

# The New Ambiguity of “Open Government”

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## I. Introduction

The Internet’s power to make government information more available and useful has, in the last several years, become a topic of keen interest for citizens, scholars, and policymakers alike. In the United States, volunteers and activists have harnessed information that the government puts online, in key domains ranging from the federal legislative branch to local city services, and have created dynamic new tools and interfaces that make the information dramatically more useful to citizens. These new tools have sparked significant academic and popular interest, and have begun to prompt a fundamental shift in thinking: policymakers have begun to consider not only the citizens who may ultimately benefit from government information, but also the third parties who can play a valuable mediating role in getting the information to citizens.

The primary concrete change in public policy, responding to this trend, has been to make more public sector data available in machine-processable electronic formats that are easier for others to reuse. Information touching the core of American civic life, including pending Congressional legislation and federal regulations, is now more readily available, and these enhancements have helped increase governmental transparency. But more mundane and practical government information, from bus schedules to restaurant health inspection data, is also being provided in friendlier formats, with consequences that improve quality of life and enhance public service delivery, but do not make any difference to transparency or accountability.

Policy initiatives that promote or reinforce this technological trend, however, are often cast in political terms as “open government” projects. These initiatives usually include reusable data as one among a range of steps designed to increase overall governmental transparency. For example, President Obama’s Open Government Directive, which was designed to implement the new administration’s overall “principles of transparency, participation and collaboration,”<sup>1</sup> instructed executive branch agencies, *inter alia*, to “mak[e] information available online in open formats . . . An open format is one that is platform independent, machine readable, and made available to the public without restrictions that would impede the re-use of that information.”<sup>2</sup> Similarly, the multilateral Open Government Declaration<sup>3</sup> signed by the United States and seven other

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<sup>1</sup> PETER R. ORSZAG, OFFICE OF MGMT. & BUDGET, EXECUTIVE OFFICE OF THE PRESIDENT, OMB MEMORANDUM NO. M-10-06, OPEN GOVERNMENT DIRECTIVE 1 (DEC. 8, 2009).

<sup>2</sup> *Id.* at 2.

<sup>3</sup> Open Government Partnership, *Open Government Declaration* (September 2011), [http://www.opengovpartnership.org/sites/www.opengovpartnership.org/files/page\\_files/OGP\\_Declaration.pdf](http://www.opengovpartnership.org/sites/www.opengovpartnership.org/files/page_files/OGP_Declaration.pdf).

countries in September 2011,<sup>4</sup> situates these new technologies of data sharing in the context of political accountability.<sup>5</sup> It begins with an acknowledgement that “people all around the world are demanding more openness in government.”<sup>6</sup> Among their promises, the signatories commit to “provide high-value information, including raw data, in a timely manner, in formats that the public can easily locate, understand and use, and in formats that facilitate reuse.”<sup>7</sup>

Public policy has increasingly blurred the boundaries between the technologies of open data and the politics of open government. This blurring paves the way for frustration and disappointment. Open government and open data can each exist without the other: A government can be an “open government,” in the sense of being transparent, even if it does not embrace new technology (the key question is whether stakeholders end up knowing what they need to know to keep the system honest).<sup>8</sup> And a government can provide “open data” on politically neutral topics even as it remains deeply opaque and unaccountable. The Hungarian cities of Budapest and Szeged, for example, both provide online, machine-readable transit schedules,<sup>9</sup> allowing Google Maps to route users on local trips. Such data is both open and governmental, but has no bearing on the Hungarian government’s troubling lack of transparency. The data may be opening up, but the country itself is “sliding into authoritarianism.”<sup>10</sup>

The popular term “open government data” is, therefore, deeply ambiguous—it might mean either of two very different things. If “open government” is a phrase that modifies the noun “data,” we are talking about politically important disclosures, whether or not they are delivered by computer. On the other hand, if the words “open” and “government” are separate adjectives modifying “data,” we are talking about data that is both easily accessed and government-related, but that might or might not be politically important. (Or, in many cases, the term might have a third meaning, as a shorthand reference to the intersection of data meeting both definitions: governmental data that is both politically sensitive and computer-provided.)

