

Censorship’s Fragile Grip on the Internet: Can Online Speech Be Controlled?

Bryan Druzin† & Jessica Li‡

This Article argues that the structural nature of the Internet makes cyber-censorship susceptible to sudden collapse. The Article takes China—the world’s largest and most sophisticated cyber-censorship regime—as a case study, arguing that China’s control over its Internet is vulnerable to rapid dissolution. This is because, given the sheer number of Chinese internet users, China relies significantly on self-censorship. While this strategy is highly effective, it is fragile. Building on the concept of *information cascades* in the economics literature, this Article posits an innovative concept we term *speech cascades*; the idea being that public understanding of what constitutes impermissible speech may change abruptly, sparking bandwagons of uncensored speech. In its simplified form, the model is as follows: each act of online defiance slightly alters perceptions of what comprises permissible speech, which in turn encourages more internet users to join the strengthening bandwagon, creating a snowball effect as mass perceptions regarding the acceptable limits of public expression shift. We briefly consider the model’s political implications: the potential for a sudden collapse of China’s cyber-censorship regime to bring about the political collapse of the Chinese government. We argue that China’s censorial system, while outwardly robust, is far more fragile than it appears—it rests primarily upon perceptions and, unlike prison cells made of concrete and iron, perceptions can change with astonishing speed. If the right conditions should emerge, China’s cyber-censorship regime may disintegrate with far-reaching consequences for China and, potentially, the world.

Introduction	370
I. The Anaconda in the Chandelier: How China Uses Law to Foster Self-Censorship	373

† Assistant Professor and Deputy Director of LLM Programs, Faculty of Law, The Chinese University of Hong Kong; PhD in Law, King’s College London; LL.M, LL.B., B.A., University of British Columbia.

‡ B.A., M.A., LL.B., Cambridge University, Solicitor of the Senior Courts of England and Wales and registered foreign lawyer in Hong Kong.

For their helpful comments on earlier drafts, we are deeply grateful to Eric Posner at the University of Chicago, Justice Kemal Bokhary of the Supreme Court of Hong Kong, Andrew Simester at Cambridge University, Scott Veitch at the University of Hong Kong, Michael Palmer at SOAS, Eva Pils at King’s College London, as well as Christopher Gane and Eric Ip at the Chinese University of Hong Kong. Any errors are our own. This research was facilitated by funding under CUHK Direct Grant Funding award.

A.	The Critical Role of Self-Censorship in Controlling Online Speech	374
B.	The Chilling Effect of Legal Vagueness.....	375
C.	Building a Regulatory Panopticon.....	377
D.	Using Law to Induce Self-Censorship Across Chinese Society	381
1.	<i>Intellectuals Made Compliant</i>	382
2.	<i>Internet Entrepreneurs Made Compliant</i>	383
3.	<i>Foreign Firms Made Compliant</i>	385
II.	Information and Speech Cascades	387
A.	Information Cascades Explained	387
B.	Example: Choosing Between Two Restaurants	388
C.	Why Online Behavior is Particularly Susceptible to Speech Cascades	390
1.	<i>Sequentiality and a Clearer Awareness of Other's Behavior</i>	390
2.	<i>Connectivity and Speed</i>	391
3.	<i>Bounded Rationality</i>	392
4.	<i>Better "Rational" Actors</i>	393
III.	The Anaconda Recoils: The Potential Collapse of Cyber-Censorship and With it the Chinese Regime	394
A.	Drilling down on Our Model: A Sudden Eruption of Speech Cascades	394
B.	Speech Entrepreneurs and the Spontaneous Emergence of Online Protest.....	399
C.	Censorship as Public Information and China's Increasing Reliance on Self-regulation.....	404
E.	What are the Potential Consequences of a Large-scale Eruption of Speech Cascades?	409
1.	<i>Scenario One: Political Transformation</i>	409
2.	<i>Scenario Two: Political Inconsequence</i>	411
3.	<i>Scenario Three: Political Accommodation</i>	412
	Conclusion	413

Introduction

The Russian novelist Aleksandr Solzhenitsyn depicted a chilling scene involving a tribute to Joseph Stalin at the close of a communist party conference. An explosion of adoring applause erupted, and all attendees rose passionately to their feet. The ovation continued unabated for over ten minutes, each man feigning enthusiasm, looking at each other in terror, and no one daring to be the first to stop clapping. With palms becoming bruised, arms aching, and the older attendees nearing exhaustion, the director of the local paper factory sat down in his seat, abruptly ending the applause. That same night the factory director was arrested.¹ There was a

1. See ALEKSANDR SOLZHENITSYN, *THE GULAG ARCHIPELAGO* 69-70 (Thomas P. Whitney trans., 1973).

reason why Soviet authorities arrested this man, and it relates explicitly to this Article's thesis: even tiny acts of dissent unsilenced are intrinsically dangerous to a regime built upon fear. Why? Because fear is a perception, and perceptions can change quickly.

China's control over its internet is such a regime. It relies heavily upon self-censorship—fear. The success and sophistication of China's cyber-censorship regime is widely acknowledged.² Yet theorists have, we argue, overestimated its robustness. While China's technological prowess in controlling its Internet is impressive, the colossal size of the Chinese population, combined with the explosive growth of Internet usage among its people, makes it extremely challenging for the Chinese government to directly censor its Internet, a challenge that will only grow as Internet penetration in China climbs. To help accomplish this task, Beijing has conscripted the participation of internet users themselves in the form of self-censorship.³ Indeed, self-censorship represents a key component in China's censorial system.⁴ Because of its reliance upon self-censorship, China's censorship regime is more fragile than it appears. If perceptions regarding the acceptable ambit of permissible speech were to suddenly shift, China's leash on its internet would unravel—potentially a lot faster

2. See PATRICIA MOLONEY FIGLIOLA, CONG. RESEARCH SERV., R41120, U.S. INITIATIVES TO PROMOTE GLOBAL INTERNET FREEDOM: ISSUES, POLICY, AND TECHNOLOGY 4 (2011) (China "has one of the most sophisticated and aggressive Internet censorship and control regimes in the world."); SUSAN L. SHIRK, CHINA: FRAGILE SUPERPOWER 91 (2008) ("China operates the most extensive and technologically sophisticated system of Internet filtering in the world."); BARNEY WARF, GLOBAL GEOGRAPHIES OF THE INTERNET 51 (2013) ("Chinese internet censorship is arguably the world's most severe."); Ronald J. Deibert, *The Geopolitics of Internet Control: Censorship, Sovereignty, and Cyberspace*, in ROUTLEDGE HANDBOOK OF INTERNET POLITICS 323, 327 (Andrew Chadwick & Philip N. Howard eds., 2009) ("China is still the world's most notorious and sophisticated censoring regime."); Gary King et al., *How Censorship in China Allows Government Criticism but Silences Collective Expression*, 107 AM. POL. SCI. REV. 1, 1 (2013) ("The size and sophistication of the Chinese government's program to selectively censor the expressed views of the Chinese people is unprecedented in recorded world history."); Editorial Board, *In Foiling Gmail, China Foils Itself*, N.Y. TIMES, Jan. 1, 2015, at A18, http://www.nytimes.com/2015/01/01/opinion/in-foiling-gmail-china-foils-itself.html?_r=0 ("Chinese censors . . . have put up the Great Firewall, some of the world's most sophisticated machinery and software for controlling or blocking what reaches millions of Chinese Internet users."); Eva Dou, *The Constant Adaptations of China's Great Firewall*, WALL. ST. J.: CHINA REAL TIME REPORT (Mar. 17, 2015), <http://blogs.wsj.com/chinarealtime/2015/03/17/the-constant-adaptations-of-chinas-great-firewall/> ("China's Great Firewall is one of the most sophisticated Internet filters in the world."); see also U.S.-CHINA ECON. & SEC. REVIEW COMM'N, 111TH CONG., 2009 REP. TO CONG. 282 (2009) (citing OPENNET INITIATIVE, <https://opennet.net> (last visited Apr. 15, 2016)).

3. See CHRISTOPHER A. FORD, CHINA LOOKS AT THE WEST: IDENTITY, GLOBAL AMBITIONS, AND THE FUTURE OF SINO-AMERICAN RELATIONS 24 (2015) (The lack of clarity "naturally creates powerful incentives for cautious self-censorship and may, in fact, be the only way the Party authorities can really exert control over the huge volumes of information circulating in the modern Chinese media.").

4. The pivotal significance of self-censorship was recognized early on in the evolution of China's Internet. See, e.g., Nina Hachigian, *China's Cyber-Strategy*, 80 FOREIGN AFF. 118, 120 (2001) ("[T]he self-censorship that the regime promotes among individuals and domestic Internet content providers (ICPs) is the primary way officials control what Chinese viewers see."); see also *infra* notes 9-13 and accompanying text.

than anyone could anticipate. Building upon the concept of information cascades in the behavioral economics literature, this Article discusses how this could happen, positing an idea that the Article terms *speech cascades*.

The strength of China's cyber-censorship regime—its use of self-regulation—is also its weakness in that it renders the system implicitly susceptible to shocks. The perceptions that underpin self-censorship can, in theory, shift quickly. Even seemingly innocuous events may cause a massive shift in perceptions by triggering a *speech cascade*: a sudden large-scale shift in norms regarding the acceptable limits of public expression that bandwagons, and quickly builds on itself. This behavioral economics model of online censorship explains the current state of China's regulation of free expression on its Internet, why this control-system appears to be changing, and, perhaps most crucially, its potential for collapse. The very nature of the censorship regime China has created makes it a candidate for dissolution. China's censorship regime depends heavily upon perceptions to achieve its ends and, unlike prison cells made of concrete and iron, perceptions can change swiftly.⁵ Perhaps most interesting is the model's political implications—a sudden collapse of China's cyber-censorship regime may translate into a “real-world” collapse of political control.

The Article proceeds in three parts. Part I discusses the essential role of self-censorship in China's strategy of Internet control, examining how China uses law to cultivate a culture of self-censorship. Part I also examines how extraordinarily successful this policy has been across the broad sweep of Chinese society—from intellectuals, to entrepreneurs, to local and foreign corporate actors. Part II then discusses the concept of information cascades and, building on this model, posits the concept of speech cascades. Part II argues that online behavior is, on a basic structural level, particularly susceptible to speech cascades. Part III then examines the speech cascade model in more detail. Part III considers the possibility of a sudden eruption of online speech cascades, and briefly canvasses the broader socio-political implications if this should come to pass. Finally, Part III discusses three possible scenarios as to how this could play out.

As the most accomplished censor of online speech in the world,⁶ China is an ideal case study for the concept of speech cascades. China's Internet represents something unprecedented in human history: a digital leviathan constrained principally by the perceptions of those who use it. China has fashioned a tight leash on its internet, but it must now hold fast to that leash. If the right conditions should emerge, China's cyber-censorship regime may suddenly collapse with far-reaching consequences for China and, potentially, the world.

5. The discussion that follows is not a normative exposition on Internet censorship. No value judgments are asserted. This Article merely argues that online censorship is structurally vulnerable to sudden collapse. Indeed, the socio-political consequences of such a collapse are wildly difficult to predict and not necessarily positive. This is treated in more detail towards the end of the discussion. See *infra* Section III.D (“What are the Potential Consequences of a Large-scale Eruption of Speech Cascades?”).

6. See *supra* note 2.

I. The Anaconda in the Chandelier: How China Uses Law to Foster Self-Censorship

China has created an impressive leash on its Internet that few would have believed possible in the early years of the technology.⁷ For our purposes, we must first describe how this leash is put together so we can then explain how it may come apart. While China implements a broad range of censorship strategies, including various direct, top-down technological methods,⁸ the true genius of China's internet censorship regime is that it has fostered a culture of self-censorship where players are induced into willing participants in the game, censoring themselves and one another.⁹ Many observers deem self-censorship as the most effective instrument of control in Beijing's toolkit.¹⁰ Indeed, "[s]elf-censorship, rather than enforced punishment, forms the cornerstone of all forms of media censorship in China."¹¹ While Beijing's technological means of control play a crucial role, "induced self-censorship has always been the CCP's main censorship device"¹² This has not changed with the advent of the Internet; self-censorship is an essential component of China's ability to control its Internet. As China's massive population gains increasing access to the Internet, the importance of self-censorship will likely only grow in importance.¹³ Ultimately, in the face of such large numbers, censoring the Internet with only technological strategies is comparable to holding back water with one's hands.

7. See Christopher Stevenson, *Breaching the Great Firewall: China's Internet Censorship and the Quest for Freedom of Expression in a Connected World*, 30 B.C. INT'L & COMP. L. REV. 531, 537 (2007).

8. YING JIANG, CYBER-NATIONALISM IN CHINA: CHALLENGING WESTERN MEDIA PORTRAYALS OF INTERNET CENSORSHIP IN CHINA 83 (2012). One study concluded that Chinese regulators employed five techniques of censorial control: (a) legislation, (b) blocking, (c) build-up (increase "healthy" content), (d) education (for example, promoting the use of "healthy" content), and (e) self-regulation. See Lena L. Zhang, *Behind the "Great Firewall": Decoding China's Internet Media Policies from the Inside*, 12 CONVERGENCE: INT'L J. RES. INTO NEW MEDIA TECH. 271, 280 (2006). The last of these—self-regulation—is pivotal and the focus of the present discussion. We can conceptually partition these five techniques into two basic approaches: *direct censorship* and *indirect censorship*. The first four techniques can all be thought of as direct censorship in that they involve direct action from the authorities; self-regulation is indirect censorship in that it is indirectly produced by direct censorship.

9. See Hachigian, *supra* note 4, at 120 (describing China's self-censorship regime).

10. HAIQING YU, MEDIA AND CULTURAL TRANSFORMATION IN CHINA 115 (2009); Lauri Paltemaa, *These Bytes Can Bite—Chinese Politics of Technology and the Controlled Internet*, in NET WORKING/NETWORKING: CITIZEN INITIATED INTERNET POLITICS 189, 196 (Tapio Häyhtio & Jarmo Rinne eds., 2008). Others have described self-censorship as China's "second weapon" to control its internet. Peter Marolt, *Grassroots Agency in a Civil Sphere? Rethinking Internet Control in China*, in ONLINE SOCIETY IN CHINA: CREATING, CELEBRATING, AND INSTRUMENTALISING THE ONLINE CARNIVAL 53, 55 (David Kurt Herold & Peter Marolt eds., 2011).

11. Yu, *supra* note 10, at 115.

12. Perry Link & Xiao Qiang, *From Grass-Mud Equestrians to Rights-Conscious Citizens: Language and Thought on the Chinese Internet*, in RESTLESS CHINA 83, 90 (Perry Link et al. eds., 2013).

13. See *infra* notes 207-11 and accompanying text.

A. The Critical Role of Self-Censorship in Controlling Online Speech

Indeed, China's reliance on self-censorship is born out of necessity as much as strategy. The sheer leviathan size of the Chinese online population makes it logistically impossible for the Chinese government to directly censor every page and every post on its Internet.¹⁴ Yet, while perfect control may remain technologically elusive, *effective control* is possible.¹⁵ To that end, self-censorship is critical. Inducing a culture of self-regulation is the only viable way for authorities to maintain control over the Internet, and this is precisely what Beijing has done: a substantial portion of the censorship regime relies on self-censorship.¹⁶ Indeed, Chinese censors seem to have abandoned much of their earlier attempts to directly censor the Internet at the point of access, as evidenced in the government's aborted *Green Dam Program*, which would have legally required all computers sold in China to have pre-installed filtering software.¹⁷ Instead, Beijing has conscripted the participation of the Internet's users. As the *People's Daily*, the Chinese government's official newspaper, pointed out as early as 2001: "The trick for the state is . . . to nurture an attitude of 'voluntary' self-control and self-censorship among users, a 'firewall within one's head.'"¹⁸ China has, in effect, rendered its population its own willing jailor.

In order to promote self-censorship and suppress undesirable online content, the government has employed a complex system of surveillance and punitive action.¹⁹ This culture of self-censorship has been described by one theorist as a giant snake resting silently over the heads of the Chinese people:

[T]he Chinese government's censorial authority in recent times has resembled not so much a man-eating tiger or fire-snorting dragon as a giant anaconda coiled in an overhead chandelier. Normally the great snake doesn't move. It doesn't have to. It feels no need to be clear about its prohibitions. Its constant silent message is "You yourself decide," after which, more often than not, everyone in its shadow makes his or her large and small adjustments—all quite "naturally."²⁰

The law plays a crucial role in achieving this outcome. China employs a broad range of technological and administrative strategies to maintain a tight leash on its internet, yet the most powerful weapon in Beijing's arsenal

14. Marolt, *supra* note 10, at 56.

15. See Taylor C. Boas, *Weaving the Authoritarian Web*, 103 CURRENT HIST. 438, 438 (2004) (describing how effective control is possible).

16. See Jiang, *supra* note 8, at 82.

17. Kenneth C.C. Yang, *The Aborted Green Dam-Youth Escort Censor-Ware Project in China: A Case Study of Emerging Civic Participation in China's Internet Policy-Making Process*, 28 TELEMATICS & INFORMATICS 101, 101-02 (2011).

18. Gudrun Wacker, *The Internet and Censorship in China*, in CHINA AND THE INTERNET: POLITICS OF THE DIGITAL LEAP FORWARD 58, 68 (Christopher R. Hughes & Gudrun Wacker eds., 2003) (referencing *Party Daily calls for action against Internet pollution*, PEOPLE'S DAILY, Mar. 21, 2001).

