in expanding organizational networks and utilize information and communication technologies to identify and mobilize supporters to an even greater extent than before. Resource-rich organizations also made appeals through mass media. The onset of digital media in the United States, in other words, did not amount to a leveling of the playing field among political organizations. Bimber’s research found that “more established, resource-rich NGOs are among the most effective exploiters of new information technology” (Bimber, 2003, p. 234). This was due, in part, to the ability of NGOs to engage in various types of “post bureaucratic political organization,” or activism that did not require clearly defined organizational boundaries, drew upon informal association and affiliation, and appealed to particular subsets of members or affiliates. Post bureaucratic organization enabled timely and opportunistic responses to political events, whereas “bureaucratic” political organization required considerable material resources, strictly defined organizational and membership boundaries, and oriented actions toward entire memberships, based upon priorities defined by a central leadership (p. 105).

In China, nongovernmental organizations have a furtive, illegal existence that severely limits their ability to raise funds, expand membership, and communicate through mainstream media, except via informal contacts or infrequent interviews. Due to the legacy of Leninism, state institutions usually see their relationship to social organizations as a zero-sum game in which the empowerment of social organizations represents a loss of power for the state. In this context, the availability of the Internet, blogs, and organizational Web sites has increased the resources for activists and social organizations to frame political problems, organize protests, and engage in agenda setting relative to the past (Yang, 2009a). The Chinese state, therefore, associates the popularization of the use of new communications technologies with the loss of its ability to guide public opinion through institutions that were effective during Information Regimes I and II.

At the same time, state dominance of most political activity and official media means social organizations in China remain weak in comparison to civil society organizations in democracies. Yet bans on political organizations unaffiliated with the state and the repression of the leaders of social movements means that nearly all political organization in China is of the post-bureaucratic sort, with spontaneous demonstrations by concerned citizens and mobs who believe the state’s action (or inaction) has jeopardized the interests of ethnic groups or middle-class urbanites. Criticism of the state in Web spaces has pressured the state to reconsider its policies and re-evaluate the actions of its agents at provincial governmental levels and below. The state has been forced to reconsider its reaction to pluralistic demands expressed through the denunciation of corruption and the abuse of power.

The growing wealth of Chinese citizens and the simultaneous availability of digital communications technology precipitated Information Regime III: the Digital Age. By the early 2000s, millions of citizens had purchased telephones, cell phones, and personal computers and subscribed to broadband Internet service. A growing percentage of Chinese citizens gained the technological capability to express their views via digital networks around the country and, indeed, around the globe. The result has been the freer expression of public opinion, although free speech can be transitory due to computerized censorship and the repression of dissidents.
Unlike other theories of political change, information regime theory focuses on the flow of information between the citizen and the state. It emphasizes the ways in which intermediary organizations such as news media, BBS forums, and blogs evolve in response to the changing properties of information in a society. Information regime theory also considers how state institutions process information and thereby enable or constrain certain political opportunities.

Table 1. Chinese Information Regimes.

<table>
<thead>
<tr>
<th>Information Regime Type</th>
<th>Causes</th>
<th>Properties</th>
<th>Opportunities and Constraints</th>
<th>Dominant Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soviet-style Propaganda State (1949–1978)</td>
<td>Geopolitics; socialist ideology; print and broadcast technology</td>
<td>State-dominated propaganda system (including schools and research); print, broadcast, film used for mobilization; personal communication networks</td>
<td>Political information dominated by party; information hierarchically distributed; high costs for unauthorized access; media subsidized by state</td>
<td>Central Propaganda Department; People’s Daily; Xinhua News Service</td>
</tr>
<tr>
<td>Commercial Media (1979–2002)</td>
<td>Decentralization; capitalist management strategies</td>
<td>Commodification of media; media conglomerates with large market share; sale of advertisements diminishing state control of personnel and content; nonpolitical widely available</td>
<td>Incentivized content production and self-censorship; market competition; media self-sufficient but repressed for noncompliance with explicit guidelines</td>
<td>Central Propaganda Department, GAPP, SARFT, Yueping Xiaozu (media evaluation small groups); weekly newspapers, tabloids, magazines; China Central Television</td>
</tr>
<tr>
<td>Digital Age (2003–present)</td>
<td>Rise in individual wealth; rapid ICT advances</td>
<td>Proliferation of information and communications technology: cell phones and personal computers; media linked to Web; e-government</td>
<td>State regulations restrict Internet use; rapid communication with like-minded individuals; freer political expression; more accessible information; easier mobilization; less formal restriction of state media</td>
<td>Ministry of Information Industry; State Council Information Office; CPD; Web portals, media Web sites, and blogs; covert party organizations to influence public opinion</td>
</tr>
</tbody>
</table>
Measuring Political Expression: Blogs Versus Newspapers