In this paper, we consider the view that this ambiguity might be beneficial, but ultimately argue that it hurts more than it helps. Information technology and transparency can be powerful allies—technologies make existing data easier to analyze, process, and

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<sup>4</sup> See Maria Otero, *On Open Government* (September 19, 2011), <http://www.opengovpartnership.org/news/open-government>.

<sup>5</sup> See generally Open Government Partnership, *supra* note 3 (committing to principles related to human rights and good governance, and recognizing the opportunities offered by new technologies).

<sup>6</sup> *Id.* at 1.

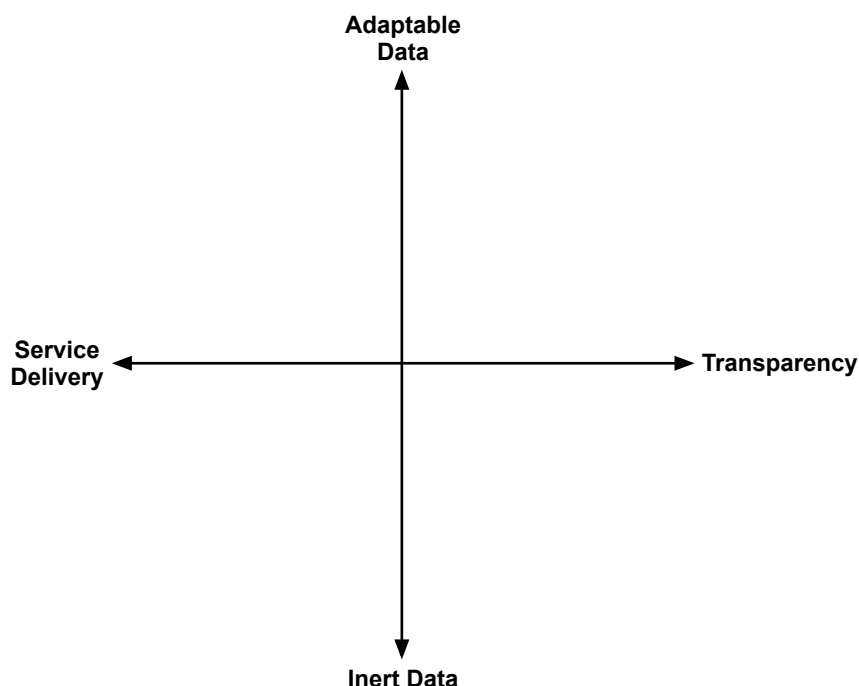
<sup>7</sup> *Id.* at 1.

<sup>8</sup> In the extreme, important political disclosures could be “open government” data even if they were chiseled on stone tablets.

<sup>9</sup> See *List of Publicly-Available Transit Data Feeds*, GOOGLETRANSITDATAFEED PROJECT, <https://code.google.com/p/googletransitdatafeed/wiki/PublicFeeds> (last visited Feb. 20, 2012), for a list of more than 150 transit agencies worldwide that provide their schedule data online to the public, using a standard called the General Transit Feed Specification (GTFS).

<sup>10</sup> Kim Lane Scheppelle, *Hungary’s Constitutional Revolution*, in Paul Krugman, *THE CONSCIENCE OF A LIBERAL* (Dec. 19, 2011, 10:31 AM), <http://krugman.blogs.nytimes.com/2011/12/19/hungarys-constitutional-revolution>.

combine than ever before, which can open the door to qualitatively novel forms of public scrutiny. At the same time, the technology of open data can powerfully enhance service delivery in any regime, even an opaque regime. When open data is confused with open government, governments may be able to take credit for increased transparency simply by delivering open data technology.



In place of the confusion, we offer a stylized framework to consider each of these two questions independently. One dimension describes technology: how is the disclosed data structured, organized, and published? We describe the data itself as being on a spectrum between *adaptable* and *inert*, depending on how easy or hard it is for new actors to make innovative new uses of the data. The other dimension describes the actual or anticipated benefits of the data disclosure, where the goals of disclosure run on a spectrum between *service delivery* and *transparency*. We recognize that although many disclosures do serve both objectives, it is common for one of the two motives to predominate to some degree over the other.