19. See Marolt, *supra* note 10, at 56.

20. Perry Link, *China: The Anaconda in the Chandelier*, N.Y. REV. BOOKS, Apr. 11, 2002, <http://www.nybooks.com/articles/archives/2002/apr/11/china-the-anaconda-in-the-chandelier/> (describing Chinese censorship generally).

is law. The specific technological tactics China employs to control its Internet—such as blocking websites, flagging keywords, and funneling connections through a handful of state-run operators that act as digital arteries to the outside world that may be filtered—are well-known²¹ and need not be discussed here at length (the “great firewall of China” as it is popularly known²²). How China’s variety of laws and administrative regulations induce a culture of self-censorship is underappreciated in the literature. This involves the “participation of state and non-state actors at all institutional levels.”²³ China’s framework for control is “multilayered and achieved by distributing criminal and financial liability, licensing and registration requirements, and self-monitoring instructions to non-state actors at every stage of access, from the ISP to the content provider and the end user.”²⁴ What it cannot achieve technologically in light of the size of its internet users, China effectuates by strategically using law to foster self-censorship.

B. The Chilling Effect of Legal Vagueness

There are two components to China’s use of law regarding self-censorship. The first is a strategic lack of legal clarity. It did not take long for China to erect a legal framework to control its Internet.²⁵ Indeed, the government responded to the new technology with impressive alacrity. The country’s first Internet laws were signed into effect as early as 1994.²⁶ Additional regulations soon followed. The first significant law to regulate Internet content was the 1996 *Interim Provisions Governing Management of Computer Information Networks in the People’s Republic of China Connecting to the International Network*.²⁷ This was China’s first major attempt to use law to restrain its Internet.²⁸ Further amendments were introduced in 1998 and 2000 under the *Provisions for the Implementation of the Interim Provisions Governing Management of Computer Information Networks in the People’s Republic of China*, State Council Order No. 292, *Measures for the Administration of Internet Information Services*, and the *Decision of the Standing Committee of the National People’s Congress on Preserving Computer*

21. For an overview of such censorial strategies, see U.S.-CHINA ECON. & SEC. REV. COMM’N, *supra* note 2, at 282.

22. Cheryl L. Brown, *China’s Second-Generation National Identity Card: Merging Culture, Industry, and Technology*, in *PLAYING THE IDENTITY CARD: SURVEILLANCE, SECURITY AND IDENTIFICATION IN GLOBAL PERSPECTIVE* 57, 64 (Colin J. Bennet & David Lyon eds., 2008). For book-length treatment of the topic, see generally MATTHIAS RUNKEL, *THE GREAT FIREWALL OF CHINA: POLITICAL AND ECONOMICAL IMPLICATIONS OF THE GREAT SHIELD* (2010).

23. RONALD DEIBERT ET AL., *ACCESS CONTROLLED: THE SHAPING OF POWER, RIGHTS, AND RULE IN CYBERSPACE* 458 (2010).

24. *Id.*

25. Some of this section is derived from an earlier paper of ours on Chinese Internet censorship. Bryan Druzin & Jessica Li, *The Art of Nailing Jello to the Wall: Reassessing the Political Power of the Internet*, 40 *J.L. & POL’Y* (forthcoming 2016).

26. ZIXUE TAI, *THE INTERNET IN CHINA: CYBERSPACE AND CIVIL SOCIETY* 133 (2006).

27. Jill R. Newbold, Note, *Aiding the Enemy: Imposing Liability on U.S. Corporations for Selling China Internet Tools to Restrict Human Rights*, 2003 *U. ILL. J.L., TECH. & POL’Y* 503, 507–08 (2003).

28. GUOSONG SHAO, *INTERNET LAW IN CHINA* 30 (2012).

Network Security.²⁹ Article 15 of the Directive, the *Measures for the Administration of Internet Information Services*, lists illegal online content.³⁰ This includes, but is not limited to, information that is at variance with basic constitutional principles, endangers national security, divulges state secrets, subverts the government, undermines national unification, is detrimental to the honor and interests of the state, undermines the state's policies on religion, or propagates evil cults and feudalistic superstitions.³¹ What actually constitutes, for example, activities that harm "the honor or the interests of the nation"³² is unclear. Without clearly establishing guidelines as to what qualifies as prohibited activity, such provisions invariably obscure the boundaries of permissible expression, engendering pervasive confusion as to what kind of speech is and is not acceptable.³³ Indeed, the genius of this statute is that it is fantastically vague. The precise ambit of permissible speech is left unclear to encourage self-censorship and maximize the range within which people voluntarily restrain their behavior online.³⁴ The "deliberately vague wording supports the individual Internet user's perception that one can never feel safe, as one never exactly knows where the authorities draw the line between the acceptable and the illegal."³⁵ This chilling effect is often "imperceptible and not measurable by outside observers."³⁶ Yet the guessing game that this requires is arguably the most effective strategy among the various methods of Internet control that China deploys.³⁷

The pernicious impact of legal ambiguity on speech has long been recognized in U.S. jurisprudence under the *chilling effect doctrine*.³⁸ This doctrine holds that vagueness and the threat of sanctions can indirectly—yet profoundly—stifle public speech. Broadly defined statutes can levy a distinctly "chilling effect"³⁹ on citizens' willingness to engage in public speech out of fear of potential legal repercussions, real or not. As such, vaguely worded statutes are powerful instruments of social control. Because such statutes "leave the boundaries between lawful and unlawful

29. Stevenson, *supra* note 7, at 537-38.

30. See *Measures for the Administration of Internet Information Services*, ST. COUNCIL ORDER 292, Sept. 25, 2000, <http://www.cecc.gov/resources/legal-provisions/measures-for-the-administration-of-internet-information-services-cecc>.

31. *Id.*

32. *Id.*

33. See SHAO, *supra* note 28, at 57 (describing how vague law blur the boundaries of free expression).

34. Link & Qiang, *supra* note 12, at 89-90.

35. Marolt, *supra* note 10, at 55.

36. *Id.*

37. *Id.*

38. In the United States, the doctrine began to take shape in the mid-twentieth century. The first reference to the chilling effect doctrine can be found in the 1952 case of *Wieman v. Updegraff*, 344 U.S. 183, 195 (1952) (Frankfurter, J., concurring). Soon after, the court in *Speiser v. Randall* adopted the reasoning of *Wieman*, 357 U.S. 513, 529 (1958). For a good overview of the doctrine's evolution, see Monica Youn, *The Chilling Effect and the Problem of Private Action*, 66 VAND. L. REV. 1473, 1481-95 (2013).

39. See Frederick Schauer, *Fear, Risk and the First Amendment: Unraveling the "Chilling Effect"*, 58 B.U. L. REV. 685, 685, 690 (1978) (defining the "chilling effect doctrine").

conduct indeterminate, they, like overbroad laws, instill caution in individuals, encouraging them to forego expressive activities that might conceivably be prohibited.”⁴⁰ Individuals, fearful that what they are expressing is falling beyond the acceptable boundaries of public speech, engage in self-censorship, resulting in “restrained and homogeneous expression.”⁴¹ In this fashion, fear of legal reprisal, coupled with uncertainty as to the true ambit of legal permissibility, will tend to inhibit or completely shut down public speech. China’s cyber-censorship regime capitalizes on this effect. Indeed, one could not be faulted for concluding that the legislative scaffolding of China’s Internet is calibrated to achieve precisely this outcome: to generate a “chilling effect” on online speech and foster behavioral norms that encourage Internet users to self-censor.⁴²

C. Building a Regulatory Panopticon

The second component to inducing self-censorship is instilling the fear of being watched. Law and regulation mixed with the correct dose of technological prowess achieves this end. Jeremy Bentham famously envisioned a prison—the Panopticon—that was constructed so that the imprisoned could be secretly watched at all times.⁴³ The constant possibility of surveillance would cause the inmates to self-monitor out of fear.⁴⁴ Michel Foucault used the Panopticon as a metaphor for modern society where “a state of conscious and permanent visibility . . . assures the automatic functioning of power.”⁴⁵ According to Foucault, an individual “subjected to a field of visibility, and who knows it, assumes responsibility for the constraints of power: he makes them play spontaneously upon himself; he inscribes in himself the power relation in which he simultaneously plays both roles; he becomes the principle of his own subjection.”⁴⁶ In short, the imprisoned become their own jailors. Because they never know when they are being watched, they are both the subjects and the administrators of disci-

40. KEITH WERHAN, *FREEDOM OF SPEECH: A REFERENCE GUIDE TO THE UNITED STATES CONSTITUTION* 146 (2004).

41. Judith Wagner DeCrew, *Free Speech and Offensive Expression*, in *FREEDOM OF SPEECH* 81, 84 (Ellen Frankel Paul, Fred D. Miller, Jr. & Jeffrey Paul eds., 2004).

42. At time of writing, the Chinese government is considering a new cybersecurity draft law that would likely further curtail online speech. Article 1 of the proposed statute highlights:

[T]he protection of “internet sovereignty,” a term that has been used to justify increasing state control over online speech. Other provisions increase surveillance of the Internet for overly broadly defined security reasons without establishing effective privacy protections, increase requirements for companies to censor online speech, heighten a demand for companies to require real-name registration by users, and stipulate that user data must be stored in China.

Bethany Allen-Ebrahimian, *The ‘Chilling Effect’ of China’s New Cybersecurity Regime*, FOREIGN POL’Y, July 10, 2015, <http://foreignpolicy.com/2015/07/10/china-new-cybersecurity-law-internet-security>.

43. JEREMY BENTHAM, *THE PANOPTICON WRITINGS* 8 (Miran Božovič ed., 1995).

44. *Id.*

45. MICHEL FOUCAULT, *DISCIPLINE AND PUNISH* 201 (Alan Sheridan trans., Vintage Books 2d ed. 1995) (1977).

46. *Id.* at 202–03.

plinary power. Foucault's vision captures an essential feature of China's system of Internet control.⁴⁷ The specter of potential surveillance ensures that "netizens" voluntarily censor their own as well as each other's online activities.⁴⁸

The key to building this cyber-Panopticon is making the user believe that they may be being watched. Authorities have used an assortment of regulatory methods to achieve this. Extinguishing anonymity through exerting control over the gatekeepers is crucial. China has managed to control the actions of the Internet Service Providers (ISPs) and Internet Content Providers (ICPs) by placing legal responsibility for infractions of regulations directly at their feet.⁴⁹ All ISPs are by law required to keep meticulous records of each customer's account number, phone number, IP address, sites visited, and time spent online.⁵⁰ Providers are legally obligated to hand over users' personal details to government authorities and maintain the above records for a period of two months.⁵¹ Regulations introduced as early as 2002 require many ISPs to install software that archives all messages sent and received by users.⁵² Eager to avoid legal responsibility, ICPs pro-actively regulate chat rooms and bulletin boards.⁵³ Webmasters of websites are legally required to "guide" discussions in online forums, report back to government officials at the relevant levels on the general trends within the discussion groups, and remove any politically sensitive content found on their sites.⁵⁴ Failure to comply will result in closure of the website and possible arrest.⁵⁵ The proliferation of Internet cafés across the country initially offered the potential for widespread anonymity. However, the government quickly eliminated this, demanding that café owners police themselves and making café owners legally responsible

47. See generally Lokman Tsui, *The Panopticon as the Antithesis of a Space of Freedom: Control and Regulation of the Internet in China*, 17 CHINA INFO. 65 (2003) (using the Panopticon as an analogy for Chinese Internet control). Although not specifically concerning Chinese internet censorship, see MARK POSTER, *THE SECOND MEDIA AGE* 67-69 (1995), for an application of the theory of the panopticon to databases. See also Eugene Provenzo, Jr., *The Electronic Panopticon: Censorship, Control, and Indoctrination in a Post-Typographic Culture*, in LITERACY ONLINE: THE PROMISE (AND PERIL) OF READING AND WRITING WITH COMPUTERS 167, 167-88 (Myron C. Tuman ed., 1992) (applying the theory of the panopticon to modern digital culture).

48. Michael F. Hauben is credited with coining the portmanteau to connote "citizen of the Internet." See MICHAEL HAUBEN & RONDA HAUBEN, *NETIZENS: ON THE HISTORY AND IMPACT OF USENET AND THE INTERNET* 3-4 (1997); Maren Hartmann, *Technologies and Utopias: The Cyberflâneur and the Experience of 'Being Online'* 214-215 (Jan. 2004) (Ph.D. dissertation, University of Westminster) (on file with the University of Westminster Library).

49. See Tamara Renee Shie, *The Internet and Single-Party Rule in China*, in *DEBATING POLITICAL REFORM IN CHINA: RULE OF LAW VS. DEMOCRATIZATION* 215, 223 (Suisheng Zhao ed., 2006).

50. See DEIBERT, *supra* note 23, at 465.

51. See Shie, *supra* note 49, at 223.

52. *Id.*

53. See U.S.-CHINA ECON. & SEC. REV. COMM'N, *supra* note 2, at 284.

54. ANNE-MARIE BRADY, *MARKETING DICTATORSHIP: PROPAGANDA AND THOUGHT WORK IN CONTEMPORARY CHINA* 134 (2008).

55. *Id.*

for any infractions committed by their patrons.⁵⁶ To further diminish anonymity, real-name registration is required for many Internet-related activities, from participating in university online bulletin boards to individuals buying pre-paid cell phone SIM cards.⁵⁷ In early 2015, authorities introduced a new raft of regulations, requiring “users of an array of services to register their real names with service providers.”⁵⁸ A user sitting in a Starbucks in downtown Shanghai wanting to use the complimentary internet must input their cellular phone number to obtain an access code. The Chinese authorities have made impressive strides towards extinguishing online anonymity in China.

And that there may be someone watching is no myth. Although it remains classified, the MPS reportedly employs between 30,000 to 40,000 human monitors, or “cyber-police,” to scrutinize online content.⁵⁹ As early as 2000, police departments of 700 cities and provinces in China had officially incorporated this cyber division.⁶⁰ In addition, authorities have strategically solicited the help of citizens themselves, encouraging individuals to be vigilant in monitoring content.⁶¹ The government coordinates large informal groups of Internet monitors to screen websites for “objectionable” material.⁶² As early as 2004, the MPS had established a large network of online reporting centers with a reward component, encouraging citizens to report any illegal or harmful information.⁶³ With the increasing use of social media and microblogging—specifically the popularity of Sina Weibo (China’s Twitter)—reports have emerged that the number of people actively policing public opinion online is as high as two million.⁶⁴

Violations of government regulations have been met with strong punitive measures. Websites that did not obtain government authorization

56. See U.S.-CHINA ECON. & SEC. REV. COMM’N, *supra* note 2, at 284.

57. *Id.*

58. Gillian Wong, *China Threatens Sina Corp. Over Insufficient Censorship*, WALL ST. J. (Apr. 11, 2015, 5:15 AM), <http://www.wsj.com/articles/china-threatens-sina-corp-over-insufficient-censorship-1428743575>.

59. FENGSHU LIU, *URBAN YOUTH IN CHINA: MODERNITY, THE INTERNET AND THE SELF* 40 (2011). Some report a figure as high as 100,000. See DANIEL R. MCCARTHY, *POWER, INFORMATION TECHNOLOGY, AND INTERNATIONAL RELATIONS THEORY: THE POWER AND POLITICS OF U.S. FOREIGN POLICY AND THE INTERNET* 94 (2015) (referencing various estimates). When one includes those directly employed by the state (although working in the private sector), “public opinion analysts” as they are dubbed, this number swells to a jaw-dropping two million. See Katie Hunt & C.Y. Xu, *China “Employs 2 Million to Police Internet,”* CNN (Oct. 7, 2013), <http://www.edition.cnn.com/2013/10/07/world/asia/china-internet-monitors>. This is discussed in more detail below. See *infra* note 64.

60. THOMAS LUM, CONG. RESEARCH SERV., RL33167, *INTERNET DEVELOPMENT AND INFORMATION CONTROL IN THE PEOPLE’S REPUBLIC OF CHINA* 6 (2006).

61. *Id.* at 7.