To test for evidence of information regime change, we conducted content analysis on nine daily newspapers in Beijing, Shanghai, and Guangzhou in 2003, as well as on a selection of blogs featuring commentary on “hard news” in 2006. Both media types are publicly available and have considerable potential to influence readers’ political views. Given that online media were only beginning to play a powerful role in Chinese politics in 2003, we assumed that newspapers in 2003 published news similar to that of Information Regime II. This assumption was supported by extensive content analysis of daily newspapers in the 1980s and 1990s, which suggests that criticism of state institutions remained low and at relatively constant levels over time.

Blogging was uncommon in China until 2006—the year that saw blogs increase to 16 million, or 32 times the number of blogs in early 2005 (Esarey & Xiao, 2008). It was not, therefore, possible to compare blogs from 2003 with newspapers from the same year. Nevertheless, through a comparison of the content of newspapers and blogs, we hoped to get a general sense of the changing properties of political information in China’s emerging network society.

Compared to traditional media, blogs are freer from regular instructions that dictate content. Incentives for bloggers differ from those of journalists working in China’s official mass media; almost no bloggers depend upon blogging for their livelihood. Bloggers are, therefore, less affected by pressures to comply with regime priorities for media content. Unlike mainstream media products that are subject to extensive editorial review and external political monitoring, blog content is determined entirely by bloggers and immediately available to readers, who post reactions that remain in the blog or that are removed subsequently at the discretion of the blogger.

Blogs addressing politically controversial topics can be swiftly shut down. Bloggers can, however, start up new blogs at little or no financial cost. Readers of the earlier blog site can locate the new blog using a search engine. The impact of blog closure, while far from inconsequential, is not catastrophic. This is not true for media organizations. When a newspaper or magazine is forcibly shuttered, it seldom reopens in a manner that resembles the earlier format. Journalists who lose their jobs face substantial costs in terms of lost time and revenue.

Due to financial incentives for journalists to comply with the regime’s wishes for media content and given the low costs for bloggers if their blogs are shut down, we hypothesized that, compared to traditional media, blogs are more likely to contain opposing perspectives and criticism of the state. Blogging, therefore, could be seen as representing a new avenue for citizen empowerment. We expected content analysis of blogs and newspapers to detect a major difference in the degree of freedom of expression (pertaining to hard news) between journalists in traditional media and bloggers.

Human coders analyzed blog and newspaper content. At present, only human coders can detect and categorize the subtleties of political expression in blogs, as bloggers tend to use indirect language, satire, or images to criticize the state. The measurement of conceptual variables—such as freedom, pluralism, and propaganda—requires a rigid adherence to an evaluative protocol, as well as the ability to
recognize qualities associated with key variables, based on the entire content of a blog posting or news article—a very different endeavor from the computerized identification of key words. Due to the tightly controlled nature of the media environment in China, computerized content analysis may miss nuances of expression that communicate the presence of a subtle divergence from the official line. The protocol used to evaluate the newspapers resulted in data that was directly comparable to that of blogs.

Why newspapers? Next to television, more Chinese living in urban areas get their news from newspapers than from any other source. Furthermore, central regulations mandate that news reports posted on Internet sites must originate from official news sources. Most Internet news is reprinted from reports that appeared first in official print media sources. While Chinese television has a broader reach, newspapers provide more diverse and in-depth coverage and operate in a more competitive media market. Newspaper content also contains higher levels of freedom and more debate, while serving as a primary source of state propaganda.