On the diagram, the vertical axis describes the data itself, and the horizontal axis describes the extent to which transparency or service delivery predominates as a goal or anticipated result of the disclosure. There is broad political consensus in the vertical direction, in favor of adaptable data, but there are differences of opinion laterally, about the relative political importance of service delivery and transparency as end goals for public disclosure. (Our discussion in Part IV, below, will illustrate these dimensions by populating the graph with examples of concrete public policies.)

Our discussion is organized as follows: Part II.A. explains the conceptual origins of the relatively modern idea of “open government” as a public policy, starting with the first recognized use of the term in the mid-twentieth century. The phrase is of fairly

recent vintage, but it reflects a particular perspective on the issues it describes—and it was well established before the Internet came into being. Part II.B., correspondingly, explores the conceptual roots of “open data,” an idea that has always included, but has always applied far beyond, the kinds of information associated with civic transparency. Part III follows the story forward in time, as these concepts began to merge and gave rise to the ambiguous idea of “open government data,” detailing some of the confusions that have ensued in the wake of this ambiguity. Part IV describes our alternative proposal, which differentiates the widely shared goal of adaptable data from the more controversial choice between prioritizing enhanced service delivery or enhanced transparency as end goals of disclosure. Part V concludes.

## II. Conceptual Origins

Open government, and open data, each have rich conceptual histories that predate the Internet. These histories are indispensable tools for understanding the current debate.

### A. *Conceptual Origins of Open Government*

The idea of “open government,” in the sense we use that term today, is a component of the peacetime dividend that America reaped at the end of the Second World War. After the war ended, the federal government was left in a state of relative opacity. Having grown accustomed to wartime information restrictions, the federal workforce was “fearful of Cold War spies, intimidated by zealous loyalty investigators within and outside of government, and anxious about” workforce reductions following the war.<sup>11</sup> As a result, “the federal bureaucracy generally was not eager to have its activities and operations disclosed to the public, the press, or other governmental entities.”<sup>12</sup>

The opacity surrounding World War II was not, as wartime opacity might be today, a derogation from a clearly established statutory requirement of federal government transparency. Instead, prior to World War II, the key federal law controlling disclosure of government information was the archaic Housekeeping statute of 1789,<sup>13</sup> which gave “[g]overnment officials general authority to operate their agencies” and withhold records from the public.<sup>14</sup> The Administrative Procedure Act of 1946,<sup>15</sup> while it did contain a general requirement of access to public records, empowered agencies to restrict access “in the public interest,” with or without “good cause found”—a faint

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<sup>11</sup> HAROLD C. RELYEA & MICHAEL W. KOLAKOWSKI, CONG. RESEARCH SERV., 97-71 GOV, ACCESS TO GOVERNMENT INFORMATION IN THE UNITED STATES 2 (April 23, 2007).

<sup>12</sup> *Id.*

<sup>13</sup> *See id.* The Housekeeping statute, Rev. Stats. § 161 (1875), was first codified at 5 U.S.C.A. § 22. *See generally* 26A CHARLES ALAN WRIGHT ET AL., Federal Practice and Procedure, § 5682 (1st ed. 2011) (describing the case law of the Housekeeping privilege, which has sometimes been asserted as a basis for executive branch resistance to judicial subpoenas). In 1958, Congress amended the statute to reflect an increasing interest in transparency, adding the sentence, “This section does not authorize withholding information from the public or limiting the availability of records to the public.” 72 Stat. 547 (1958). The current, amended version is codified at 5 U.S.C.A. § 301 (2012).

<sup>14</sup> *See* H.R. REP. NO. 89-1497, at 2-3 (1966).