62. See Link & Qiang, *supra* note 12, at 91. These people are sarcastically referred to as the “fifty-cent party” because it is believed that they were paid fifty cents for each online post. *Id.*

63. LUM, *supra* note 60, at 7.

64. Unlike the “cyber-police,” however, these monitors simply passively observe trends in online speech. See Hunt & Xu, *supra* note 59. Interestingly, this was first reported by Chinese state media (the Beijing News), which suggests that the government is eager to impress upon the public that their online activity is being monitored.

before distributing news have faced the threat of closure and fines of up to 30,000 RMB (roughly USD\$5,000 based on the 2015 exchange rate).⁶⁵ Even the simple act of blocking sites appears to send a chilling message to users and site operators that they are potentially being watched.⁶⁶ In 2006, China introduced two cartoon-police characters that periodically pop up on computer screens of users accessing Shenzhen-based websites, a move clearly designed to impress upon the user that they are being monitored and that the user should self-censor.⁶⁷ This is underscored by the names of these two animations—Jingjing and Chacha—a “playful” pun on the Chinese word for police (Jingcha警察).⁶⁸ The ostensible purpose of these icons is to provide information links to police websites. Many university-based websites, as well as many high-profile web-based discussion groups, employ chatroom monitors to “guide” online discussions and delete impermissible postings.⁶⁹

In the early days of China’s Internet, individuals were apprehended to alert the public to the futility of resistance.⁷⁰ High profile arrests include that of Lin Hai, who was accused of “inciting the overthrow of the state,” for having sent over 30,000 e-mail addresses to *Dacankao*, an underground electronic newsletter based overseas; he was sentenced to two years in jail and was stripped of his political rights for a year.⁷¹ In another incident, Huang Qi, an activist in Sichuan Province, was arrested for posting online information about the victims of the Tiananmen demonstrations.⁷² The punishment of individuals for internet activities persists, although not in massive numbers.⁷³ Sentenced offenders number approximately two or three dozen at any time.⁷⁴ And “[w]hile cases that have escalated to the point of arrest and imprisonment are rare, stiff fines and prison sentences have scared off the vast majority of Chinese citizens, effectively sending the message that the state will not tolerate opposition.”⁷⁵ Instances of official prosecution of individuals are perhaps best understood in the context of the well-known Chinese adage: “kill the chicken to scare the monkey,”

65. LUM, *supra* note 60.

66. See generally Irina Shklovski & Nalini P. Kotamraju, *Online Contribution Practices in Countries that Engage in Internet Blocking and Censorship*, CHI 1109-18 (2011) (conducting fascinating empirical research that supports this assertion).

67. BRADY, *supra* note 54, at 133.

68. Eveline Chao, *Five Myths About the Chinese Internet*, FOREIGN POL’Y (Nov. 20, 2012), www.foreignpolicy.com/2012/11/20/five-myths-about-the-chinese-internet/.

69. BRADY, *supra* note 54, at 133.

70. Jessica Li, *Internet Control and Authoritarianism: Regimes Defying Political Change 31* (Apr. 2008) (unpublished M.A. thesis, University of British Columbia) (on file with UBC Theses and Dissertations).

71. Ronald J. Deibert, *Dark Guests and Great Firewalls: The Internet and Chinese Security Policy*, 58 J. SOC. ISSUES 143, 148 (2002).

72. Eric Harwit & Duncan Clark, *Shaping the Internet in China: Evolution of Political Control Over Network Infrastructure and Content*, 41 ASIAN SURV. 377, 395 (2001).

73. For a table of examples of such instances as late as 2009, see U.S.-CHINA ECON. & SEC. REV. COMM’N, *supra* note 2, at 285.

74. Link & Qiang, *supra* note 12, at 89.

75. Dharmesh V. Dhawankar, *Contextualizing E-Governance in New Media Milieu*, 1 INTELL. RESONANCE: DCAC J. INTERDISC. STUD. 12, 15 (2013).

meaning to single out one offender for severe punishment in order to deter others. By imposing strict rules guiding Internet usage and by enacting the occasional unforgiving punishment on violators, the state has stunned the public into silence by making the cost of dissent prohibitively high.

D. Using Law to Induce Self-Censorship Across Chinese Society

By all measures, this has worked. While it is logistically impossible for authorities to comprehensively monitor the online behaviour of all its citizens, or even really more than a small fraction of its population, self-regulation extends across the broad sweep of Chinese society. From the individual to the institutional level, all players are coerced into proactively engaging in self-censorship. Indeed, as many commentators have noted, far from a vocal online civil society, a pervasive sense of political apathy seems to have descended upon most segments of Chinese society.⁷⁶ This is particular true among China's youth who, crucially, represent the majority of the country's Internet users.⁷⁷ This demographic is not going online to forcefully rally for political change, "make political statements[,] or to fight for their political rights."⁷⁸ They go online for entertainment purposes.⁷⁹ A series of relatively recent nationwide surveys shows that more than fifty percent of internet users do not post their opinions online at all.⁸⁰ Another study found that a majority of those polled trusted the con-

76. E.g., HELEN SUN, *INTERNET POLICY IN CHINA: A FIELD STUDY OF INTERNET CAFÉS* 250 (2010); see also JIANG, *supra* note 8, at 112 (noting the younger generation's political apathy oddly coexisting with passionate patriotism); LIU, *supra* note 59, at 53 (noting that urban Chinese youth are far less politicized than their counterparts in the late 1980s); XIA YONG, *THE PHILOSOPHY OF CIVIL RIGHTS IN THE CONTEXT OF CHINA* 95 (2011) (noting the historical political apathy among the Chinese people); Yi Mou, David Atkin & Hanlong Fu, *Predicting Political Discussion in a Censored Virtual Environment*, in *POLITICAL COMMUNICATION IN CHINA: CONVERGENCE OR DIVERGENCE BETWEEN THE MEDIA AND POLITICAL SYSTEM?* 81, 92 (Wenfang Tang & Shanto Iyengar eds., 2012) (an empirical study noting the significant lack of political involvement among China's younger generation). For a more anecdotal yet widely-cited examination, see Simon Elegant, *China's Me Generation: China's Me Generation*, TIME, Nov. 5, 2007, <http://content.time.com/time/magazine/article/0,9171,1675626,00.html>. This political indifference has also been noted among China's entrepreneurial class. See XIAOQIN GUO, *STATE AND SOCIETY IN CHINA'S DEMOCRATIC TRANSITION: CONFUCIANISM, LENINISM, AND ECONOMIC DEVELOPMENT* 137 (Edward Beauchamp ed., 2003). But see Zhong Yang & Hu Wei, *Mass Political Interest in Urban China: An Empirical Study*, 11 CHINA: INT'L J. 87, 92-93 (2013) (relying on empirical research to argue that the perception that there are low levels of political interest among the Chinese is mistaken, despite the fact that their findings relate only to urban regions). For a more in-depth treatment of this topic, see Druzin & Li, *supra* note 25, at Part III "A Gentle Equilibrium of Political Disengagement."

77. See David Kurt Herold, *Users, Not Netizens: Spaces and Practices on the Chinese Internet*, in *CHINA ONLINE: LOCATING SOCIETY IN ONLINE SPACES* 20, 23 (Peter Marolt & David Kurt Herold eds., 2015). This section on political apathy among the Chinese youth is largely taken from an article of ours on the political power of social media. See Druzin & Li, *supra* note 25.

78. Herold, *supra* note 77, at 23.

79. See *id.* at 24 (describing the entertainment value of the Internet to Chinese people).

80. Fei Shen et al., *Online Network Size, Efficacy, and Opinion Expression: Assessing the Impacts of Internet Use in China*, 21 INT'L J. PUB. OPINION RES. 451, 461 (2009).

tent available online and felt that control over the Internet was justified.⁸¹ In a 2007 survey, over eighty percent of respondents stated that online activity should be controlled and almost eighty-five percent cited the government as the appropriate institution to oversee this.⁸² As one Chinese scholar opines, actors who engage in self-censorship “due neither to private interest nor to government pressure may have unintentionally absorbed societal apathy to political affairs.”⁸³ This may be the case for huge swaths of the Chinese population. In the early days of China’s Internet, commentators were optimistic that the emergence of China’s online virtual communities augured the “formation of a nascent civic sphere.”⁸⁴ However, it would seem, Chinese online society at every level has been largely pacified—a remarkable achievement that speaks to the efficacy of China’s strategy of Internet control.

1. Intellectuals Made Compliant

In the nascent days of the Internet, many believed that the Internet would invite Chinese scholars and intellectuals to take their thoughts online, which would result in a flowering of ideas and a new, hitherto unseen activism in this group.⁸⁵ The argument was that a hundred flowers would bloom once again, this time in digital form, and, to a limited extent, this turned out to be true.⁸⁶ The expanded space of free expression for intellectuals indicated progress as scholars began signing on to the Internet in large numbers, while intellectual websites such as the Formalization of Ideas, which directed serious and scholarly attention to pressing social and political issues were on the rise.⁸⁷ The state responded by adopting a strategy of control far more refined than that traditionally employed against the print press.⁸⁸ Rather than shutting down controversial sites outright, authorities extended a greater degree of tolerance towards intellectual website editors, encouraging them to exercise their own “good judgment” on the admissibility of submitted articles.⁸⁹

81. See Shie, *supra* note 49, at 226.

82. Liu, *supra* note 59, at 53.

83. Jiang, *supra* note 8, at 72.

84. Shen et al., *supra* note 80, at 452. For early work in this vein, see generally Guobin Yang, *The Co-Evolution of the Internet and Civil Society in China*, 43 *ASIAN SURV.* 405, 405-22 (2003); Guobin Yang, *The Internet and Civil Society in China: A Preliminary Assessment*, 12 *J. CONTEMP. CHINA* 453, 453-75 (2003); Guobin Yang, *The Internet and the Rise of a Transnational Chinese Cultural Sphere*, 25 *MEDIA, CULTURE & SOC’Y* 469, 469-90 (2003).

85. See William Thatcher Dowell, *The Internet, Censorship, and China*, 7 *GEO. J. INT’L AFF.* 111, 112 (2006).

86. Xiaowen Xu, *Internet Facilitated Civic Engagement in China’s Context: A Case Study of the Internet Event of Wenzhou High-speed Train Accident (Dec. 2011)* (unpublished M.A. thesis, Columbia University) (on file with the Columbia University Library system).

87. YONGMING ZHOU, *HISTORICIZING ONLINE POLITICS: TELEGRAPHY, THE INTERNET, AND POLITICAL PARTICIPATION IN CHINA* 156-57 (2006).

88. See *id.* at 157.

89. See *id.* at 158.

This strategy was highly effective. Legal ambiguity and the potential for prosecution stifled the emergence of unconstrained intellectual discourse, producing a chilling effect.⁹⁰ Given the absence of strict guidelines as to what constitutes permissible material, and the ever-present fear of being punished by the state, in order to ensure the practical viability of their sites, editors reliably err on the side of caution and publish articles which will not offend the sensibilities of the state.⁹¹ The state does not directly interfere with editorial decisions because it does not have to—the shadow of the anaconda in the chandelier looms large. Very early, it became clear that officials were able to achieve their goal by trusting webmasters to conduct self-censorship and, as a result, sensitive topics remained mostly untouched by mainstream intellectual websites.⁹² After an initial period of free development, many intellectuals discovered the limits to their capabilities and found that it is simply easier to acquiesce to the tacit wishes of the state, offering compliance instead of contention.⁹³ This *de facto* alliance between the state and intellectuals has successfully stifled a truly free electronic press for academics. A medium which holds so much promise for independent thought has now been firmly submerged under the pressure of more pressing, pragmatic concerns.

2. *Internet Entrepreneurs Made Compliant*

China's entrepreneurial class has also been pacified by China's culture of self-censorship. In the early days of the Internet, conventional wisdom held that an emerging class of empowered internet entrepreneurs, together with the influx of foreign capitalists, would set in motion political reforms and unleash the transformative possibilities of the Internet.⁹⁴ But, for the time being, it would appear that Chinese authorities are dictating the rules of the game and eliciting the compliance of these crucial players. Many initially hyped the possibility that an emerging class of Chinese Internet entrepreneurs would propel the political reform agenda. Yet despite the socioeconomic clout of this group, these individuals have not taken any active interest in political affairs, much less the politics of opposition.⁹⁵

Again, a lack of legal clarity as to what exactly constituted impermissible behavior and the ever-present threat of legal prosecution predictably generated a chilling effect. As the media sector evolved, domestic Internet start-ups became heavily involved in the complex process of aggregating

90. MAROLT & HEROLD, *supra* note 68, at 20 ("The Chinese government brought in 'new legislation that in effect criminalizes online dissent' with vague and broad definition of online criminality' that 'has led to increased self-censorship by some of China's most influential bloggers, chilling political discourse in the country.'" (footnotes omitted)).

91. *See id.* at 179.

92. ZHOU, *supra* note 87, at 159.

93. *See id.*

94. For early scholarship in this vein, see, e.g., RUTH CHERRINGTON, CHINA'S STUDENTS: THE STRUGGLE FOR DEMOCRACY 203 (1991). *But see* JAMES MANN, THE CHINA FANTASY: HOW OUR LEADERS EXPLAIN AWAY CHINESE REPRESSION 10-11 (2007) (arguing that economic development does not necessarily bring political liberalization).

95. *See* Wacker, *supra* note 18, at 68.

and disseminating information, stepping into a role traditionally held by the state censorship apparatus.⁹⁶ Caught between satisfying market demand and placating government authority, the Internet media sector opted to take the latter course, eagerly self-regulating in order to appease government desire for political correctness so as to secure its market position and avoid potential legal troubles.⁹⁷ In the struggle to control online content, many ICPs proactively restrain their users, minimizing any focus on politics so as to avoid sticky legal situations.⁹⁸ This trend did not take long to set in. Indeed, it is easily discerned even in the very early years of China's Internet.⁹⁹ For example, during the Jiangxi schoolhouse explosion in 2001, Sina.com pre-empted Beijing by censoring and restricting the full range of expression on the topic; a week after the incident, authorities demanded that all sites reiterate the official line on the story and Internet companies uniformly fell in line.¹⁰⁰

Compliance with the state was officially cemented as early as March, 2002 when under the supposed concern over global spam originating in China, over 100 Chinese Internet entrepreneurs voluntarily signed the "Public Pledge on Self-Discipline for China Internet Industry," a document designed to establish "self-disciplinary mechanisms" so as to enhance the orderly development of the Internet in the country.¹⁰¹ The pledge, among other stipulations, used legally ambiguous language backed by the threat of serious legal sanctions to encourage the use of "the web in a civilized way" and "the elimination of deleterious information from the Internet."¹⁰² This was a significant early step towards establishing a culture of self-censorship within China's business community.¹⁰³ On December 8, 2003, over thirty Internet news and information providers, including *Renmin*, *Xinhua*, Sina, Sohu, and Net Ease, signed a new "Internet News Information Service Self-Discipline Pledge," in which signatories agreed to "obey government administration and public supervision voluntarily, to resist firmly the Internet transmission of harmful information such as obscenity, pornography and superstition, and to resist the substance of information that violates the fine cultural traditions and moral codes of the Chinese nation."¹⁰⁴

The reason that Chinese entrepreneurs are willing to cooperate with the state is because they see themselves primarily as modernizers of the economy rather than political reformers.¹⁰⁵ Government, on the other hand, permits input from this group into policy—a point Beijing is willing

96. Shanthi Kalathil, *China's New Media Sector: Keeping the State in*, 16 PAC. REV. 489, 489-90 (2003).

97. See Wacker, *supra* note 16, at 68-69.

98. *Id.* at 69.

99. *Id.* at 494-95.

100. Kalathil, *supra* note 96, at 489-90.

101. *Id.* at 498.

102. *Id.* at 499.

103. See FRANK CASO, CENSORSHIP 71 (2008).

104. DEIBERT, *supra* note 23, at 149.

105. See Kalathil, *supra* note 96, at 497.

to concede in exchange for a partner in Internet control.¹⁰⁶ This appears to fall perfectly in line with early studies that concluded that there is little evidence to support the Pollyannish visions of scholars that the development of a private entrepreneurial elite would eventually drive democracy in the country.¹⁰⁷ This partnership did not take long to emerge. Despite the optimistic predictions of some political observers and global business leaders, the widely-held assumption that China's entrepreneurial class is poised to make demands for democracy is ill-founded.¹⁰⁸ While entrepreneurs as a group have had a structural impact on Chinese politics, they have not exercised a brand of political assertiveness that would actually alter the nation's formal political institutions and traditions.¹⁰⁹ Those who saw in China's growing array of corporatists a path to gradual political liberalization were proven wrong. A class of society financially and personally invested in the country's economy and growth will understandably reject any advancements that may bring about social and political instability.¹¹⁰ The bottom line is that among the economic elite, there was shown to be "no relationship between indicators of individual prosperity and support for political reform."¹¹¹ There is "a large element of corporatism in the Chinese market system, and the state links businessmen to itself through favors."¹¹² Indeed, the interests of the state and the private sector remain powerfully aligned.¹¹³ And so those who have the ability to unleash the power of the Internet to the fullest extent are not eager to push the state on the freedom of speech. Internet entrepreneurs are increasingly involved in a pragmatic and consultative relationship with the government, whereby both parties are aligning their complementary visions and goals.¹¹⁴

3. *Foreign Firms Made Compliant*

The lure of China's vast market and fear of losing access to it as a consequence of running afoul of Chinese law have compelled many foreign companies to establish a close relationship with the Chinese state, making many of these companies just as anxious as the domestic private sector not

106. *Id.* at 497–98.

107. *Id.* at 490.

108. Kellee S. Tsai, *Changing China: Private Entrepreneurs and Adaptive Informal Institutions 2* (May 12, 2006) (unpublished conference paper), https://www.researchgate.net/profile/Kellee_Tsai/publication/228676691_Changing_China_Private_Entrepreneurs_and_Adaptive_Informal_Institutions/links/09e415148ba4752205000000.pdf?inViewer=0&pdfJsDownload=0&origin=publication_detail.

109. *Id.* at 2.

110. See BRUCE J. DICKSON, *RED CAPITALISTS IN CHINA: THE PARTY, PRIVATE ENTREPRENEURS, AND PROSPECTS FOR POLITICAL CHANGE* 133 (2003).

111. *Id.* at 137.

112. Kate Xiao Zhou & Stephen Zierak, *How the Internet Is Changing China*, in *DEMOCRATIZATION IN CHINA, KOREA, AND SOUTHEAST ASIA?* 232, 244 (Kate Xiao Zhou et al. eds., 2014).