A team of coders generated the newspaper dataset to which we refer later, and they analyzed 5,883 articles from nine daily newspapers in Beijing, Shanghai, and Guangzhou. The articles appeared on the first two pages of the newspaper and the first two pages of the national, local, and economic sections, with the article as the unit of analysis. Appendix 1 lists the newspapers analyzed. The sample is designed to capture major news stories within these sections of each newspaper. The dataset includes articles from "party papers" with close ties to local and central Chinese Communist Party organizations, semi-commercialized papers, and highly commercialized papers. One paper of each type was selected for Beijing, Shanghai, and Guangzhou to comprise the sample representative of mainstream dailies in each city.

We generated the sample of blogs by entering (in simplified Chinese characters) each of the names of the newspapers into Google Blog Search, a process that produced 5,948 results for Chinese-language blog posts written during 2006. From the search results, 1,000 blog entries were selected at random. Postings that did not relate to current events, national news, local news, the politics of China, and economic affairs were excluded from analysis, as were returns corresponding to entries written outside China. The initial returns contained a large number of duplicated search results, which were eliminated. Eventually, 555 blog postings are selected for analysis, with the individual blog posting as the primary unit of analysis. Coders conducted several rounds of pretests prior to commencing analysis. As a result, the reliability of the coding is very high, giving the data considerable validity. Intercoder reliability statistics appear in Appendix 2.

The blog sample consists of posts commenting on stories that appeared in the newspapers that we analyzed or, less frequently, of posts that commented on the reportage of these newspapers. This blog data should not be seen as representative of all content in the Chinese blogosphere. Rather, it is best understood as representative of the writings of bloggers who choose to comment on, or to re-post, content containing official discourses and reports in mainstream newspapers.
Content Analysis Results

A comparison of the levels of criticism, pluralism, and propaganda in blogs and newspapers is instructive. Criticism and pluralism are intended to serve as indicators of the freedom to consider political issues through debate or criticism of powerful institutions, while the propaganda is designed to provide insight into the state’s agenda setting capacity. Criticism is coded on a numerical scale for news reports and blog postings that contain politically sensitive forms of criticism, such as criticism of the central party-state, criticism of local officials, criticism of various social phenomena, and criticism of corporations. Pluralism is identified as the presence of two opposing perspectives pertaining to the same issue. Articles or blog postings coded as propaganda are those with only one perspective—corresponding to that of the central or local state. For an article to be coded as propaganda, the coder had to determine that its intention is to guide public opinion.

In blogs, there is more criticism of all types. More than 61% of blog postings contain some form of criticism, compared to 19% of newspaper articles. Some 19% of critical blog postings pertain to central levels of government, as opposed to less than 4% of newspapers. Further, there are two postings that implicitly criticize former head of state Mao Zedong. This finding is interesting, considering that not a single newspaper article contains any criticism of a central leader.

Criticism of the state is higher in blogs by a factor of four and pluralism is higher by a factor of seven. National propaganda is five times more frequent in newspapers. Please see Table 2 for the details. There is no local propaganda in the blog postings, whereas in newspapers, one-fifth of the articles analyzed contain local propaganda.

Table 2. Frequencies (percentage).

<table>
<thead>
<tr>
<th></th>
<th>Blogs</th>
<th>Newspapers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pluralism</td>
<td>36</td>
<td>5</td>
</tr>
<tr>
<td>Criticism</td>
<td>61</td>
<td>19</td>
</tr>
<tr>
<td>National Propaganda</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>Local Propaganda</td>
<td>0</td>
<td>21</td>
</tr>
</tbody>
</table>

Blog n is 555; newspaper n is 5,883.

As hypothesized, blogs are much freer than newspapers in affording opportunities to challenge the official line. On the whole, these results are similar to those of content analysis conducted by Junhua Zhang, who found that 69% of blogs crossed the "red line" of political correctness in a sample of 600 posts by bloggers writing in a narrative fashion (Zhang, 2009, p.100).