<sup>15</sup> Administrative Procedure Act, Pub. L. No. 79-404, 60 Stat. 237 (1946).

precursor of the robust justificatory requirements and procedural assurances of modern administrative law.<sup>16</sup>

The period from 1945 to 1955 was a “crucial decade” of early pressure toward greater openness, driven in part by the American Society of Newspaper Editors (ASNE).<sup>17</sup> In 1953, ASNE commissioned a report, prepared by a prominent newspaper attorney named Harold Cross, entitled *The People’s Right to Know: Legal Access to Public Records and Proceedings*.<sup>18</sup> The report’s foreword noted that Cross had “written with full understanding of the public stake in open government”<sup>19</sup>—one of the earliest known uses of the term. The report became “the Bible of the press and ultimately a roadmap for Congress regarding freedom of information,”<sup>20</sup> and it served as “a call to battle . . . aimed primarily at the needs of news editors and reporters.”<sup>21</sup>

In 1955, Congress created the Special Subcommittee on Government Information, also known as the Moss Committee,<sup>22</sup> which incubated the legislation that became the Freedom of Information Act a decade later.<sup>23</sup> Wallace Parks, who served as counsel to the subcommittee,<sup>24</sup> gets credit as the first to expound on the term “open government” in print, thanks to his posthumous 1957 article, *The Open Government Principle: Applying the People’s Right to Know*.<sup>25</sup> Parks does not explicitly define the term “open government” in the article (in fact, he uses the phrase just four times in 22 pages), but his usage makes clear that he saw open government as matter of transparency:

From the standpoint of the principles of good government under accepted American political ideas, there can be little question but that *open government and information availability* should be the general rule from which exceptions should be made only where there are substantial rights, interests, and considerations requiring secrecy or confidentiality and these are held by competent authority to overbalance the *general public interest in openness and availability*.<sup>26</sup>

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<sup>16</sup> See RELYEA & KOLAKOWSKI, *supra* note 11, at 2.

<sup>17</sup> George Penn Kennedy, *Advocates of Openness: The Freedom of Information Movement 17-19* (Aug. 1978) (unpublished Ph.D. dissertation, University of Missouri-Columbia) (on file with author).

<sup>18</sup> *Id.* at 31.

<sup>19</sup> James S. Pope, *Foreword* to HAROLD L. CROSS, *THE PEOPLE’S RIGHT TO KNOW: LEGAL ACCESS TO PUBLIC RECORDS AND PROCEEDINGS*, at ix (1953). The *Foreword* was written in Nov. 1952. Pope was the chairman of ASNE’s Committee on Freedom of Information, and later the Society’s president.

<sup>20</sup> MICHAEL R. LEMOV, *PEOPLE’S WARRIOR: JOHN MOSS AND THE FIGHT FOR FREEDOM OF INFORMATION AND CONSUMER RIGHTS* 49 (2011).

<sup>21</sup> Kennedy, *supra* note 17, at 31-32.

<sup>22</sup> Congressman John E. Moss, a Democrat from California, chaired the Special Subcommittee on Government Information within the House Committee on Government Operations. See LEMOV, *supra* note 20, at 50.

<sup>23</sup> See Kennedy, *supra* note 17, at 63.

<sup>24</sup> LEMOV, *supra* note 20, at 51.

<sup>25</sup> Wallace Parks, *The Open Government Principle: Applying the Right to Know Under the Constitution*, 27 GEO. WASH. L. REV. 1 (1957).

<sup>26</sup> *Id.* at 4 (emphasis added).

Parks's thinking, and perhaps his choice of words,<sup>27</sup> was part of a long campaign of legislative pressure that would culminate with the passage of the Freedom of Information Act (FOIA) in 1966.<sup>28</sup> While President Lyndon B. Johnson "hated the very idea of journalists rummaging in government closets, hated them challenging the authorized view of reality, [and] hated them knowing what he didn't want them to know,"<sup>29</sup> he nonetheless signed the FOIA bill, professing "a deep sense of pride that the United States is an open society in which the people's right to know is cherished and guarded."<sup>30</sup>

Over the next several decades, the term "open government" was used primarily as a synonym for public access to previously undisclosed government information. When Congress amended FOIA in 1974,<sup>31</sup> it noted that "[o]pen government has been recognized as the best insurance that government is being conducted in the public interest."<sup>32</sup> Similarly, the Privacy Act of 1974 aimed to achieve the ideals of "accountability, responsibility, legislative oversight, and open government," together, while respecting citizen privacy in government-held information.<sup>33</sup> Also considered under "open government" were "open meeting" laws, like the Government in the Sunshine Act,<sup>34</sup> which threw open the doors of federal agency meetings. As the case law of FOIA and related statutes developed through the 1970s and 80s, federal court decisions began to use the term "open government" as well, likewise referring to governmental transparency.<sup>35</sup>