113. See JOSEPH FEWSMITH, *THE LOGIC AND LIMITS OF POLITICAL REFORM IN CHINA* 109 (2013).

114. *Id.*

to offend Beijing.¹¹⁵ As with domestic actors, legal ambiguity and the potential for legal prosecution ensured a reliable degree of compliance from the majority of foreign multi-national enterprises. This phenomenon manifested relatively early in the growth of China's Internet. Indeed, it did not take long for rumors to emerge that U.S. software and Internet companies such as Yahoo!, Google, and Microsoft were proactively scrubbing search results of politically incendiary content.¹¹⁶ In June 2005, MSN Spaces, Microsoft's blog-hosting service, began removing sensitive words like "democracy" and "human rights" from use in Chinese blog titles and postings.¹¹⁷ Senior executives at Yahoo! later described such actions as part of the burden of conducting business in China.¹¹⁸ Foreign firms, forced to interpret vague legal prohibitions regarding the acceptable parameters of online speech for themselves, naturally slide into self-censorship: "Fearing severe and arbitrary penalties for lax censorship, many firms vigorously censor content . . ." ¹¹⁹ As such, foreign media multinationals are unlikely to push for a broadening of media parameters so long as investors are loathe to compromise their business plans by antagonizing the government and potentially incurring legal repercussions for such actions.

Many companies have taken pains to cultivate a working relationship with authorities, so it is simply easier to adhere to local business practices of self-censorship.¹²⁰ While some may test the outer boundaries of what Chinese officials may deem acceptable, given that the state largely dictates the fate of those involved in the Internet industry, foreign actors appear to have embraced self-regulation.¹²¹ And despite the pressure from human rights groups and international condemnation of their actions, most corporations are willing to overlook violations of freedom of expression and indeed even become participants in censorship in order to maintain a foothold in the lucrative Chinese market.¹²² While most companies adamantly deny that they have tailored their products to appease the state, insisting that they are politically neutral entities, this does not appear to cohere with reality.¹²³ Indeed, the willingness of foreign firms to engage in self-censorship was underscored in early 2010 by Google's announcement that, following a sophisticated cyberattack on its corporate infrastructure, it would cease self-censorship of its Chinese-language Google.cn,¹²⁴ a ces-

115. JOHN M. KLINE, *ETHICS FOR INTERNATIONAL BUSINESS: DECISION MAKING IN A GLOBAL POLITICAL ECONOMY* 41 (2010).

116. See LUM, *supra* note 60, at 8.

117. *Id.*

118. *Yahoo! Inc.'s Provision of False Information to Congress: Hearing Before the H. Comm. on Foreign Aff.*, 110th Cong. 61 (2007) (statement of Rep. Sheila Jackson Lee).

119. KLINE, *supra* note 115.

120. See Jessica Li, *Internet Control and Authoritarianism: Regimes Defying Political Change* 42-43 (2005) (unpublished B.A. thesis, University of British Columbia) (on file with the University of British Columbia Library system).

121. *Id.*

122. *Id.*

123. *Id.*

124. Austin Ramzy, *Google Ends Policy of Self-Censorship in China*, TIME (Jan. 13, 2010), <http://content.time.com/time/world/article/0,8599,1953248,00.html>.

sation for which Google has paid a heavy commercial price.¹²⁵

A “profit over values” approach and a tacit coalition between enterprise (both foreign and domestic) and government perfectly harmonize with the state’s goal of feeding technological growth while dampening potential social unrest. Beijing has succeeded at constraining its Internet across the broad sweep of Chinese society, and central to this remarkable feat is the culture of self-censorship it has fostered.¹²⁶ Yet this strength is, we argue, paradoxically the system’s weakness. It represents an inbuilt vulnerability—it is to this intrinsic liability that we now turn.

II. Information and Speech Cascades

Having mapped out how China’s leash on its Internet is constructed, we are now positioned to discuss how it may unravel. This requires an understanding of how information cascades work. This section unpacks the concept and introduces the idea of speech cascades.

A. Information Cascades Explained

An information cascade occurs when people form beliefs based upon the behavior or opinion of others. The basic crux of the concept is as follows: people observe the behavior of others and draw a conclusion regarding a certain factual state of affairs. This conclusion then informs their own behavior, which in turn affects the beliefs and behaviors of others running through the same calculation. The result is that this can set off a chain reaction of sorts, where a single spark can ignite a prairie fire, as one scholar vividly describes it.¹²⁷ Cascade theory seeks to explain the observable phenomenon of sudden social change, when individuals adopt similar behavior en masse.¹²⁸ Information cascades have been put forward as an explanation of the fragility of mass behaviors.¹²⁹ Theorists “call upon ideas like information cascades to describe how peripheral knowledge can pervade a society, changing the perceptions and realities of political

125. As a result of Google’s subsequent closure of its China-based search engine, Google’s share of China’s search market fell to roughly twenty-six percent in 2010 as the share held by Baidu, China’s popular domestic search engine, rose to seventy-three percent. See MICHAEL CZINKOTA, ILKKA RONKAINEN, *INTERNATIONAL MARKETING* 144 (2012). As of the second quarter of 2014, Google’s share of the Chinese search engine market stood at merely 10.9%. See Keith Bradsher & Paul Mozur, *China Clamps Down on Web, Pinching Companies Like Google*, N.Y. TIMES (Sept. 21, 2014), http://www.nytimes.com/2014/09/22/business/international/china-clamps-down-on-web-pinching-companies-like-google.html?_r=0.

126. See Kalathil, *supra* note 96, at 494-95.

127. See Timur Kuran, *Sparks and Prairie Fires: A Theory of Unanticipated Political Revolution*, 61 *PUB. CHOICE* 41, 60 (1989). It should be noted that Kuran is not technically describing information cascades with his analogy; however, his concept is very similar.

128. The foundational work in the cascade theory literature is Sushil Bikhchandani, et al., *A Theory of Fads, Fashion, Custom, and Cultural Change as Information Cascades*, 100 *J. POL. ECON.* 992, 992 (1992). For the related concept of herd behaviour, see Abhijit V. Banerjee, *A Simple Model of Herd Behavior*, 107 *Q.J. ECON.* 797, 797 (1992).

129. See Bikhchandani et al., *supra* note 128, at 993-94.

power.”¹³⁰ Siushil Bikhchandani, who wrote the foundational literature on the concept, described the process more technically in this manner: “An information cascade occurs when it is optimal for an individual, having observed the actions of those ahead of him, to follow the behavior of the preceding individual without regard to his own information.”¹³¹ This “follow the crowd” response is often an effective decision-making shortcut, as (we assume) the actions of the majority are usually predicated upon a greater pool of sound information.¹³² For example, upon leaving a movie theatre, unsure of where the exit is, one would likely simply observe the direction in which other members of the audience are moving and follow them. The implicit danger in this of course—and the literature is quick to point this out—is that the assumption that the majority is acting upon reliable information is often wrong. The information may be incorrect yet there is nevertheless a sudden rush of people jumping on the informational bandwagon, allowing it to determine their behavior.

B. Example: Choosing Between Two Restaurants

Consider the simple example of choosing between two restaurants: restaurant A and restaurant B. You must decide between the two restaurants but have very little information to go by (say restaurant A looks slightly cleaner). You notice, however, that restaurant A is dead empty but restaurant B has a few patrons. What do you do? You follow the crowd and opt for restaurant B. However, everyone is doing the same thing and in fact in doing so you have now contributed to the informational appeal of restaurant B, which in turn draws even more patrons to restaurant B, and on it goes. The pattern strengthens with each patron and a cascade results: restaurant B will become packed while restaurant A remains empty. Even a late-comer patron highly inclined to eat at restaurant A, upon seeing that restaurant B is full of so many diners and restaurant A is dead empty, may be swayed to eat at restaurant B. However—and this is an important point—all of this is no guarantee that restaurant B is any better than restaurant A. In fact, it could very well be inferior. The patrons you observed in restaurant B may have simply flipped a coin in making their decision.¹³³ The net result, however, is that a self-reinforcing cascade occurred.¹³⁴

130. MARY JOYCE, DIGITAL ACTIVISM DECODED: THE NEW MECHANICS OF CHANGE 211 (2010).

131. Bikhchandani, *supra* note 128, at 994.

132. In social psychology this tendency is described using the concept of informational social influence. See ELLIOT ARONSON ET AL., SOCIAL PSYCHOLOGY 240-50 (5th ed. 2005). For the foundational study on this concept, see generally MUZAFER SHERIF, THE PSYCHOLOGY OF SOCIAL NORM (Harper Torchbooks 1966) (1936).

133. Information cascades predicated on flawed assumptions are known as *reverse cascades*. These are decision sequences “where initial misrepresentative signals start a chain of incorrect decisions that is not broken by more representative signals received later.” Lisa R. Anderson & Charles A. Holt, *Information Cascades in the Laboratory*, 87 AM. ECON. REV. 847, 859 (1997); see also Don Ross, *The Evolution of Individualistic Norms*, in COOPERATION & ITS EVOLUTION 17, 30-31 (Kim Sterelny et al. eds., 2013).

134. One example of an erroneous information cascade offered in the literature is a highly qualified job candidate performing badly in a job interview sparking “a series of

The concept is more formally understood in the following way. Agents must choose between two mutually exclusive alternatives: e.g. eat at restaurant A or at restaurant B.¹³⁵ The model is sequential—agents decide one after the other and each agent is able to see the choices of all the other agents who decided before her. Each agent has a modicum of private information regarding the choice (i.e. which restaurant is better), but gives equal weight to their private and the public information. The first agent, relying only on her private information (because that is all that is available to her at this stage), chooses restaurant A (as her private information dictates). If the next agent's private information also indicates that restaurant A is the better choice, then a cascade will occur. This is because the third agent will select restaurant A even if her private information indicated restaurant B (note that she gives equal weight to her private information and public information). However, let us assume that the second agent's private information indicates that restaurant B is the better choice and so selects restaurant B. In this situation, the choices of the first and second agents negate each other with respect to their impact upon public information. The third agent will find herself in a condition of informational ignorance. As such, she will go by her private information. Her decision will then start a cascade because there is now a guarantee of public information for the fourth agent (i.e. a restaurant with two patrons versus another with only one). Thus, in either scenario a cascade will result. Siushil Bikhchandani et al. formally show that in a “fairly general setting with sequential choices . . . at some stage a decision maker will ignore his private information and act only on the information obtained from previous decisions . . .” In the absence of external disturbances, so do all later individuals.¹³⁶ This is an important insight with respect to China's cyber-censorship regime.

This concept is relevant because self-censorship forms a core component of China's censorial regime and, crucially, the precise boundaries of permissible speech are not clear.¹³⁷ As such, there is always a degree of informational uncertainty regarding a great deal of speech. While the boundaries of permissibility may be clear with respect to extreme forms of contentious speech, the acceptability of so much public expression remains unclear.¹³⁸ Along the margins of permissibility, the internet user's private information is very weak. It is thus within this space that the boundary may be pushed ever so slightly, yet potentially triggering a cascade of uncensored online speech—a speech cascade. Speech cascades are

rejections [which] can create a reverse cascade that eliminates many future job opportunities.” Anderson & Holt, *supra* note 133, at 847.

135. See Banerjee, *supra* note 128, at 798-99 (using a similar restaurant example).

136. Bikhchandani, *supra* note 128, at 994.

137. See FORD, *supra* note 3 (noting how legal vagueness “creates powerful incentives for cautious self-censorship”).

138. See Ilya Somin, *The Uncertain Limits of Intellectual Freedom in China*, WASH. POST: VOLOKH CONSPIRACY (Aug. 7, 2014), <https://www.washingtonpost.com/news/volokh-conspiracy/wp/2014/08/07/the-uncertain-limits-of-intellectual-freedom-in-china/>.

more thoroughly fleshed out in Section III.A. Before exploring the model more rigorously, however, let us consider how, given the structural characteristics of the Internet, the information cascade model is in fact even more robust with respect to online behavior.

C. Why Online Behavior Is Particularly Susceptible to Speech Cascades

Information cascades have been criticized, as have most economic models, as being an over-simplified, crude representation of reality.¹³⁹ There is of course merit to this position. Human behavior is not always as systematic as economists like to portray it to be.¹⁴⁰ However, the model, we argue, grows more robust in the context of online behavior. There are basic structural reasons for this. The result is that Internet-based communities are particularly susceptible to information cascades in the form of speech cascades.

1. *Sequentiality and a Clearer Awareness of Other's Behavior*

Information cascades are open to criticism in that they assume perfect sequentiality with each agent able to observe the behaviors of all the agents before her.¹⁴¹ Actors make decisions sequentially, “with later people watching the actions of earlier people, and from these actions inferring something about what the earlier people know.”¹⁴² Yet situations that exhibit perfect sequentiality are in reality more the exception than the norm.¹⁴³ The Internet, however, frequently exhibits sequentiality, with users behaving in a highly structured, usually sequential fashion. Indeed, it is often perfectly sequential. One need only glance at the standard layout of chat rooms, message boards, microblog posts, Facebook, and other social media platforms, email threads, and the comments to online articles to appreciate their sequential structure: commenters respond in a successive fashion, able to view previous comments.¹⁴⁴ This is true for Internet chatter as a whole: each user has instant access, either in its entirety or

139. Pierre Lemieux, *Following the Herd*, 26 REG. 16, 17 (Winter 2003-04).

140. Many criticize rational choice theory along these lines. See, e.g., Dan Ariely et al., “Coherent Arbitrariness”: *Stable Demand Curves Without Stable Preferences*, in THE CONSTRUCTION OF PREFERENCE 246, 247 (Sarah Lichtenstein & Paul Slovic eds., 2006); Amos Tversky & Richard H. Thaler, *Anomalies: Preference Reversals*, 4 J. ECON. PERSP. 201, 201-11 (1990) (arguing that individuals in fact often make irrational choices and so human psychology resists this simplistic model).

141. See, e.g., Robert J. Shiller, *Conversation, Information, and Herd Behavior*, 85 AM. ECON. REV. 181, 183 (1995) (“It would seem that few of the examples of information cascades proposed by Banerjee (1992) and Bikhchandani et al. (1992) satisfy the assumptions of the sequential models.”).

142. DAVID EASLEY & JON KLEINBERG, NETWORKS, CROWDS, AND MARKETS: REASONING ABOUT A HIGHLY CONNECTED WORLD 425 (2010).

143. See Shiller, *supra* note 141, at 182-83 (arguing that sequential decision-making is in reality rare).

144. See, e.g., RICHARD HOLT, DIALOGUE ON THE INTERNET: LANGUAGE, CIVIC IDENTITY, AND COMPUTER-MEDIATED COMMUNICATION 15-16 (2004) (noting this sequential structure); PAUL C. ADAMS, ATLANTIC REVERBERATIONS: FRENCH REPRESENTATIONS OF AN AMERICAN PRESIDENTIAL ELECTION (2007) (arguing this structure is better conceptualized as a tree-diagram).

partially, to the past online behavior of other users. In the real world, agents do not always act in such a well-formatted sequential structure and commonly are not able to perfectly view the behavior of preceding agents. The original cascade model's assumption that the behavior of all the previous agents is known is better approximated in an online setting. In this fundamental respect—sequentiality and a clearer awareness of the behavior of previous actors—the cascade model maps onto online behavior far more readily than it does onto other informational environments.

2. *Connectivity and Speed*

The information cascade model applies more robustly to Internet-based communities also in terms of connectivity. Indeed, the degree of hyper-connectivity the Internet affords is nowhere approximated in the real world.¹⁴⁵ Moreover, this connectivity is presently experiencing explosive growth with the increased usage of smartphones and other internet-enabled mobile devices.¹⁴⁶ The Internet is now in its second stage of development, “evolving from a data network connecting PCs with wires to a much broader network reaching a wide range of new portable devices such as mobile phones and tablet computers.”¹⁴⁷ The highly interconnected nature of the Internet makes speech cascades even more likely to occur in that this connectivity enhances the transmission of information. What was once referred to as a global village has now arguably become a global living room: the collective chatter and discussion of large masses of people is occurring on a scale hitherto unimagined in human history.¹⁴⁸ The breathtaking speed at which information can now be transmitted complements this hyper-connectivity. This accelerated speed of communication amplifies the effect of an information cascade, making sudden normative shifts regarding what is acceptable online speech far more likely.

Indeed, in an age where a person can upload a video recording of a panda sneezing and the video is viewed almost a quarter of a billion times by people across the planet,¹⁴⁹ the concept of information cascades and rapid political change needs to be completely reexamined in light of the

145. See, e.g., THOMAS L. FRIEDMAN, *THE WORLD IS FLAT: A BRIEF HISTORY OF THE TWENTY-FIRST CENTURY* 516–17 (2nd rev. and expanded ed. 2007) (noting that this connectivity has helped to “flatten” the world); see also Jyh-An Lee & Ching-Yi Liu, *Forbidden City Enclosed by the Great Firewall: The Law and Power of Internet Filtering in China*, 13 MINN. J.L. SCI. & TECH. 125, 126 (2012) (“There is no doubt that the Internet has unleashed vast information flows throughout global society.”).

146. OECD, *OECD INTERNET ECONOMY OUTLOOK 21* (2012), <http://www.oecd.org/sti/ieconomy/oecd-internet-economy-outlook-2012-9789264086463-en.htm>.