Another important difference between the content of blogs and newspaper articles is the greater tendency of blogs to criticize corporations. The objectivity of Chinese journalists is often compromised by corruption. At press conferences, it is common practice for companies to give red envelopes of cash to journalists to "cover transportation costs." Some public relations firms even wire funds to the bank accounts of journalists and reporters who write favorable articles, thus earning more money than those
who file reports portraying a company in neutral terms. Bloggers have less opportunity to receive such payments. Typically, they do not attend press conferences (unless they are also journalists) and seldom have direct contact with the corporations they criticize. More than 10% of blog posts contain criticism of corporations, as compared to less than 2% of newspaper articles. Bloggers, more than journalists, appear to be acting as watchdogs in a country plagued by faulty products, hazardous business practices, and corporations engaging in illegal pollution.

**Criticism of the State**

When logistic regression is performed on the blog dataset, with criticism being recoded as a dichotomous dependent variable, the following results are obtained. Blogs commenting on national affairs are 10 percentage points more likely to be critical than are blogs concerning local issues. This finding suggests that bloggers may differ from citizens who tend to blame local government for their problems (Fewsmith, 2008; O'Brien & Li, 2006). Interestingly, blog posts that utilize anonymous or unclear sources of information are less likely to be critical when compared to posts that are based primarily on governmental information sources. This implies that bloggers cite governmental sources in attacks on state policy or the conduct of an official that they deem inappropriate. Such a practice may be a tactic to shield a blogger from arbitrary closure of his or her blog based on suspicions that the blogger is attempting to undermine state power. Unoriginal blog content—often statements by officials that are pasted onto the blog page—is 22 percentage points more likely to be critical than content written entirely by the blogger, a finding that suggests critical postings rely heavily on government statements. Bloggers, therefore, are not incautious: They use the state’s own pronouncements to criticize such problems as corruption or poor implementation of state policies. On the whole, a comparison of blogs and newspapers confirms the hypothesis that compared to the content of mainstream media, blogs are much more likely to contain opposing perspectives and criticism of the state. Moreover, the reach of propaganda, although considerable in newspapers, is much weaker in blogs.

**Advocacy of Freedom of Speech and Political Reform**

Digital technologies empower citizens by providing forums for the expression of political views and criticism of the state. Chinese online spaces have become forums for advocating political reform, a phenomenon rarely seen in official media since the founding of the People’s Republic in 1949. To test the extent that reform discourses have emerged on Chinese Internet sites, we used Google Blog Search to track the frequency of key words in blogs that are associated with the advocacy of political reform. In our initial test, we hypothesized that blog content concerning concepts associated with political liberalization were likely to have increased over time. Our search terms included the words “freedom of speech” [yanlun ziyou 言论自由], “rights” [quanli 权利], and “the Internet” [either hulianwang 互联网 or wangluo 网络]. We assumed that the frequency with which bloggers mentioned the above search terms in blog postings indicated their support for the expansion of freedom of speech on the Internet. To affirm the validity of the test, the top returns were read to ensure that blog posts are advocating, and not opposing, political liberalization. Table 3 shows that our hypothesis was confirmed through this empirical test. While not large, relative to the universe of Chinese blogs, the number Chinese netizens calling for greater freedom
of expression is clearly growing over time. This trend remains the same when we control for the increase in the number of Chinese Internet users over the same time period.


<table>
<thead>
<tr>
<th>Year</th>
<th>Blog Postings</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>15</td>
</tr>
<tr>
<td>2005</td>
<td>54</td>
</tr>
<tr>
<td>2006</td>
<td>229</td>
</tr>
<tr>
<td>2007</td>
<td>920</td>
</tr>
<tr>
<td>2008</td>
<td>2,740</td>
</tr>
<tr>
<td>2009</td>
<td>5,110</td>
</tr>
<tr>
<td>2010</td>
<td>14,200</td>
</tr>
</tbody>
</table>

Searches conducted January 17, 2011.

In a second test, we inserted the terms "democracy" [minzhu 民主] and "political reform" [zhengzhi gaige 政治改革 or tizhi gaige 体制改革] into the search box, with returns restricted to simplified Chinese characters. The terms were chosen carefully to search for words that connote ideas associated with the creation of liberal democracy, without sounding overly controversial, which could lead to erasure. Minzhu is a word that has a double meaning in the Chinese context in that it can describe both procedural democracy in countries such as the United States, as well as rule by the CCP under the present one-party system (Nathan, 2008). The term we chose pertaining to the reform of political institutions, tizhigaige, connotes adaptation, but in common parlance does not necessarily imply democratic reform. Tizhigaige is a term often used by the party to describe state-led efforts for institutional reform, but it can also be used to refer to political reform designed to empower citizens vis-à-vis the state. When appearing together in a blog posting, the term for "democracy" and at least one term for "political reform" reflects sentiment that is supportive of China’s democratization, while remaining sufficiently innocuous so as to avoid tripping automated filters or alerting Internet censors. Table 4 depicts these results.