### B. Conceptual Origins of Open Data

The Internet holds obvious promise as a tool for sharing more data, more widely, than has ever been possible before. Across a wide range of technical fields, the adjective

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<sup>27</sup> Parks may actually owe this famous turn of phrase to one of his editors: According to a footnote, Parks passed away unexpectedly, eight months before his article was published, and we have found no further record to describe his editors' role in putting the piece together. *See Parks supra* note 25, at 1, in the biographical footnote.

<sup>28</sup> Freedom of Information Act, Pub. L. No. 89-487, 80 Stat. 250 (1966). For a history of the passage of the Act, *see generally* LEMOV *supra* note 20, ch. 5, at 53.

<sup>29</sup> Bill Moyers, *Is This a Private Fight or Can Anyone Get In It?*, COMMON DREAMS (Feb. 15, 2011), <https://www.commondreams.org/view/2011/02/15-7>.

<sup>30</sup> Statement by President Lyndon B. Johnson upon signing Pub. L. 89-487 (July 4, 1966), *available at* <http://www.justice.gov/oip/67agmemo.htm>.

<sup>31</sup> Act of Nov. 21, 1974, Pub. L. No. 93-502, 88 Stat. 1561 (1974) (amending 5 U.S.C. 552, known as the Freedom of Information Act).

<sup>32</sup> S. REP. NO. 93-854, at 1 (1974).

<sup>33</sup> S. REP. NO. 93-1183, at 1 (1974).

<sup>34</sup> Government in the Sunshine Act, Pub. L. No. 94-409, 90 Stat. 1241 (1976).

<sup>35</sup> *See, e.g.,* Rocap v. Indiek, 539 F.2d 174, 180 (D.C. Cir. 1976) ("by enacting the Freedom of Information Act, Congress determined that the benefits to be derived from 'open government' outweighed the costs"); Bast v. U.S. Dept. of Justice, 665 F.2d 1251, 1253 (D.C. Cir. 1981) ("the importance attributed by Congress to open government is clear, and the Act is designed to resolve most doubts in favor of public disclosure."); Mobley v. I.R.S., 1968 WL 1747 (N.D. Cal. June 14, 1978) ("[Plaintiffs] have established their right to see what information the IRS has collected on them and thereby affirmed one of the express policies of the FOIA, the right to open government").

“open” has become a powerful, compact prefix that captures information technologies’ transformative potential to enhance the availability and usefulness of information.

Parallel explorations of the possibilities have been unfolding in a number of areas, accelerating in tandem with the growing uptake of the Internet. The Open Access movement aims to make peer reviewed scientific literature freely available online.<sup>36</sup> The Open Educational Resources campaign seeks to create digital repositories of free learning materials, to support global access to knowledge.<sup>37</sup> Open standards aim to unlock technological innovation by removing intellectual property barriers.<sup>38</sup> The Creative Commons system of “copyleft” licenses, which makes it easier for creative artists to share and reuse each others’ work, aims toward “an Internet full of open content, where users are participants in innovative culture, education, and science.”<sup>39</sup>

“Open source” software is, at a minimum, software whose source code is freely available to the program’s users.<sup>40</sup> But it has also, more broadly, become shorthand for the collaborative innovation strategy that in fact underlies many open source software projects—an ethos in which anyone can contribute, abundant scrutiny can help to find and resolve bugs,<sup>41</sup> and a community of creators can take pride in a useful, freely available end product.<sup>42</sup>

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<sup>36</sup> See, e.g., Peter Suber, *Open Access to the Scientific Journal Literature*, 1 J. BIOLOGY 1 (June 2002), available at <http://www.earlham.edu/~peters/writing/jbiol.htm>.

<sup>37</sup> See generally, OPEN EDUCATIONAL RESOURCES COMMONS, <http://www.oercommons.org> (last visited Feb. 20, 2012) (OER Commons “provide[s] support for and build[s] a knowledge base around the use and reuse of open educational resources (OER)”).