147. *Id.*

148. See FUJUN REN & JIEQUAN ZHAI, *COMMUNICATION AND POPULARIZATION OF SCIENCE AND TECHNOLOGY IN CHINA* 112–13 (2013) (noting the profound impact of Internet communications on the interconnectivity of actors).

149. See Jimvwmos, *The Sneezing Baby Panda*, YOUTUBE (Nov. 6, 2006), <https://www.youtube.com/watch?v=FZRH3iTPrk>.

transformative effect of internet technology.¹⁵⁰ Billions of people now use the internet to communicate with stunning rapidity. It is a medium for transmitting information at lightning speeds totally unprecedented in human history and has radically changed the conduits of social connection upon which cascade theory was first based. Indeed, the implications of information cascades need to be critically reexamined (beyond the issue of online censorship). Trends in mass social behavior, driven by this previously unimaginable degree of connectivity, are susceptible to information cascades. This has deep socio-political and cultural implications that are, however, beyond the scope of this short discussion.

3. *Bounded Rationality*

Another reason that suggests the information cascade model better maps onto online behavior is the limited knowledge of participants of their fellow netizens.¹⁵¹ The information cascade model assumes that actors are boundedly rational—that is, they make their decisions within a field of incomplete information.¹⁵² Each internet user is operating from a position of imperfect information regarding other agents. Users only see the online behavior of other agents but have no way of knowing if the actions of these other actors are predicated upon authoritative information. As such, users often assume (incorrectly) that other actors are working off of more perfect information and as such are inclined to interpret their behavior as conveying reliable information. Consider again the example of the two restaurants.¹⁵³ The diner coming very late in the information cascade will tend to assume, just by seeing other diners, that the previous diners are acting on more perfect information—i.e. that they know the restaurant is of high quality. The more diners that are present, the more this impression is reinforced. However, the restaurant may not be of high quality at all. Perhaps the previous diners are themselves acting on incorrect information generated earlier in the information cascade.¹⁵⁴ If the late-comer diner does not directly inquire about the decision process of all the other diners, she has no way of knowing that their decision to eat at that restaurant was merely

150. One need only look to the impact of Internet communication in facilitating the events of the Arab Spring in 2010. For a deeper exploration of this topic, see Druzin & Li, *supra* note 25, at 3–4.

151. Bounded rationality is simply the idea that actors' decisions are limited by the information they have, the cognitive limitations of their minds, and the time available to make the decision. For early foundational work on the concept, see generally ARIEL RUBINSTEIN, *MODELING BOUNDED RATIONALITY* (1998); HERBERT A. SIMON, *MODELS OF BOUNDED RATIONALITY: ECONOMIC ANALYSIS AND PUBLIC POLICY* (1982); Daniel Kahneman, *Maps of Bounded Rationality: Psychology for Behavioral Economics*, 93 *AM. ECON. REV.* 1449 (2003); Herbert A. Simon, *Bounded Rationality and Organizational Learning*, 2 *ORG. SCI.* 125 (1991). For a fascinating and in-depth exposition on the importance of bounded rationality to a range of fields, including economics, cognitive science, and biology, see generally *BOUNDED RATIONALITY: THE ADAPTIVE TOOLBOX* (Gerd Gigerenzer & Reinhard Selten eds., 2002).

152. See generally Bikhchandani, *supra* note 128.

153. Banerjee, *supra* 128, at 798–99 (using the same example).

154. For a good, clear discussion of this and other problematic aspects of herd behaviour, see Shiller, *supra* note 141, at 181–83.

the result of an information cascade. This is precisely the case with online behavior. There is seldom any way of discovering the motivation of other internet users, and as such, a general impression that other agents are acting on bona fide information will tend to arise, particularly if we see the same behavior in very large numbers.

4. Better "Rational" Actors

One final point regarding the application of cascade theory to Internet behavior: Internet users are arguably better rational actors. This is because they are not overloaded with information. Information cascades assume a rational choice model;¹⁵⁵ a cascade occurs because each actor rationally makes her decision based on the behavior of preceding actors. In the real world there is usually a host of variables that may reframe the information upon which a player is acting. For instance, an actor may attribute the fact that restaurant B is full of patrons not to the fact that the food is better, but rather to the fact that restaurant B's sign is better lit, or that it is better decorated. This additional information may mitigate the impact of an information cascade. However, with respect to online bulletin boards, fleeting tweets, and brief social media posts, there is a relative paucity of information. Much context is stripped away. The behavior of others is typically reduced to a string of utterances or a reposting of images. Actors thus form their impressions based on the very narrow slice of information provided them.

Such a narrowly focused set of information is, arguably, more fertile soil for an information cascade in that in cyber-space a great deal of context—other actors' motivations, external considerations, even tone—is absent from the stream of information upon which one bases one's decisions. Behavior reinforced by the credibility of large numbers will levy a more powerful impact where there is less contextual information to go on. Put another way, it is easier to wrongly interpret information when there is less information being provided. While there is less "noise,"¹⁵⁶ there is less information that may correct the mistaken inferences drawn from the information presented. Moreover, many challenge the assumption central to information cascades—that actors always reach decisions in a rational manner—arguing that social pressure also levies a powerful impact upon agents' choices.¹⁵⁷ The sanitized conditions of online behavior, where

155. See also FEWSMITH, *supra* note 113. See generally Bikhchandani, *supra* note 128, at 994.

156. For a more precise definition of "noise," see EDWARD P. LAZEAR & MICHAEL GIBBS, PERSONNEL ECONOMICS IN PRACTICE 390 (3d ed. 2015) ("Random fluctuations in a measured variable, usually output, that result from the inability to measure the relevant variable perfectly or from the inability to control the relevant variable perfectly.").

157. See also JOHN SLOMAN ET AL., PRINCIPLES OF ECONOMICS 46 (2013); Joseph Henrich et al., *What Is the Role of Culture in Bounded Rationality?*, in BOUNDED RATIONALITY: THE ADAPTIVE TOOLBOX 343, 343-59 (Gerd Gigerenzer & Reinhard Selten eds., 2002) (noting the effect of culture on decision-making). See generally Shiller, *supra* note 141, at 181 (arguing that social influence also plays a role in "herd behavior"). Many have argued that an array of non-rational forces—social influences, cognitive biases, emotions—influence *homo economicus* (a rational and selfish individual with relatively stable prefer-

actors make decisions in physical isolation, minimizes the impact of social influence and other external factors that may otherwise stymie the emergence of an information cascade. Under such conditions, agents are arguably better “rational” actors.

A susceptibility to information cascades is thus structurally built into online interaction. While the potential for speech cascades is always present in the brick and mortar world, this potential is powerfully amplified online. The implications of this for the state’s ability to maintain censorial control over online speech is far-reaching. Let us now examine the concept of speech cascades in more detail and the potential impact of a sudden eruption of speech cascades.

III. The Anaconda Recoils: The Potential Collapse of Cyber-Censorship and with it the Chinese Regime

Ultimately, the cash value of the present discussion is this: given the possibility of information cascades, a cyber-censorship regime forced to rely on sustaining mass perceptions may be far less robust than it appears. We argue that the nature of online behaviour renders cyber-censorship structurally vulnerable to sudden collapse. Such collapse, we posit, may manifest as a sudden wave of such speech cascades, eventually giving way to a torrent of open speech where internet users, misinterpreting the online speech of other users, engage en masse in unrestricted online expression. This sudden opening of speech may have immense political implications for the Chinese regime. Whether such a course of events will actually unfold is uncertain.¹⁵⁸ However, it remains important to note that its potential is clearly present in the case of China.

A. Drilling down on Our Model: A Sudden Eruption of Speech Cascades

The concept of speech cascades can be formally modeled; indeed, it has already been formally modeled in the cascade literature.¹⁵⁹ We need only substitute certain variables: the two mutually exclusive alternatives are to self-censor or not to self-censor. That is, to engage in what, for

ences). For some notable works in this vein, see, e.g., DAN ARIELY, *PREDICTABLY IRRATIONAL, REVISED AND EXPANDED EDITION: THE HIDDEN FORCES THAT SHAPE OUR DECISIONS* (2010) (refuting the assumption that individuals behave in fundamentally rational ways); CASS R. SUNSTEIN, *WHY NUDGE?: THE POLITICS OF LIBERTARIAN PATERNALISM* (2014) (arguing for a form of paternalism that guides individuals to beneficial choices while protecting against the dangers of governmental overreach); RICHARD H. THALER & CASS R. SUNSTEIN, *NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS* (2008) (positing the concept of “choice architecture”—nudging people toward decisions that are in their best interest); Richard H. Thaler & Cass R. Sunstein, *Libertarian Paternalism*, 93 *AM. ECON. REV.* 175 (2003) (advocating governmental policies that exploit psychological tendencies to increase public welfare).

158. The uncertainty of making predictions regarding the impact of large-scale speech cascades is considered more deeply later in the discussion. See discussion *infra* Section III.D.

159. For a formal model of information cascades, see Bikhchandani, *supra* note 128.

expository convenience, we may call *closed speech* (self-censored speech) or *open speech* (speech that is not self-censored). The private information is the knowledge that some speech is not acceptable; the public information is the online behavior of others. In our model, we distinguish between *speech bandwagons* and speech cascades.¹⁶⁰ A speech bandwagon entails a stream of actors engaging in a comparable degree of open speech without, however, implying a further escalation in open speech. A speech cascade occurs where multiple successive speech bandwagons erupt quickly and entails an overall escalation in open speech, which may occur quite swiftly. For our model to work, we assume that certain characteristics of Chinese Internet users hold steady. Because we are speaking here of such large numbers (800 million and counting¹⁶¹), we believe we are justified in assuming the following characteristics to be consistently present across the broad sweep of China's Internet users: (1) a significant number of China's internet users would prefer to engage in more open speech but do not and instead engage in self-censorship;¹⁶² (2) some of these actors (this may be a small minority) are willing to test the limits of acceptable expression (we call this category of actors *speech entrepreneurs*¹⁶³); however, (3) the extent to which these actors are willing to push the limits of acceptable expression is trivial—very few are willing to test the boundaries of permissibility to any significant degree (the model does not require such risk-takers).¹⁶⁴ So long as these assumptions hold true, speech bandwagons should sporadically form given the structural properties of Internet communication¹⁶⁵ and the nature of China's cyber-censorship regime. This may culminate in a sudden eruption of open speech in the form of speech cascades, causing millions to doubt their previously-held understanding of the permissibility of certain forms of speech and instantly question what exactly the "rules" are.

All the basic structural constituents for the emergence of speech cascades are in place. China's reliance on legal and regulatory ambiguity to generate a chilling effect and encourage self-regulation, while a highly effective strategy, is also a fundamental vulnerability. Because the precise boundaries of permissible speech are left vague, a pervasive uncertainty

160. We conceptually draw on Cass R. Sunstein's distinction between "norm bandwagons" and "norm cascades." According to Sunstein, norm bandwagons "occur when small shifts lead to large ones, as people join the 'bandwagon'; norm cascades occur when there are rapid shifts in norms." Cass R. Sunstein, *Social Norms and Social Roles*, 96 COLUM. L. REV. 903, 909 (1996).

161. See *infra* note 211.

162. Yuxin A. Zhang, *China: Self-Censorship Displaces Western Threats*, DIPLOMAT (Mar. 3, 2015), <http://thediplomat.com/2015/03/china-self-censorship-displaces-western-threats/> (describing how fear of the Chinese Communist Party results in self-censorship).

163. We borrow this from Cass R. Sunstein's term "norm entrepreneur." See Sunstein, *supra* note 160, at 909.

164. THOMAS LUM ET AL., CONG. RESEARCH SERV., R42601, CHINA, INTERNET FREEDOM, AND U.S. POLICY 2 (2012).

165. See discussion *supra* Section II.C.

exists regarding the acceptable limits of expression.¹⁶⁶ While the average internet user has a general understanding of what is and is not acceptable speech, at the margins these standards become unclear. Chinese internet users thus naturally look to others to ferret out what exactly is permissible, tending to assume that consensus conveys reliability (an unfounded assumption).¹⁶⁷ Ironically, this leads to a situation where everyone is looking to everyone else for accurate information. This lack of certainty renders the system inherently susceptible to speech cascades: a speech entrepreneur, pushing the boundaries of acceptability, is well-positioned to trigger a speech bandwagon. Speech bandwagons can grow into speech cascades, building quickly and surging like a wave across social media and microblogging sites.¹⁶⁸ The impact of a speech cascade will be especially strong for someone entering the cascade fairly late in the game. As in our example above of the late-comer patron who is highly inclined to eat at restaurant A being persuaded to nevertheless eat at restaurant B, even an internet user highly inclined to engage in closed speech may be persuaded by the numerical strength of a speech cascade to engage in open speech.

A single speech bandwagon will not radically press back the limits of acceptable Internet speech. It will produce a slight escalation in open speech but will eventually subside. The situation grows more serious, however, where speech cascades erupt. In such cases, a bandwagon will spawn additional bandwagons of increasingly open speech. The model assumes that even users willing to challenge the limits of permissible speech will not do so if it represents a significant departure from their understanding of what is deemed acceptable by the censors. As such, each speech bandwagon will only shift perceptions of acceptability to a very minor, almost negligible degree. However, while each speech bandwagon only incrementally moves the boundaries of perceived permissibility, the process can, in theory, quickly build on itself. Each successive speech bandwagon widens the borders of permissible speech ever so slightly but repeatedly so that the boundaries of what is perceived as acceptable quickly recede.

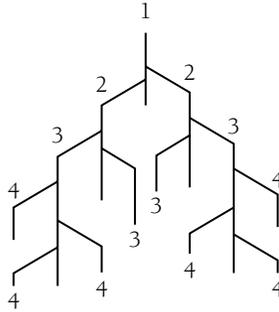
Figure 1. The figure below illustrates a speech cascade, depicting four cascade levels (each number refers to the cascade level). The initial speech bandwagon spawns additional speech bandwagons, which each in turn generate more bandwagons. This need not be one bandwagon to two bandwagons as illustrated below; the number of bandwagons might jump from

166. FREEDOM OF THE PRESS 2013: CHINA COUNTRY REPORT, FREEDOM HOUSE (2013), <https://freedomhouse.org/report/freedom-press/2013/china> (noting how the Chinese government exploits the vague wording of laws to penalize citizens for certain kinds of speech).

167. This is psychological phenomenon is known as *social proof* (also known as informational social influence): the tendency of agents to adopt the actions and views of others so as to reflect correct behavior, a tendency that is especially prominent in ambiguous situations where people are unable to determine the appropriate behavioral rules. For foundational empirical work on this subject, see Herbert C. Kelman, *Compliance, Identification, and Internalization: Three Processes of Attitude Change*, 2 J. CONFLICT RESOL. 51, 59 (1958).

168. See *infra* Table 1.

one bandwagon directly to three or a greater number of bandwagons. The result is that a speech cascade may grow extremely quickly. These cascades may involve anywhere between a mere handful of people to literally millions of actors. The degree of expression at each cascade level in the figure grows less self-censored. At each level, a speech entrepreneur pushes the acceptable boundaries of public expression a little further, triggering a new bandwagon of more open speech.



The reader should note that the above diagram is simplified for expository clarity. Reality is of course far messier and a cascade will likely unfold in a less linear, coherent fashion.¹⁶⁹ Indeed, a speech cascade may manifest with such dizzying complexity that the exact pathways of interconnection may be impossible to chart. Moreover, not every level of a cascade will necessarily generate an escalation in open speech (as it does in Figure 1); however, the presence of speech entrepreneurs ensures an inevitable escalation in open speech so long as the cascade grows sufficiently large. Another important point is that a speech cascade may manifest on any scale of analysis: the above illustration may be understood as involving several dozen agents or several million. However, at any scale, a transition to fully open speech can occur swiftly as perceptions shift. Each speech bandwagon will further push back the perceived boundary of permissible speech as people misinterpret the previous bandwagon as reliably signaling that a wider ambit of public expression is now acceptable.¹⁷⁰ Each bandwagon level in the diagram connotes a minor escalation in open speech. A more technical explanation is as follows: Bandwagon 1 conveys speech X , where X represents a certain modest degree of open speech. Speech entrepreneurs in Bandwagon 2, assuming speech X as now acceptable, engage in speech $X+1$, where 1 represents an incremental escalation of open speech. Speech entrepreneurs in Bandwagon 3, building off of Bandwagon 2, then

169. Larger aggregates of speech cascades linked together in different configurations of interconnection may emerge. Such interconnected eruptions may form a matrix of stunning complexity.

170. For discussion of availability cascades, a related concept, see Timur Kuran & Cass R. Sunstein, *Availability Cascades and Risk Regulation*, 51 *STAN. L. REV.* 683, 683 (1999) (positing that individuals imitate others because they take the availability of information as an indication of its reliability; thus the more prevalent the view is in the public discourse, the more people will be inclined to subscribe to it).

employ speech X+2. Likewise, Bandwagon 4 involves speech X+3. This process reiterates until fully open expression is attained.