When we checked the top blog postings in these search returns, it is clear the blog posts are supportive of liberal democracy. Although it is possible the state or blog service providers may have deleted some earlier posts of this nature, thereby resulting in a steeper upward trend, these results indicate the number of bloggers discussing what Western analysts would consider to be democracy or democratization has increased by 826 times within a six-year period. The above empirical tests suggest that blogs are vastly freer sources of political information than are mainstream newspapers. Moreover, the number of bloggers advocating greater information freedom and democratic political reform is on the rise.
Table 4. "Democracy" and "Political Reform."

<table>
<thead>
<tr>
<th>Year</th>
<th>Blog Postings</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>23</td>
</tr>
<tr>
<td>2005</td>
<td>107</td>
</tr>
<tr>
<td>2006</td>
<td>213</td>
</tr>
<tr>
<td>2007</td>
<td>1,130</td>
</tr>
<tr>
<td>2008</td>
<td>2,390</td>
</tr>
<tr>
<td>2009</td>
<td>3,640</td>
</tr>
<tr>
<td>2010</td>
<td>19,000</td>
</tr>
</tbody>
</table>

Searches conducted on January 17, 2011.

Discussion

Political scientist Hu Yong has likened the expression of personal views in Chinese Internet spaces to a "cacophony" (xuanhua). People give voice to a variety of concerns that include the mundane, personal, and political in chat rooms, blogs, and comment boxes on Web portals (Hu, 2009). In such a vibrant environment, political advocacy represents a growing segment of online expression. In a political context in which CCP leaders have not shown support for genuine freedom of expression or greater political liberalization, our empirical tests provide evidence of dramatic change in Chinese politics that is attributable to new communications technologies.

Information regime theory predicts that changes in the properties of political communication have considerable effects on political opportunities and the behavior of state and societal actors. The properties of political communication cause new institutions to emerge and adapt, resulting in new opportunities and constraints for political mobilization. In Chinese Information Regimes I and II, the evolution of political institutions—rather than technological development—was largely responsible for the transformation of political communication by raising the costs of obtaining politically sensitive information and thereby reducing the opportunity for political resistance. By comparison, new media technologies in China’s emerging third information regime have liberalized communication and lowered the cost of obtaining and exchanging many types of political information, which has also prompted renewed efforts by the state to retain control of political expression.

Existing party and organizations, such as the Central Propaganda Department of the Chinese Communist Party and the State Council Information Office, adapted their organizational structures to strengthen state control over the Internet. Laws were updated and new laws written to tighten restrictions over political expression online. New information control institutions, such as the Ministry of Information Industry, were created. Thousands of party organizations were founded to guide online commentary through the posting of anonymous essays. As new state institutions evolved to control political
information, China’s netizens adapted to new circumstances by expressing their views through coded language, neologisms, and satire to evade censorship and avoid repression.

In the words of Manuel Castells, a “network society” is coalescing in China that stretches across the country and beyond its borders through digitally connected communities (Castells, 2009). “Mass self-communication” via blogs and other media enables freedom of speech and political participation, even in an authoritarian regime (Castells, 2010). In the past, due to the China’s geographic size and large population, activists had difficulty creating linkages with activists elsewhere, who may have had similar concerns or been willing to support a popular movement. Via blogs, online video clips, email, and text messages, activists can utilize interactive relationships to garner broad support for their causes. A reader of an activist’s blog post may write sympathetic comments or, if the reader is herself a blogger, provide a link to the blog post to attract other readers. The voice of the individual activist is thereby magnified and public opinion, in a sense, aggregated as one post or photo “goes viral” among netizens. This process contributes to producing a mass Internet incident.