<sup>38</sup> See, e.g., Laura DeNardis, *Open Standards and Global Politics*, 13 INT’L J. COMM. L. & POL’Y 168 (2009).

<sup>39</sup> *About Creative Commons*, CREATIVE COMMONS, <https://creativecommons.org/about> (last visited Feb. 20, 2012).

<sup>40</sup> More practically, however, the definition of “open source” from the Open Source Initiative includes a number of other criteria, including redistribution, licensing, and non-discrimination requirements. See *The Open Source Definition*, OPEN SOURCE INITIATIVE, <http://opensource.org/docs/osd> (last visited Feb. 20, 2012).

<sup>41</sup> As Linus Torvalds—creator of the Linux operating system—famously remarked, “[g]iven enough eyeballs, all bugs are shallow.” ERIC STEVEN RAYMOND, *THE CATHEDRAL AND THE BAZAAR* (Version 3.0) abstract (2000), available at <http://www.catb.org/~esr/writings/cathedral-bazaar/cathedral-bazaar>.

<sup>42</sup> Not all “open source” software is “free software,” and the usage of these terms has been subject to significant philosophical debate, see, e.g., Richard Stallman, *Why Open Source Misses the Point on Free Software*, GNU OPERATING SYSTEM, <https://www.gnu.org/philosophy/open-source-misses-the-point.html> (last visited Feb. 20, 2012). Several of the most widely used open source regimes, such as the GNU General Public License (GPL), actually impose additional, stringent conditions, most importantly the condition that modified versions of the software must be distributed on the same permissive and noncommercial terms as the original, see, *The GNU General Public License v3.0*, FREE SOFTWARE FOUNDATION (June 29, 2007), <http://www.gnu.org/licenses/gpl.html>. In the license’s preamble, the GPL’s authors state, “[w]hen we speak of free software, we are referring to freedom, not price.” Other licenses, such as the BSD License, simply require that source code be made available, without restricting commercialization, see, *The BSD 2-Clause License*, OPEN SOURCE INITIATIVE, <http://www.opensource.org/licenses/bsd-license.php> (last visited Feb. 20, 2012). And still others, such as the Microsoft Public License (MPL), require that if the source code for a licensed program is distributed at all, it must be distributed in full and must be freely available to reuse, but do not require that the source code be distributed—thus allowing for anyone to build commercial, closed-source software that

Across each area, there is a common thread: when many individuals or groups are able to access information themselves and interact with it on their own terms (rather than in ways prescribed by others), significant benefits can accrue. Each of these movements is focused on certain classes of information, and each one leverages new technology to make that information more freely and readily available and useful.

“Open,” as applied to various kinds of information, thus inherits both a technological and a philosophical meaning. At a technological level, the term suggests using computers to handle information efficiently, in place of manual human processing, greatly extending the range of logistically feasible ways in which information can be used. The extent to which this is possible often turns on the technical details, as computers can more readily transform information that is provided in standard, structured formats.

Philosophically, the term suggests participation and engagement—a democratized, accessible sharing and re-use of information among all the people who might benefit from it. This implies an absence of legal barriers to innovative new projects, and a larger cultural enthusiasm for innovative and sometimes unexpected developments.<sup>43</sup>

“Open data” combines both senses of the word “open”—both the term’s technological meaning and its philosophical meaning—with a focus on raw, authoritative, or unprocessed information that allows individuals to reach their own conclusions. Before its civic uses, the term was used in science, where it referred to raw, unprocessed scientific data.

The earliest appearance of the term “open data” in a policy context appears to come from science policy in the 1970s: When international partners helped NASA operate the ground control stations for American space science satellites, the operative international agreements required those partners to adopt an “open-data policy comparable to that of NASA and other U.S. agencies participating in the program, particularly with respect to the public availability of data.”<sup>44</sup> The agreements also required that data be made available to NASA “in the NASA-preferred format.”<sup>45</sup>

Later, a 1995 National Academies of Sciences report *On the Full and Open Exchange of Scientific Data* elaborated the idea of sharing data from environmental monitoring satellites, perhaps reflecting its shared lineage with those earlier NASA

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incorporates the MPL licensed components, see, *Microsoft Public License*, MICROSOFT, <http://www.microsoft.com/en-us/openness/licenses.aspx#MPL> (last visited Feb. 20, 2012).