A speech cascade will yield a synergistic effect, powerfully distorting public information regarding the limits of expression. Even an internet user extremely hesitant to test the boundaries of online expression may feel emboldened to do so in the wake of a speech cascade. If unchecked, at a certain point this “flow” of speech becomes very difficult to stanch.¹⁷¹ By changing the perceptions that underpin self-censorship, a sudden eruption of large-scale speech cascades may critically weaken, and possibly collapse, China’s control over its internet. The process may be clearer if we construct an example involving a small number of agents. Imagine a group of twenty people in a public setting with well-established speech norms—say colleagues in the office of a prestigious law firm. In this example, a large number of these all-white colleagues are closeted racists. Although never explicitly stated, it is understood by all the colleagues that racist speech is unacceptable in the office. One worker, however, laughs at a racist joke made by a visitor. After a brief moment of stunned silence, many of the other colleagues also laugh (Bandwagon 1). Another worker follows this with a slightly racist comment with many of her colleagues agreeing (Bandwagon 2). Another worker then makes an even more racist comment, which is received positively by the workers and further discussed (Bandwagon 3). Emboldened by these speech bandwagons, many of the other workers may then begin to openly express racist views, giving way to a full-blown speech cascade, each racist speech bandwagon becoming more brazen than the last. While this example involves only twenty people, it may just as easily involve twenty million. It makes no difference so long as the agents are able to communicate. The core dynamic is the same. Again, the potential speed at which a sudden eruption of speech cascades could in theory unfold should be appreciated.

In an effort to explain the occurrence of dramatic shifts in commonly held societal norms, some theorists refer to a tipping point¹⁷² being

171. A cascade may not technically even come in the form of speech; expression may come in the form of the posting and sharing of images. A good example is the image of the fictional animal called a grass mud horse, significant in that when pronounced in Mandarin the name is a double entendre for “F††** your mother.” The animal’s image began circulating in 2009 and has become a powerful semiotic device among Chinese netizens to protest Internet censorship. See Michael Wines, *A Dirty Pun Tweaks China’s Online Censors*, N.Y. TIMES (Mar. 11, 2009), http://www.nytimes.com/2009/03/12/world/asia/12beast.html?_r=0. Videos of schoolchildren singing songs employing the term have also gone viral on China’s Internet. JOSEPH TSE-HEI LEE, *CHINA’S RISE TO POWER: CONCEPTIONS OF STATE GOVERNANCE* 76 (2012). Chinese authorities have not let contentious digital images go uncensored, employing “well-developed image analysis software” that detects and removes targeted images whenever they surface. Philip N. Howard, *Extremists Fear the Web: Politics, Liberty and the New Internet of Things*, SALON (May 30, 2015), http://www.salon.com/2015/05/30/extremists_fear_the_web_politics_liberty_and_the_new_internet_of_things/.

172. On the related concepts of tipping points, critical mass, and riot thresholds, see THOMAS C. SCHELLING, *MICROMOTIVES AND MACROBEHAVIOR* 94 (1978); Robert Cooter, *Expressive Law and Economics*, 27 J. LEGAL STUD. 585, 586 (1998); Mark Granovetter, *Threshold Models of Collective Behavior*, 83 AM. J. SOC. 1420, 1420 (1978) (examining

reached that triggers a sudden rush towards a new behavioral norm in an abrupt and punctuated fashion.¹⁷³ Cass R. Sunstein among others has put forward the concept of a “norm cascade” to explain sudden changes in social norms.¹⁷⁴ The concept of norm cascades addresses sudden cultural shifts, such as the fall of communism and the attack on apartheid in South Africa.¹⁷⁵ Robert Ellickson describes a norm cascade in the following manner: “[I]n the paradigm case an upstart norm starts slowly, gains momentum, and culminates in a triumphant rush. Various authors refer to a tipping point being passed, to an equilibrium changing not gradually but in punctuated fashion, or to a cascade being triggered.”¹⁷⁶ The structure of online discourse, specifically the hyper-connectivity and speed at which communication occurs, renders cyber-space particularly hospitable to cascades.

B. Speech Entrepreneurs and the Spontaneous Emergence of Online Protest

In the norm cascade model, bandwagons are spurred on by “norm entrepreneurs,” individuals who challenge the normative standards embraced by their society.¹⁷⁷ In a similar fashion, highly vocal online commentators, such as influential voices on popular microblogging sites, may function as speech entrepreneurs. Such actors, in challenging the acceptable limits of online expression, if only modestly, may spark sudden spontaneous bandwagons of open speech. Many of the popular commentators on China’s microblog sites are “online celebrities whose millions of fans read, discuss and spread their outpouring of news and opinions, plenty of which chastise or ridicule officials.”¹⁷⁸ These influential com-

tipping points in riot behaviour). For the very accessible, interesting, but decidedly non-academic treatment which helped to popularize this idea, see MALCOM GLADWELL, *THE TIPPING POINT: HOW LITTLE THINGS CAN MAKE A BIG DIFFERENCE* 7–9 (2000).

173. See Mark J. Roe, *Chaos and Evolution in Law and Economics*, 109 HARV. L. REV. 641, 663–65 (1996); see also Richard H. McAdams, *The Origin, Development, and Regulation of Norms*, 96 MICH. L. REV. 355, 368 (1997). See generally Randal Picker, *Simple Games in a Complex World: A Generative Approach to the Adoption of Norms*, 64 U. CHI. L. REV. 1225, 1250–51 (1997) (examining rapid norm change).

174. See Sunstein, *supra* note 160, at 909; see also Cristina Bicchieri & Yoshitaka Fukui, *The Great Illusion: Ignorance, Information Cascades and the Persistence of Unpopular Norms*, 9 BUS. ETHICS Q. 127, 127–29 (1999); Cooter, *supra* note 172; Robert C. Ellickson, *The Evolution of Social Norms: A Perspective from the Legal Academy*, in SOCIAL NORMS 35, 51–52 (Michael Hechter & Karl-Dieter Opp eds., 2001); Timur Kuran, *Ethnic Norms and Their Transformation Through Reputational Cascades*, 27 J. LEGAL STUD. 623, 628 (1998); McAdams, *supra* note 173; Roe, *supra* note 173.

175. Sunstein, *supra* note 160. In Sunstein’s view, a norm cascade is primarily driven by a combination of information heuristics and reputational motivations, inducing individuals who might not genuinely adhere to the norm to abandon the previously held norm and jump on the bandwagon, which then furthers the trend. The present model focuses only upon information heuristics.

176. See Ellickson, *supra* note 174, at 51.

177. Sunstein, *supra* note 160, at 909.

178. Chris Buckley, *Crackdown on Bloggers Is Mounted by China*, N.Y. TIMES (Sept. 10, 2013), http://www.nytimes.com/2013/09/11/world/asia/china-cracks-down-on-online-opinion-makers.html?_r=0.

mentators are known as “Big Vs,” meaning big voices but a play on “verified accounts” (registered identities).¹⁷⁹ These speech entrepreneurs may wield tremendous social influence by producing speech cascades: “a Big V microblogger can transform an otherwise obscure issue—a land dispute in a village, graft by a small-town official—into a subject of passionate national discussion and a headache for the government.”¹⁸⁰

The ability of users to repost has an especially profound impact because of its exponential character. For instance, assume one blogger has 100 followers and each of these followers in turn has 100 followers; if each of the blogger’s followers were to repost a message, this would generate 10,000 reposts. If this is repeated one more degree, one million reposts are produced. At three degrees (three clicks), 100 million reposts are in theory possible.¹⁸¹ Moreover, a fact most non-Chinese speakers do not realize, while 140 characters in English (the limit for a post on most microblogs) limits the depth of information a post can contain, 140 Chinese characters can convey a considerable amount of information and nuance. Chinese does not even require spacing between words. With the ability to upload photos and video clips, broadcasting and dissemination capability of microblogging “has surpassed TV media.”¹⁸² Some online bloggers “have become more influential than certain state media organs Weibo is so fast, and the velocity and breadth of the transmission of information is just so much greater now than it is in newspapers and even on TV.”¹⁸³ Indeed, Sina Weibo has evolved into “a raucous forum, instantly spreading news and views in brief messages that can flit past censors.”¹⁸⁴ Launched in 2010 after Chinese authorities banned Twitter, by fall of 2013, the popular microblogging site boasted more than a half a billion registered users with 100 million messages posted daily.¹⁸⁵ It is currently the fifth most visited site on China’s Internet.¹⁸⁶ As of fall 2013, Sina Weibo listed “347 users with more than five million registered fans

179. *Id.*

180. *Id.*

181. YANQI TONG & SHAOHUA LEI, *SOCIAL PROTEST IN CONTEMPORARY CHINA, 2003–2010: TRANSITIONAL PAINS AND REGIME* 156 (2014). The power of exponential growth is captured in the concept of “six degrees of separation”; the idea that at most every human being is only six steps away in cross-association from any other person. See Jeffrey Travers & Stanley Milgram, *An Experimental Study of the Small World Problem*, 32 *SOCIOLOGY* 425, 425–26 (1969).

182. TONG & LEI, *supra* note 181, at 157.

183. Buckley, *supra* note 178.

184. *Id.*

185. *China Employs Two Million Microblog Monitors State Media Say*, BBC (Oct. 4, 2013), <http://www.bbc.com/news/world-asia-china-24396957>. However, these numbers have since declined.

186. *Top Sites in China*, ALEXA, <http://www.alexa.com/topsites/countries/CN> (last visited Mar. 12, 2016). Sina Weibo, however, has seen a decline in users, which many attribute to restrictions introduced by the state, such as requiring users to register their real names before making posts, a five-strike rule that suspends users after five objectionable posts, and a crackdown on “online rumors.” See, e.g., Charles Cluster, *The Demise of Sina Weibo: Censorship or Evolution?*, FORBES (Feb. 4, 2014), <http://www.forbes.com/sites/ccuster/2014/02/04/the-demise-of-sina-weibo-censorship-or-evolution/>.

each; each of the top five has more than 50 million.”¹⁸⁷ The emergence of these opinion leaders is arguably the most significant feature of microblogging.¹⁸⁸ Given this, it is not surprising that the emergence of microblogging is a cause of particular concern for authorities.

For the unpersuaded reader, there are numerous high-profile examples of online speech cascades. To be sure, speech cascades are occurring continuously on China's Internet. While most of these erupt and dissipate without being clearly identified and as such are soon forgotten, many large-scale speech cascades of a political nature have surged across China's Internet in recent years. Speech cascades of this nature have in fact become so common that the term “large-scale internet mass incident” (an awkward but accurate translation of the Chinese descriptor) has been used to describe online protests that censor official corruption and government failures.¹⁸⁹ These are events marked by Internet discussion critical of government officials or policies with more than a one million click rate.¹⁹⁰ More commonly, the phrase “Internet event” is employed.¹⁹¹ Hardly a year passes now without multiple Internet events occurring.¹⁹² In recent years, many Internet events were initiated by opinion leaders on microblogging forums, such as Weibo.¹⁹³ The most influential events “tend to take spontaneous forms, with large numbers of internet users participating simultaneously but without coordination.”¹⁹⁴ Where large-scale spontaneous patterning emerges, there is usually an underlying structural cause. In this case, speech cascades explain how such collective behavior may spontaneously arise. Below is a table listing major online speech cascades. The reader will note that the majority of these generated a measurable impact offline.

Table 1 List of large-scale ‘internet events’ from 2004–2011

2004 Online protests erupted in response to the light sentencing of the wife of a wealthy businessman who, after having her BMW scratched by a tractor, ploughed through a crowded street of pedestrians, killing one woman and injuring many more.¹⁹⁵ Accusations of corruption spread online with over 70,000 online posts.¹⁹⁶

187. Buckley, *supra* note 178.

188. TONG & LEI, *supra* note 181, at 166–67.

189. *Id.* at 146–73; see also YANQI TONG & SHAOHUA LEI, CREATING PUBLIC OPINION PRESSURE IN CHINA: LARGE-SCALE INTERNET PROTEST 3–4 (EAI Background Brief, Paper No. 534, 2010).

190. TONG & LEI, *supra* note 181, at 146.

191. See, e.g., Guobin Yang, *Internet and Civil Society*, in HANDBOOK OF CONTEMPORARY CHINA 437, 443–46 (William S. Tay & Alvin Y. So eds., 2012).

192. GUOBIN YANG, THE POWER OF THE INTERNET IN CHINA: CITIZEN ACTIVISM ONLINE 30 (2009).

193. TONG & LEI, *supra* note 181, at 151.

194. YANG, *supra* note 192, at 32.

195. Elizabeth Corrin, *China's Rule of Law*, in CHINA 2020: THE NEXT DECADE FOR THE PEOPLE'S REPUBLIC OF CHINA 173, 189–90 (Kerry Brown ed., 2011).

196. Jay Hauben, Netizen Reporting and Media Criticism Pressure for a New Journalism: The South China Tiger, Anti-CNN and the Wenchuan Earthquake 13 (2014)

Eventually, a chief investigator and a district judge were arrested and the online furor subsided.¹⁹⁷

- 2005 An online petition campaign sprung up on China's Internet to protest Japan's bid to become a permanent member on the UN Security Council.¹⁹⁸ Within a few weeks over forty-one million signatories were collected online.¹⁹⁹ Initially encouraged by authorities, the protests spilled offline with many anti-Japanese marches escalating into full-scale riots. Chinese authorities moved to deflate the protests' momentum.²⁰⁰
- 2006 Online protest erupted in response to the closure of Peking University's bulletin board system (BBS), at the time the largest in China.²⁰¹
- 2007 Demonstrations against a chemical factory project in Xiamen were mobilized online.²⁰²
- 2008 Video of a former communist party chief and deputy director of the Shenzhen Maritime Safety Administration attempting to molest an eleven-year-old girl in a restaurant sparked public outcry online. The official was eventually relieved of his position.²⁰³
- 2008 A China Central Television (CCTV) report on the need for Internet restrictions featured a story involving an elementary school student who allegedly stumbled upon Internet pornography.²⁰⁴ Accusations that the story was staged proliferated online. Condemnation eventually decried all CCTV reporting as propaganda.²⁰⁵
- 2009 An Internet meme and image of a fictional animal called a "grass-mud horse," a parody of government Internet censorship, swept China's Internet, going viral.²⁰⁶
- 2009 Netizens expressed outrage that a woman who stabbed to death a government official while being sexually assaulted by a group of officials was charged with homicide.²⁰⁷ The online uproar forced authorities to eventually punish the officials involved.²⁰⁸
- 2009 Online anger flared over the initiative to install filtering software (Green Dam Youth Escort software) on all personal computers sold in China, eventually leading to the indefinite suspension of the pro-

(unpublished manuscript) (on file with Columbia University Library system), <http://www.columbia.edu/~hauben/ronda2014/netizen-pressure.pdf>.

197. See TAI, *supra* note 26, at xiii-xiv.

198. See JESSICA CHEN WEISS, POWERFUL PATRIOTS: NATIONALIST PROTEST IN CHINA'S FOREIGN RELATIONS 138-42 (2014).

199. XU WU, CHINESE CYBER NATIONALISM: EVOLUTION, CHARACTERISTICS, AND IMPLICATIONS 83 (2007).

200. See WEISS, *supra* note 198, at 140.

201. Yang, *supra* note 191, at 444.

202. *Id.*

203. HEROLD & MAROLT, *supra* note 10, at 136.

204. *Id.* at 138.

205. *Id.*

206. See Wines, *supra* note 171.

207. HEROLD & MAROLT, *supra* note 10, at 137.

208. *Id.*

- posal.²⁰⁹
- 2009 The death of a prisoner while, prison officials claimed, “playing peek-a-boo” with other inmates triggered an explosion of online criticism of the police.²¹⁰ The term “playing peek-a-boo” became a popular online phrase for police corruption. In response, authorities began an overhaul and investigation of the prison system.²¹¹
- 2009 An Internet meme, “Jia Junpeng, your mother wants you to come home for dinner,” swept across China’s Internet.²¹² Microbloggers soon appropriated the phrase as a political symbol.²¹³
- 2010 Online protests against Chinese Internet censorship sprang up in the wake of Google’s decision to withdraw from China.²¹⁴
- 2011 Online discussion surrounding the collision of two high-speed trains in Wenzhou, unreported by state media, quickly escalated into widespread indignation on China’s microblogs.²¹⁵ Within two days, 5.3 million posts emerged on Sina microblog.²¹⁶ The event illustrated that “the speed with which information can be circulated defies the keyword-based filtering that Chinese authorities use to censor the Internet.”²¹⁷
- 2011 Demands to relocate a damaged chemical plant were “enabled by the speed of the Internet and the number of people using it.”²¹⁸ One day after discussions surged online, 12,000 demonstrators converged in Dalian. Censors were unable to delete posts quickly enough to prevent the offline protests.²¹⁹

Note. The table lists selected examples of public anger rapidly gathering momentum through online discussion. These “Internet events” represent large-scale online speech cascades. Data on Internet events post-2011 are less reliable and so these are omitted from the table.

The real-world complexity of these events makes it difficult to discern the number of speech bandwagons involved with each Internet event. Given the degree of open speech involved, these events are undoubtedly large-scale speech cascades involving numerous speech bandwagons of differing degrees of open speech. The 2008 CCTV report on Internet pornography illustrates this well. This Internet event involved successive waves of

209. See TONG & LEI, *supra* note 181, at 154.

210. *Id.*

211. *Id.*

212. David Pierson, *China’s Favorite Internet Craze: ‘Jia Junpeng, Your Mom Is Calling You to Come Home and Eat,’* L.A. TIMES, Sept. 5, 2009, <http://articles.latimes.com/2009/sep/05/business/fi-china-internet-fad5>.

213. See Yang, *supra* note 191, at 440-41.

214. *Id.* at 444.