While the dynamics of digital communication are becoming clearer, its political effects remain illusive. As pressure on the regime from online dissent grows, is the regime listening? Are bloggers disgruntled citizens howling in the wilderness? Is authoritarian rule more stable by virtue of allowing people to vent steam, as it were? When addressing these questions, it is wise to heed the caution of scholars such as Bingchun Meng (2010), who has argued in this journal that the association of digital empowerment with democratization risks limiting the ability of researchers to evaluate China’s complex and evolving information environment. That bloggers are writing about democracy is not tantamount to democratization, although the former is certainly necessary for the latter. Freedom of political communication is but one important ingredient in the transition from authoritarian rule.

At this stage, it is possible to venture tentative conclusions about the effect of ICT technology on fundamental political change. The agenda-setting literature suggests that the frequency with which certain types of content appear in mass media helps to determine the issues that the public sees as important and how certain issues are perceived (Iyengar & Kinder, 1987, Iyengar, 1991). While a large percentage of newspaper content can be considered to be propaganda, there is less propaganda in the blogosphere. If, as our empirical analysis indicates, digital forms of communication have reduced the capacity of the Chinese state to dictate media content, agenda-setting effects on newspaper readers are likely to diminish among avid blog readers, who “self-select” political information on the Web and tune out tightly controlled mass media. Although mass media remain powerful, a new age of limited media effects may emerge in China for many of the same reasons that scholars have argued media effects have diminished in the United States (Bennett & Iyengar, 2008).

A longstanding feature of the Chinese state’s communication power has been the ability to influence political preferences through propaganda and the use of value-laden political expressions called tifa. In cyberspace, the state has less control over tifa, such as “harmonious society” [hexie shehui], which implies the country’s movement toward socioeconomic inequality. Netizens joke that censorship means “being harmonized” [bei hexie] and deride the state’s presence online as a “river crab” [hexie], a homophone of Mandarin Chinese for “harmony.” Over time, this could limit the state’s ability to shape
political preferences in such a way as to privilege the interests of the CCP. What may appear to be small “victories” by netizens through the humorous adaptation of state slogans may embolden citizens to challenge political injustices associated with misuse of state power. “Mass self-communication” by citizens may help to level the playing field between state and societal actors over time, as the latter take advantage of the expansion of post-bureaucratic opportunities to independently promote issues to the public agenda.

Such assertions merit qualification. High economic growth rates in the People’s Republic and the improvement of living standards for many Chinese suggests that the CCP may have relatively little to fear. Entrepreneurs are broadly supportive of state institutions (Chen & Dickson, 2010, p. 181). Public opinion surveys suggest widespread optimism about the health of the Chinese economy and approval of the government’s performance, generally (Pew, 2008). Most people do not view income inequality as a serious problem, despite tremendous evidence suggesting otherwise (Whyte, 2010).

What about the views of major players in the country’s information technology sector? Qing Duan (2007) has observed that IT elites who run major Web sites benefit greatly from the status quo: “Even though some IT leaders have negotiated with the state for more freedom, this does not negate the fact that the state still remains in control of the Internet and binds these IT elites into its patronage (p. 180). Guobin Yang (2009) has suggested, however, that the high volume of traffic—associated with Internet activism—incentivizes Web site operators to participate in contentious activities. He argues that the Internet facilitates forms of protest that protect citizens’ rights and exposes official corruption—functions that Chinese rulers want the Internet to perform. The nightmare of CCP leaders is that online activism will go offline and spin out of control before the Web’s “cacophony” can be silenced.

Although state capacity to monitor ICT content allows the rapid identification of political opponents, the use of repression and even the manipulation of political information can be costly when exposed by dissidents, international organizations, and even corporations. As Google’s decision to relocate its search engine outside China attests, the struggle for freedom of the Internet continues. The Leninist state’s obsession with information control is both the rationale for suppression of dissent and the cause of digital resistance that could be called Chinese “counter power” (Castells, 2007). China’s digital information regime change has led to the emergence of new political structures, as well as opportunities for citizens and online communities to challenge the state. While some may argue that online expression is “cheap talk,” the hottest expressions in cyberspace are not those that support the state, but those that lampoon it.
Appendix 1. Description of Newspapers Analyzed in 2003.