<sup>43</sup> See, e.g., *The Power of Open*, CREATIVE COMMONS, <http://thepowerofopen.org> (last visited Feb. 20, 2012).

<sup>44</sup> Memorandum of Understanding Between the Italian Telespazio (S.P.A.) and the United States National Aeronautics and Space Administration (NASA), U.S.-Italy, May 9, 1974, 26 U.S.T. 3078, at 3 [hereinafter *U.S.-Italy MOU*]. Between 1973 and 1975, the U.S. concluded similar agreements with a number of other countries, e.g., U.S.-Braz., Apr. 6, 1973, 24 U.S.T. 897; U.S.-Iran, Oct. 29, 1974, 26 U.S.T. 2936; U.S.-Zaire, Jan. 31, 1975, 26 U.S.T. 1699; and U.S.-Chile, Sep. 8, 1975, 26 U.S.T. 3040. The language slightly varied from one agreement to the next, but each further assigned to a local partner research organization the responsibility to “ensure unrestricted public availability” of the data “at a fair and reasonable charge based on actual cost.”

<sup>45</sup> *U.S.-Italy MOU*, at 1.



agreements: “International programs for global change research and environmental monitoring crucially depend on the principle of full and open exchange . . . Experience has shown that increased access to scientific data, information, and related products has often led to significant scientific discoveries and the opportunity for educational enhancement.”<sup>46</sup>

The term “open data” has also appeared in the life sciences context, principally in relation to genetic data. A feature on Jim Kent, the graduate student whose programming work allowed the publicly funded Human Genome Project to finish its work before competing private efforts, said in part: “Kent’s work illustrates the need to think about more than just open source code; in the scientific community there is a growing awareness of the importance of open data.”<sup>47</sup>

### III. “Open Government” Meets “Open Data”

#### A. *Early Roots of the Convergence*

Government data started going online almost as soon as the Internet opened to individual users in the early 1990s. The earliest pioneer was a man named Jim Warren, a sixties radical from Silicon Valley. Warren was well-known as the founder of the West Coast Computer Faire, one of the first venues to showcase the personal computer.<sup>48</sup> He was also known as an “open government” activist, but his particular flavor of transparency had a high-tech twist.<sup>49</sup> In 1993, he “show[ed] California Assembly Member Debra Bowen how public access to state legislative records could be accomplished via the Internet at low cost and high benefit to the public.”<sup>50</sup> Bowen introduced A.B. 1624 in March 1993,<sup>51</sup> and Warren “single-handedly launched a crusade to ensure the bill’s passage,” which succeeded later that year.<sup>52</sup> California became “the first state in the nation to put its legislative information, voting records, and state laws

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<sup>46</sup> *On the Full and Open Exchange of Scientific Data*, NATIONAL RESEARCH COUNCIL (Apr. 3, 1995), [http://www.nap.edu/readingroom.php?book=exch&page=summary.html#sum\\_need](http://www.nap.edu/readingroom.php?book=exch&page=summary.html#sum_need).

<sup>47</sup> Bruce Stewart, *Keeping Genome Data Open: An Interview with Jim Kent*, O’REILLY MEDIA (Apr. 5, 2002), <http://www.oreillynet.com/pub/a/network/2002/04/05/kent.html>.

<sup>48</sup> The first West Coast Computer Faire was held in San Francisco in 1977—and it was, at the time, the world’s biggest computer trade show. It was at this Faire where Steve Jobs and Steve Wozniak first launched the Apple II personal computer. *See Triumph of the Nerds: The Transcripts Part I*, PBS, <http://www.pbs.org/nerds/part1.html> (last visited Feb. 20, 2012).

<sup>49</sup> *See, e.g.*, Peter H. Lewis, *Cyberspace Prophets Discuss Their ‘Revolution’ Face to Face*, N.Y. TIMES, Aug. 23, 1995, available at <http://www.nytimes.com/1995/08/23/us/cyberspace-prophets-discuss-their-revolution-face-to-face.html> (describing Warren as “an advocate for open government”).