215. Xiaowen Xu, *Internet Facilitated Civic Engagement in China’s Context: A Case Study of the Wenzhou High-speed Train Accident (2011)* (unpublished M.A. thesis, Columbia University) (on file with the Columbia University Library System).

216. *Id.*

217. OLESYA TKACHEVA, *INTERNET FREEDOM AND POLITICAL SPACE* 107 (2013).

218. *Id.* at 108.

219. *Id.*

speech bandwagons that escalated into open speech.²²⁰ Accusations of lying were initially leveled only at the student.²²¹ However, these attacks soon escalated with online outrage turning towards the CCTV journalist responsible for the broadcast.²²² Eventually, netizens “broadened their attacks to condemn all reporting on CCTV as biased, propaganda-based, or simply lies.”²²³ This event illustrates the way a speech cascade can escalate, in this case from condemnation of a young schoolgirl to the central news outlet of the Chinese Communist Party.

A defining characteristic of all these Internet events is the speed and an increasing willingness of netizens to engage in more brazen levels of open speech. These appear to be largely “spontaneous responses to offline injustices or are launched by individuals. These forms of protest depend crucially on the Internet network structures, where . . . a single posting has the chance of wide circulation.”²²⁴ While it is difficult to quantify with perfect certainty because many less conspicuous “internet events” go unrecorded, such events appear to be growing in both frequency and influence.²²⁵ Increasingly, authorities see Internet events as precarious outpourings of public sentiment that need to be monitored, contained, and diffused.²²⁶ There is considerable academic discussion as to why these events occur.²²⁷ The present model is useful in that it can explain the sudden and convulsive nature of Internet events. China’s Internet is a vast restless sea of millions, reasonably calm on the surface yet coursing with powerful cross currents and eddies of speech that, whipped up by information cascades, intermittently surge suddenly into massive waves of spontaneous, open expression.

C. Censorship as Public Information and China’s Increasing Reliance on Self-regulation

The good news for authorities is that information cascades are fragile. They can be easily derailed by the arrival of new public information.²²⁸ For example, seeing a diner from restaurant B (the one full of patrons) rushed to the hospital with food poisoning will disrupt an information cascade suggesting that restaurant B serves better food. The prospective diner’s misinterpretation of restaurant B’s busy appearance as signaling reliable information is at once corrected. Conformity “is brittle. The arrival of a little information . . . can shatter an informational cascade.”²²⁹ It

220. See HEROLD & MAROLT, *supra* note 10, at 138 (discussing the 2008 event).

221. *Id.*

222. *Id.*

223. *Id.*

224. YANG, *supra* note 192, at 32.

225. *Id.* at 30.

226. Zhu, Huaxin, *Gei Difang Zhengfu Tingdui Wangluo Yulun de 10 Tiao Jianyi [Ten Recommendations for Local Governments on Handling Public Opinion]*, PEOPLE.CN, July 24, 2009, <http://yg.people.com.cn/htmlArt/Art335.htm>.

227. See Xu, *supra* note 215.

228. Bikhchandani, *supra* note 128, at 994.

229. *Id.*

is therefore not difficult to short-circuit an information cascade: “[t]he release of a small amount of public information can shatter a long-lasting cascade”²³⁰ The new public information “needs only to offset the information conveyed by the action of the last individual before the start of the cascade, even if millions subsequently imitated.”²³¹ While a speech cascade can grow quickly, it is not a highly stable equilibrium.

Cascades of open speech are themselves just as vulnerable to changes driven by the government censors turning up at the *other* restaurant, and thus quickly changing again the collective behavior. As such, censorship's fragile grip on the internet is equally free speech's fragile grip on the internet. Indeed, the Chinese authorities appear to be doing precisely this—they have adopted a strategy of containing speech cascades as soon as they form.²³² For example, evidence has shown that censors are using “soft control methods” to proactively direct the flow of online discourse to forestall the emergence of speech cascades.²³³ As early as 2004, authorities introduced armies of “internet commentators” to guide and redirect online opinion by “writing responses to postings and joining the debates.”²³⁴ Their mission is to covertly guide the direction of the debates²³⁵ Some estimates put the number of these internet commentators as high as 250,000–300,000.²³⁶ However, extinguishing a speech cascade once it has gathered considerable momentum is not so simple.

If a speech cascade is not quickly extinguished, it may spawn multiple waves of speech bandwagons, each further pressing back the boundaries of permissibility (see Figure 1). Herein lies the danger for China's censors—to prevent escalation, they must consistently and swiftly disband speech cascades as soon as they form. As one theorist notes:

If an incident sparks enough interest and outrage it will be shared rapidly between users of platforms Once interest reaches a certain point and the issue has gone viral, visibility becomes self-perpetuating as the mere fact that an issue has become the most commented-on gives it additional visibility that will again increase the number of times it is seen and shared.²³⁷

The longer a speech cascade continues the greater the chance it will spawn other cascades. Direct censorship in the form of the scrubbing of contentious speech from the Internet is therefore critically important. Each instance where such content is not removed sends a signal regarding the

230. *Id.* at 1005.

231. *Id.* at 1006.

232. See *supra* notes 200–04 and accompanying text.

233. Yiben Ma, *Online Chinese Nationalism and its Nationalist Discourses*, in ROUTLEDGE HANDBOOK OF CHINESE MEDIA 203, 211 (Gary D. Rawnsley & Ming-yeh T. Rawnsley eds. 2015).

234. Guobin Yang, *Internet and Civil Society*, in HANDBOOK OF CONTEMPORARY CHINA 437, 449 (William S. Tay & Alvin Y. So eds., 2012).

235. See *id.*; see also INGRID D'HOOGHE, CHINA'S PUBLIC DIPLOMACY 55 (2015).

236. D'HOOGHE, *supra* note 235, at 55.

237. Cole Carnesecca, *Voice of the Masses: The Internet and Responsive Authoritarianism in China*, in URBAN MOBILIZATIONS AND NEW MEDIA IN CONTEMPORARY CHINA 117, 121 (Lisheng Dong, Hanspeter Kriesi & Daniel Kubler eds., 2015).

acceptable limits to expression. As such, it should not be a surprise that authorities exert a disciplined effort to remove such content; not because discrete instances of open speech are so damaging, but rather because they can affect public perceptions and therefore increase the likelihood of large-scale speech cascades.²³⁸ Indeed, censorship—particularly its online variant where conditions are heightened and amplified—is perhaps best understood as a form of marketing. The adage “kill the chicken to scare the monkey” takes on new meaning when dealing with a highly interconnected audience of hundreds of millions.

The government legally requires website administrators to employ “in-house” censors—colloquially referred to as “cleaning ladies” or “big mamas,”—to “screen for and quickly remove offensive material from bulletin boards and chat rooms.”²³⁹ These censors are good at their jobs. Researchers have found, for example, that nearly thirty percent of objectionable posts on Sino Weibo are “gone within [five to thirty] minutes and [ninety] percent are gone within [twenty-four] hours” and that these “censors take an especially dim view of posts that go viral”²⁴⁰ While Chinese authorities are unlikely to be thinking in terms of information cascades, their logic is intuitively in line with the concept—dissent unsilenced has the potential to spiral out of control. It is telling that the millions of people scrutinizing online public opinion are reported as employing software that “tracks how widely a topic is being discussed by counting the number of comments and shares. When the score reaches [forty] out of [one hundred], the system will send an alert.”²⁴¹

Such levels of discourse around the same topic—particularly if it is a sensitive topic with which authorities are likely uncomfortable—may indicate the emergence of a speech cascade. In September 2013, China’s highest court issued guidelines, instituting penalties for those guilty of online “rumors and slander.”²⁴² Such penalties may include up to three years in prison for a slanderous message forwarded more than 500 times or read more than 5,000 times.²⁴³ It is interesting that numbers of this kind are attached to the offense, as this is not the case with criminal libel under American law.²⁴⁴ While the degree of broadcast may have bearing with

238. See *id.* (discussing “how viral grievances can elicit responsive reactions from the state rather than repressive ones”).

239. SHANTHI KALATHIL & TAYLOR C. BOAS, *OPEN NETWORKS, CLOSED REGIMES: THE IMPACT OF THE INTERNET ON AUTHORITARIAN RULE* 26 (2003); see also *supra* notes 47–50 and accompanying text.

240. *How to Get Censored on China’s Twitter*, PROPUBLICA (Nov. 14, 2013, 11:19 AM), <http://www.propublica.org/article/how-to-get-censored-on-chinas-twitter>; see also YUEZHI ZHAO, *COMMUNICATION IN CHINA: POLITICAL, ECONOMY, POWER, AND CONFLICT* 32 (2008).

241. Hunt & Xu, *supra* note 59.

242. See Buckley, *supra* note 178.

243. *Id.*

244. Criminal libel, while technically on the books in many U.S. states, is in fact rarely enforced nowadays. Most libel cases are now civil wrongs. See MARKUS D. DUBBER & TATJANA HÖRNLE, *CRIMINAL LAW: A COMPARATIVE APPROACH* 411 (2014). Seventeen states and two territories have criminal defamation laws. Colorado (COLO. REV. STAT.

respect to assessing damages, a precise number of recipients is not an element of the crime.²⁴⁵ Indeed, there may be other motivations here. The act of forwarding a message that tests the boundaries of permissibility signals tacit agreement with its content, and when such a message is read over 5,000 times, an information cascade could be forming. If action is taken early, information cascades are collapsible. The task is thus one of vigilance and speed of response.

Yet going forward, this may become increasingly difficult to achieve. Internet usage in China is increasing at a fast rate.²⁴⁶ In 2008, China's internet users numbered 253 million, approximately a fifth of the population.²⁴⁷ As of the end of 2013, the number of users in China stood at approximately 618 million, a staggering twenty-seven-fold increase from 23 million in 2001,²⁴⁸ and a 9.5% increase over 2012.²⁴⁹ China's Ministry of Industry and Information Technology (MIIT) has projected domestic internet usage to climb to 800 million by end of 2015.²⁵⁰ This is a truly staggering number considering that a vast swath of China's population remains rural and poor. Advancing Internet technology, growing connec-

§ 18-13-105 (2015)); Florida (FLA. STAT. § 836.01 (LexisNexis 2016)); Idaho (IDAHO CODE § 18-4801 (2015)); Kansas (KAN. STAT. ANN. § 21-4004 (2015)); Louisiana (LA. STAT. ANN. 14:47 (2015)); Michigan (MICH. COMP. LAWS § 750.370 (2016)); Minnesota (MINN. STAT. § 609.765 (2015)); Montana (MONT. CODE ANN. § 13-35-234 (2015)); New Hampshire (N.H. REV. STAT. ANN. § 644:11(2016)); New Mexico (N.M. STAT. ANN. § 30-11-1 (2016)); North Carolina (N.C. GEN. STAT. § 14-47 (2015)); North Dakota (N.D. CENT. CODE § 12.1-15-01 (2015)); Oklahoma (OKLA. STAT. TIT. 21 § 1441 (2015)); Utah (UTAH CODE ANN. § 76-9-404 (LexisNexis 2015)); Virginia (VA. CODE ANN. § 18.2-417 (2015)); Washington (WASH. REV. CODE § 9.58.010 (2015)); Wisconsin (WIS. STAT. § 942.01 (2015)), as well as the territories of Puerto Rico (P.R. LAWS ANN. TIT. 33, §§ 4101-04 (2010)), and the Virgin Islands (14-59 VI CODE ANN. § 1172 (2010)).

245. For a summary of criminal libel and defamation outside of the United States, see Bryan Druzin & Jessica Li, *The Criminalization of Lying: Under What Circumstances, if any, Should Lies Be Made Criminal?* 101 J. CRIM. L. & CRIMINOLOGY 529, 539-41 (2011). For example, under Canadian law a person who knowingly publishes false, defamatory libel is subject to a prison term of up to five years. *Id.* at 540, n. 45. In "many authoritarian regimes anti-defamation law is used as an instrument of political control or to silence journalistic dissent . . . Imprisonment for defamation is commonplace across much of Asia and the Middle East, where it is frequently used by governments for political purposes." *Id.* at 540-41. Criminal anti-defamatory laws known as *descato* laws are prevalent in several Central and South American jurisdictions. *Descato* (disrespect) laws specifically protect the honor of public officials. FRANCISCO FORREST MARTIN & STEPHEN J. SCHNABLY, INTERNATIONAL HUMAN RIGHTS AND HUMANITARIAN LAW: TREATIES, CASES AND ANALYSIS 763 (2006).

246. The following section on the growth of Internet usage in China is largely drawn from another article by the authors, see Druzin & Li, *supra* note 25, at 1 (arguing that the political power of Internet technology has in fact been widely overstated).

247. HONG XUE, CYBER LAW IN CHINA 16 (2010).

248. MICHELLE W. LAU, INTERNET DEVELOPMENT AND INFORMATION CONTROL IN THE PEOPLE'S REPUBLIC OF CHINA (CRS REPORT FOR CONGRESS) 2 (2005), <http://www.cfr.org/content/publications/attachments/-crs%20report%20china%20internet.pdf>; CNNIC Released the 33rd Statistical Report on Internet Development in China, CNNIC (Jan. 17, 2014), http://www1.cnnic.cn/AU/MediaC/rdxw/hotnews/201401/t20140117_43849.htm.

249. See CNNIC, *supra* note 248.

250. *Chinese Internet Users to Hit 800m by 2015*, XINHUA (May 5, 2012), http://www.chinadaily.com.cn/business/2012-05/05/content_15217515.htm.

tivity, new telecommunication devices such as smartphones and other electronic devices, along with ever higher literacy rates have lent new momentum to people-to-people communications in China.

While China's firewall is formidable, the problem for authorities is that as more Chinese come online, strategies of direct censorship that rely on technological methods of Internet control, such as scrubbing the Internet of contentious speech, will become increasingly more challenging to comprehensively perform. Such an approach will increasingly become like a game of "Whack-a-mole": censors will extinguish an emerging speech cascade only to have many more "pop up." As a result, Beijing may be forced to rely increasingly on self-regulation to keep things in check. Indeed, there may be indications that Beijing, faced with a surging Internet population, is already being forced to choose its battles more carefully. Recent empirical work confirms what has been anecdotally reported for a while now: Chinese authorities are not censoring all online discussion critical of the government—a healthy degree of criticism of the government is in fact not being censored.²⁵¹ Researchers analyzed the content of millions of Chinese social media posts before Chinese authorities discovered, evaluated, and censored those they deemed objectionable.²⁵² The researchers then observed which posts were censored.²⁵³ The study concluded that authorities are now primarily targeting online discussion that may produce public protests or other forms of collective action.²⁵⁴ Censors are no longer attempting to "prune" all forms of online expression.²⁵⁵ It is likely that authorities are growing increasingly aware of their inability to censor all forms of contentious speech and so have chosen instead to concentrate their efforts in a more targeted fashion. If China is facing an increasing strain on their ability to directly censor online speech, it makes perfect sense to maximize their censoring capability by being more selective as to where they apply their efforts. Indeed, what we may be witnessing is a form of censorial triage.²⁵⁶ This relaxation in censorship, however, injects even greater uncertainty regarding the exact boundaries of acceptable expression and, as such, increases the likelihood of speech cascades that might culminate in a massive eruption of open speech. The consequences of such an event are difficult to predict.

251. See Gary King et al., *supra* note 2 (an empirical study analyzing patterns regarding the relationship between the content of an online post and the likelihood of censorship). Some of this section is taken from a forthcoming article. See Druzin & Li, *supra* note 25.

252. See generally Gary King et al., *How Censorship in China Allows Government Criticism but Silences Collective Expression*, AM. POL. SCI. REV. 1 (2013).

253. *Id.*

254. See *id.* at 1. The study also found that, alongside collective-action speech, censors consistently targeted pornography and overt criticism of online censorship. See *id.* at 6.

255. See *id.* at 2. The study divided content into five distinct categories: (1) collective action potential, (2) criticism of the censors, (3) pornography, (4) government policies, and (5) other news. Postings related to categories 1, 2, and 3 received the most scrutiny. See *id.* at 6.

256. See King et al., *supra* note 2, at 1.

E. What Are the Potential Consequences of a Large-scale Eruption of Speech Cascades?

Despite the challenge of predicting the socio-political implications of a large-scale eruption of speech cascades, we are left to wonder what are the possible scenarios for political change or the lack thereof. To that end, this concluding section considers three scenarios. The first is a scenario in which a sudden eruption of speech cascades culminates in the complete disintegration of Beijing's political control. This is the most consequential and perilous scenario. The second scenario is where even a sudden outpouring of open online speech does not translate into offline political dissent, and as such produces no offline impact. The third scenario lies somewhere between the first and second—online speech cascades generate offline demands for political reform and in order to pacify public dissatisfaction the state provides modest political accommodation. For the reader asking why speech cascades are potentially so important, it is this: a collapse of China's cyber-censorship regime could escalate into a "real-world" collapse of political control. Let us consider this scenario first.