<table>
<thead>
<tr>
<th>Newspaper Name</th>
<th>City</th>
<th>Type of Newspaper</th>
<th>Administrative Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>People’s Daily (Renmin ribao)</td>
<td>Beijing</td>
<td>Party organ</td>
<td>Central</td>
</tr>
<tr>
<td>Beijing Morning News (Beijing chenbao)</td>
<td>Beijing</td>
<td>Moderate commercial</td>
<td>Provincial</td>
</tr>
<tr>
<td>Beijing Youth Daily (Beijing Qingnianbao)</td>
<td>Beijing</td>
<td>High commercial; Party organ</td>
<td>Provincial</td>
</tr>
<tr>
<td>Liberation Daily (Jiefang ribao)</td>
<td>Shanghai</td>
<td>Party organ</td>
<td>Provincial</td>
</tr>
<tr>
<td>Oriental Morning Post (Dongfang zaobao)</td>
<td>Shanghai</td>
<td>Low commercial</td>
<td>Provincial</td>
</tr>
<tr>
<td>Shanghai Morning News (Xinwen chenbao)</td>
<td>Shanghai</td>
<td>High commercial</td>
<td>Provincial</td>
</tr>
<tr>
<td>Southern Daily (Nanfang ribao)</td>
<td>Guangzhou</td>
<td>Party organ</td>
<td>Provincial</td>
</tr>
<tr>
<td>Southern Metropolitan Post (Nanfang dushibao)</td>
<td>Guangzhou</td>
<td>High commercial</td>
<td>Provincial</td>
</tr>
<tr>
<td>Guangzhou Daily (Guangzhou ribao)</td>
<td>Guangzhou</td>
<td>High commercial; Party organ</td>
<td>Municipal</td>
</tr>
</tbody>
</table>

Appendix 2. Intercoder Reliability

Several training sessions and a series of pretests helped to correct for errors that could result from different coders giving different numerical values to the same type of content. Two coders analyzed the blog data. Intercoder reliability was checked through the random sampling of blogs for duplication by a second coder. Averaged across variables, the intercoder reliability for the blog analysis was 96.7 %—well above the usual 85 % threshold that has been used as the standard for evaluating statistical validity (Riffe, Lacy, & Fico, 1998). For the 2003 newspaper data, four coders participated in the study. Intercoder reliability levels averaged across the key variables was 96.8 %.
### Appendix 3. Criticism in Blogs: Logistic Regression Results.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient (mfx)</th>
<th>S. E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local affairs</td>
<td>-.0950961***</td>
<td>(0.03627)</td>
</tr>
<tr>
<td>Economic affairs</td>
<td>-.1361716***</td>
<td>(0.04696)</td>
</tr>
<tr>
<td>Source from official media</td>
<td>-.0691095</td>
<td>(0.05708)</td>
</tr>
<tr>
<td>Source from Web site</td>
<td>-.0768543</td>
<td>(0.05525)</td>
</tr>
<tr>
<td>Foreign source</td>
<td>-.1061914*</td>
<td>(0.06039)</td>
</tr>
<tr>
<td>Anonymous source</td>
<td>-.1817293***</td>
<td>(0.05285)</td>
</tr>
<tr>
<td>Source unclear</td>
<td>-.1407634***</td>
<td>(0.04839)</td>
</tr>
<tr>
<td>Link to Web site</td>
<td>-.089078**</td>
<td>(0.0477)</td>
</tr>
<tr>
<td>Content somewhat original</td>
<td>.0857851**</td>
<td>(0.05)</td>
</tr>
<tr>
<td>Content unoriginal</td>
<td>.2238581**</td>
<td>(0.09963)</td>
</tr>
<tr>
<td>Pseudo R2</td>
<td>0.0770</td>
<td></td>
</tr>
</tbody>
</table>

N 555

*,**,***, indicates significance at the 10, 5, and 1% significance level, respectively.

The dependent variable, criticism, included blog postings that were critical of the head of state, any national leader, central governmental institutions or policies, local government leaders, and local government institutions or policies. The independent variables appearing in the left-hand column were coded as dummy variables (0–1); reference variables were national affairs, governmental information source, and original content.
References