1. *Scenario One: Political Transformation*

The danger for China is a scenario where online speech cascades trigger substantial collective action of a political nature offline. The unique viral nature of Internet communication combined with the colossal size of China's Internet and the increasing reliance on self-regulation may result in a massive and sudden shift in norms related to open speech. It may not simply be a matter of letting a hundred flowers bloom; it may be a matter of letting one billion flowers instantly bloom.²⁵⁷ And this may take shape with stunning speed. Small shifts in the perceptions of some networks of actors linked together in online discourse can rapidly spill out and "infect" other networks of actors, igniting a sudden torrent of perceptual change.²⁵⁸ If this shift in perceptions cannot be quickly realigned, it may pick up a head of steam, becoming impossible to contain. Changes in perceptions will build on previous shifts and in turn become the catalyst for further change. Censorship norms might collapse more quickly than anyone might anticipate. It is extremely difficult to predict the socio-political consequences of such a large-scale sudden cultural shift. A sudden col-

257. The phrase "let a hundred flowers bloom" comes from a famous proclamation of Mao Ze Dong: "The policy of letting a hundred flowers bloom and a hundred schools of thought contend is designed to promote the flourishing of the arts and the progress of science." See GREG AUSTIN, *CYBER POLICY IN CHINA* 20 (2014). Mao Ze Dong made the statement in reference to what is known as the "Hundred Flowers Campaign." The campaign encouraged Chinese citizens to openly express their opinions of the government. However, this flirtation with liberalization was extremely short-lived: "The campaign was suppressed almost as soon as it had been put in place and those who spoke out, many within the CCP, were jailed or persecuted." *Id.*

258. Cf. Julie Henderson Rucker, *Effects of Online, Collaborative Discourse on Secondary Student Writing: A Case Study of the History and Ecology of an Electronic Exchange* (Fall 2008) (unpublished dissertation, Georgia Southern University) (on file with the Jack N. Averitt College of Graduate Studies electronic theses and dissertations database).

lapse of China's cyber-censorship regime may translate into a "real-world" collapse of political stability—potentially threatening the political survival of the CCP.

The socio-political consequences if this should come to pass may be far-reaching. Indeed, there is historical precedent here. Consider the collapse of the Berlin Wall. What began as tiny protests in Leipzig, Germany, grew in numbers as demonstrators, acting on the openly defiant behavior of protesters from the previous week, converged each Monday over the course of a year.²⁵⁹ This was an information cascade.²⁶⁰ By the fall of 1989 "the marches had grown to tens of thousands of people. In October the number grew to better than a hundred thousand. On the first Monday in November, 400,000 people turned out in the streets of Leipzig."²⁶¹ By the evening of November 9, 1989, the Berlin Wall was being dismantled and the German Democratic Republic had flung open its borders.²⁶² The world watched in shock, dumbfounded at how quickly events had unfolded.²⁶³ A more recent example of the political impact of information cascades is the events of the Arab Spring. Beginning in January 2011, a sudden flood of public protest swept across much of the Arab world, toppling long-ruling autocratic regimes in Tunisia, Egypt, and Libya, and sparking bloody demonstrations in Bahrain and Yemen.²⁶⁴ Protests soon sprang up in Syria, dragging that country into a bloody civil war that continues to rage as these words are written. The use of social media such as Twitter and Facebook played a decisive role in propelling these events forward.²⁶⁵

The toppling of the regime of Hosni Mubarak in Egypt in early 2011 is now widely described as the "twitter revolution" because of the use of Twitter, Facebook, and other social media by protest groups to mobilize their

259. Peter Cruthley, *Did a Prayer Meeting Really Bring Down the Berlin Wall and End the Cold War?*, BBC (Oct. 9, 2015), <http://www.bbc.co.uk/religion/0/24661333>.

260. CLAY SHIRKY, *HERE COMES EVERYBODY: THE POWER OF ORGANIZING WITHOUT ORGANIZATIONS* 163-64 (2008).

261. *Id.*

262. ALAN W. ERTL, *TOWARD AN UNDERSTANDING OF EUROPE: A POLITICAL ECONOMIC PRÉCIS OF CONTINENTAL INTEGRATION* 115 (2008).

263. The speed at which information cascades can occur is discussed at length below.

264. Sean Aday et al., *New Media and Conflict after the Arab Spring*, 80 *PEACEWORKS* 1, 3 (2012).

265. For a good discussion regarding the exact role of social media with respect to the Arab Spring, see MOHAMMAD-MUNIR ADI, *THE USAGE OF SOCIAL MEDIA IN THE ARAB SPRING* 23-28 (2014); Philip Hopward & Muzammil Hussain, *Egypt and Tunisia: The Role of Digital Media in Liberation Technology*, in *SOCIAL MEDIA AND THE STRUGGLE FOR DEMOCRACY* 110 (Larry Diamond & Marc F. Plattner ed., 2012). There is now a sizable body of literature on the implications of the Internet on democratization and governance. For a crisp overview of the evolution of this literature as it relates to China, see Jiang, *supra* note 8, at 5-8. For recent book-length treatments, see generally JOSEPH Y. S. CHENG, *WHITHER CHINA'S DEMOCRACY? DEMOCRATIZATION IN CHINA SINCE THE TIANANMEN INCIDENT* 177-214 (2011) (examining the potential for Internet based-democratization among other issues facing China); PETER FERDINAND, *THE INTERNET DEMOCRACY AND DEMOCRATIZATION* (2013) (examining the tendency of Internet use to create new political communities in democracies and authoritarian regimes); KALATHIL & BOAS, *supra* note 239 (analyzing the ways in which the Internet may lay the basis for political change).

opposition.²⁶⁶ Information cascades that spurred public expressions of political opposition were “particularly noticeable in Tunisia and Egypt, whereby . . . ‘early movers sent a signal to a generally sympathetic public of the value of joining in.’”²⁶⁷ The protesters who converged on Tahrir Square in central Cairo maintained a strong online presence that generated an information cascade.²⁶⁸ In the case of China, liberal visions of a Chinese democracy suddenly blossoming forth may be Pollyannaish (as they were with the Arab Spring). If the stitching that holds together 1.3 billion people were to abruptly split apart, the consequences are highly unpredictable. Indeed, the literature related to the cascade model cites the sudden changes in public opinion that triggered unexpected revolutions, such as the French revolution in 1789, the Russian revolution in 1917, and the Iranian revolution of 1977–1978—events all marked by tremendous violence and social upheaval.²⁶⁹ Given the colossal size of the Chinese population, a sudden eruption of speech cascades leading to abrupt social transformation—possibly in the form of regime change—may very well prove disastrous for all stakeholders.

2. *Scenario Two: Political Inconsequence*

And yet we can also tell another story: the supposition, that the Chinese people will rally for political change merely because they are afforded the opportunity, may be fanciful. Whether contentious online speech will necessarily translate into offline dissent remains a much debated point among scholars.²⁷⁰ The notion that the Internet is destined to spearhead democratization, so commonplace in the early years of the Internet, has so far proven grossly short-sighted, at least with respect to China.²⁷¹ Many

266. See Druzin & Li, *supra* note 25, at 12; see also Druzin & Li, *supra* note 245. Some of this section is drawn from these articles.

267. JOHN MICHAEL ROBERTS, *NEW MEDIA AND PUBLIC ACTIVISM: NEOLIBERALISM, THE STATE AND RADICAL PROTEST IN THE PUBLIC SPHERE* 159 (2014).

268. See *NORTH AFRICA'S ARAB SPRING* 75 (George Joffé ed., 2013).

269. *Id.* at 70.

270. See Jonathan Hassid, *Safety Valve or Pressure Cooker? Blogs in Chinese Political life*, 62 *J. COMM.* 212, 213 (2012).

271. See, e.g., LAWRENCE LESSIG, *CODE AND OTHER LAWS OF CYBERSPACE* 206–07 (1999) (“Borders keep people in, and hence governments could regulate. Cyberspace undermines this balance The shift is away from the power of government to regulate, and toward the power of individuals to escape government regulation.”); see also GORDON C. CHANG, *THE COMING COLLAPSE OF CHINA* 90, 93 (2001) (noting the “continuing power of the state to resist change” to Chinese sovereignty and the effects of globalization); Jianhai Bi, *The Internet Revolution in China: The Significance for Traditional Forms of Communist Control*, 56 *INT’L J.* 421, 425 (2001) (drawing a link between internet growth and political liberalization); Thomas L. Friedman, *The Lexus and the Olive Tree: Understanding Globalization*, in *THE POLITICAL ECONOMY READER: MARKETS AS INSTITUTIONS* 487, 500 (Naazneen H. Barma & Steven K. Vogel eds., 2008) (famously arguing that the interconnected nature of globalization is inducing integration); Christopher R. Kedzie, *A Brave New World or a New World Order?*, in *CULTURE OF THE INTERNET* 209, 209 (Sara Kiesler ed., 1997) (examining the impact of Internet technology on political regimes and arguing such technology empowers citizens); Trevor Locke, *Participation, Inclusion, Exclusion and Net-Activism: How the Internet Invents new Forms of Democratic Activity*, in *DIGITAL DEMOCRACY: DISCOURSE AND DECISION MAKING IN THE INFORMATION AGE* 211, 214

theorists now seriously question this assumption.²⁷² Internet technology does not produce uniform and undifferentiated effects across varying countries and contexts. The technology is not a blueprint for social change that can simply be grafted from one society to another irrespective of the socio-economic and political climate that characterizes highly divergent cultures.²⁷³ While political transformation unfolded with astonishing speed in the fall of communism in Eastern Europe and the end of apartheid in South Africa, both events were the culmination of decades of resistance to oppression, suffering, and international political and economic pressure that were the prelude to genuine political change.²⁷⁴ One would be hard-pressed to show that these conditions are present with respect to China.

Indeed, even if China's censorial apparatus was dismantled, there is good cause for scepticism. The majority of the Chinese people remain far more concerned with achieving material prosperity than flirting with political dissent.²⁷⁵ While Internet technology undoubtedly harbors extraordinary potential for free expression, it would be naïve to suppose that this ensures the erosion of state authority or that it is somehow a shortcut to political transformation.²⁷⁶ The Internet may provide a forum for political discussion but collective mobilization requires a politically engaged population, and there is little indication that this is the case with respect to China.²⁷⁷

3. Scenario Three: Political Accommodation

A third scenario is that Beijing responds to a large-scale eruption of speech cascades by offering significant political concessions sufficient to mollify public ire yet falling well short of regime change. Such accommodation would be valuable in that it would prevent a further escalation of dissent while allowing the state to maintain political hegemony. Between transformative political change and political inconsequence, this is arguably the most likely outcome of a large-scale eruption of online speech cas-

(Barry Hague & Bryan Loader eds., 1999) (arguing that the Internet empowers online activism); Paul Nixon & Hans Johansson, *Transparency through Technology: The Internet and Political Parties*, in *DIGITAL DEMOCRACY: DISCOURSE AND DECISION MAKING IN THE INFORMATION AGE* 135, 136-37 (Barry Hague & Bryan Loader eds., 1999) (examining the political impact of Internet technology). See generally, CHRISTOPHER KEDZIE, *COMMUNICATION AND DEMOCRACY: COINCIDENT REVOLUTIONS AND THE EMERGENT DICTATOR'S DILEMMA* 80-82 (1997) (finding that interconnectivity is a strong predictor of democracy).

272. See DARIN HARNEY, *PROMETHEUS WIRED: THE HOPE FOR DEMOCRACY IN THE AGE OF NETWORK TECHNOLOGY* (2000) (challenging the Internet's ability to spark democratic transformation); EVGENY MOROZOV, *THE NET DELUSION: THE DARK SIDE OF INTERNET FREEDOM* (2012) (arguing that the belief in the democratizing nature of the Internet lacks support); Deibert, *supra* note 71, at 143 ("China . . . is a 'hard case' for those who argue that the Internet cannot be controlled.").

273. See Druzin & Li, *supra* note 25.

274. See Sunstein, *supra* note 157.

275. See *supra* notes 67-73 and accompanying text.

276. The authors have argued similarly elsewhere. See Druzin & Li, *supra* note 25, at 38; see also Druzin & Li, *supra* note 245.

277. See Druzin & Li, *supra* note 25.

caedes. Indeed, there are many indications that Beijing is in fact already pursuing such a response on a smaller scale.²⁷⁸ In the wake of many of the Internet incidents listed in Table 1, the state responded with impressive alacrity, initiating institutional reforms or taking disciplinary action to placate public outrage.²⁷⁹ The Chinese government has not sat idly by and ignored public opinion.²⁸⁰ Of particular note is Beijing's crackdown on corruption among public officials.²⁸¹ This is evident in a recent investigation of sixteen senior People's Liberation Army officials for corruption.²⁸² Ultimately, however, characterizing public discontent where it does emerge as a hunger for sweeping political change is misleading. While restless, China is not the political tinderbox many observers believe it to be. Indeed, as already discussed, much of China society remains, at least for the time being, politically disengaged.²⁸³ As such, it is more likely that an eruption of open speech will bring about an array of political reforms yet stop short of wholesale regime change.

Ultimately, the socio-political impact of a sudden eruption of speech cascades is very difficult to predict. Political dissent may very well spill out from the digital arteries of cyberspace as in scenario one. Yet it is unclear that this is inevitable. Alternatively, the impact may be fantastically inconsequential (scenario two) or produce only modest political accommodation (scenario three). What would happen is anyone's guess—it is uncharted territory. We make no claims of certainty. The relation between technological revolution and 'real world' changes *are* so unpredictable we may need to develop *new* ways of thinking about this very relation that the reality of China's Internet throws up in new and interesting ways.²⁸⁴ However, what is clearly important—and the point of the present discussion—is that there is the potential for China's cyber-censorship regime to unexpectedly collapse through a sudden and spontaneous eruption of open online speech. The structural framework for rapid social change is in place should conditions call for it. Given China's growing importance to the world, this potential alone should command serious attention.

Conclusion

Forced to choose between jumping on the information superhighway and languishing on the unwired byways of outdated technology, China

278. See *supra* notes 166–77 and accompanying text.

279. *Id.*

280. See Druzin & Li, *supra* note 25, at 24 n. 98.

281. See, e.g., *China Media: Military Corruption*, BBC (Jan. 16, 2015), <http://www.bbc.com/news/world-asia-china-30844254>.

282. *Id.*

283. See *supra* notes 67–73.

284. For an interesting discussion along these lines, see DEIBERT *supra* note 23, at 1–13 (discussing the political perils of Internet control). See *generally* MEDIA, MOVEMENTS, AND POLITICAL CHANGE 137–223 (Jennifer Earl & Deana A. Rohlinger eds., 2012) (exploring the relationship between online media and political change); OLESYA TKACHEVA, INTERNET FREEDOM AND POLITICAL SPACE (2013) (discussing how Internet technology can empower civil society).

embraced the Internet early on. Authorities were careful, however, to install a sophisticated system of control over the technology. The genius of the system is that it is largely self-enforcing. Indeed, it has to be. From individuals, to ISPs, to academics, and local as well as foreign firms, a culture of self-censorship dominates all spheres of potential social influence. Yet the strength of China's cyber-censorship regime—its use of self-regulation—renders it inherently susceptible to shocks. The very structures of self-censorship create the potential for *non-censorship* to break into and dominate information flows. This Article provided a behavioural economics model as to how this may occur that explains China's policy of cyber-censorship, why this sophisticated system of control appears to be changing, and the potential for its sudden collapse. As China's online population grows, censors are having to pick their battles more carefully. And as the Chinese authorities become more reliant on self-censorship to achieve their ends, speech cascades will become increasingly more difficult to nip in the bud. If not swiftly quelled, bandwagons of open speech could spark cascades of uncensored speech and alter mass perceptions that may yield significant political consequences.

While it is unlikely that the conditions for sweeping political transformation are currently present, this is subject to change. Should, for example, China's surging economy²⁸⁵ flounder or should some unforeseen incident trigger major socio-political tumult, the Internet will likely be the avenue through which dissent gains momentum, rendering scenario one—political transformation—suddenly far more plausible. The case of China, the premier cyber-censorship system in the world, shows that online speech can indeed be controlled. China's leash on its Internet is the envy of authoritarian states the world over. However, this control will grow increasingly fragile—indeed, there are already indications that this may be occurring. Chinese authorities are having to adapt their censorial strategies to evolving conditions with the ever-present threat of large-scale speech cascades looming overhead. Online speech can be controlled, but this control is not nearly as sturdy as many would have us believe. While outwardly robust, China's cyber-censorship regime is internally fragile—it rests primarily upon perceptions, and perceptions can change with astonishing speed.

285. China's economy is now the second-largest in the world and on track to becoming the largest. See Keith Bradsher, *In China, Heavy Industry Unexpectedly Falls Sharply*, N.Y. TIMES, (Feb. 9, 2015), http://www.nytimes.com/2015/02/10/business/international/in-chinaheavy-industry-unexpectedly-falls-sharply.html?_r=0; Ben Carter, *Is China's Economy Really the Largest in the World?*, BBC (Dec. 16, 2014), <http://www.bbc.com/news/magazine-30483762>; see also ROBERT COOTER & HANS-BERND SCHAFER, SOLOMON'S KNOT: HOW LAW CAN END THE POVERTY OF NATIONS 22 (2011) ("China will soon surpass the United States in national income if recent trends continue."). For doubts regarding the robustness of the Chinese economy, see generally JAMES R. GORRIE, THE CHINA CRISIS: HOW CHINA'S ECONOMIC COLLAPSE WILL LEAD TO A GLOBAL DEPRESSION (2013) (arguing that China is on the verge of an economic crisis); CARL E. WALTER & FRASER J. T. HOWIE, RED CAPITALISM: THE FRAGILE FINANCIAL FOUNDATION OF CHINA'S EXTRAORDINARY RISE (2011) (arguing that China's financial system is not a sustainable model).