<sup>50</sup> Jim Warren, <http://www.svipx.com/pcc/PCCminipages/z2854bc4b.html> (last visited Feb. 20, 2012).

<sup>51</sup> 1993 Cal. Stat. – (Cal. 1993).

<sup>52</sup> *See* Press Release, Playboy Foundation, Computer Columnist and Open-Government Activist Jim Warren to Receive 1994 Hugh M. Hefner First Amendment Award (Oct. 14, 1994), available at <http://cudigest.org/CUDS6/cud6.91>. For a first-hand account on the battle to pass A.B. 1624, *see* Interview by Russell D. Hoffman with Jim Warren, HIGH TECH TODAY (June 6, 1995), available at <http://www.animatedsoftware.com/hightech/jimwarre.htm>.

online.”<sup>53</sup> Following California’s lead, open government advocates in at least a dozen other states began to push similar grassroots proposals.<sup>54</sup>

At the federal level, when the Republicans gained control of Congress in 1994, they enjoyed a fresh opportunity to overhaul the body’s infrastructure—the first such opportunity since widespread public use of the Internet began. The web site THOMAS, launched in 1995, provided public access to proposed legislation, directory information about members and committees, and daily hearing schedules, among other useful documents.<sup>55</sup> But while THOMAS is a frequent starting point today for open government in Congress, it was not clothed in the language of “open government” at the time.<sup>56</sup> Before the convergence, “open government” meant the initial release of previously undisclosed government information, or the effort to get such information released. At its inception, THOMAS simply increased the accessibility of the existing “public work” that Congress performs.<sup>57</sup> While this increase in availability was dramatic (and would easily qualify as “open government” today), it did not fall within the term’s then-current meaning.

THOMAS was not what would now be called an open data project either, because the information it provided was accessible only via a government-supplied interface. It was designed to serve the needs of citizens—not to open the door for third parties to innovate. By contrast, although they may not have used the term “open data,” several other key government offices have long prided themselves on providing key data online in machine-readable formats. The greatest example of all may be the U.S. Census, which was providing public information through Census.gov as early as 1996.<sup>58</sup>

The first major project to take advantage of open data for an open government purpose, albeit without combining those terms, was OpenSecrets.org, a web site that allows users to search and analyze campaign finance disclosures.<sup>59</sup> It launched in 1998 under the auspices of the Center for Responsive Politics, combining government data with third party innovation. From the beginning, it aimed to let users adapt the data to their own purposes. On the site’s early home page, its creators explained that they planned on “expanding the interactivity of the site, making it possible for you to ask your own questions - how much did the tobacco industry give in the last election, for example, or where does your congressman rank in dollars from labor unions, defense contractors,

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<sup>53</sup> Sen. Debra Bowen, *California Legislature Marks 10 Years Online*, GOVERNMENT TECHNOLOGY (Jan. 22, 2004), <http://www.govtech.com/e-government/California-Legislature-Marks-10-Years-Online.html>.

<sup>54</sup> See Jim Warren, *Guest Commentary*, THE INTERNET GAZETTE & MULTIMEDIA REVIEW (Jan. 1995), <http://www.kenmccarthy.com/archive/gazette/ig4.html>.

<sup>55</sup> See Guy Lamolinara, *Congress on the Internet: New Web Server Organizes Online Information*, LIBRARY OF CONGRESS INFORMATION BULLETIN (Jan. 23, 1995), <http://www.loc.gov/loc/lcib/9502/thomas.html>.

<sup>56</sup> See *id.*

<sup>57</sup> See *id.*

<sup>58</sup> See, e.g., *Home Page*, U.S. CENSUS BUREAU (Dec. 14, 1996), <http://web.archive.org/web/19961227012639/http://www.census.gov/> (accessed by searching for Census.gov in the Internet Archive index).

<sup>59</sup> See Joshua Tauberer, *Big Data Meets Open Government*, OPEN GOVERNMENT DATA: THE BOOK, <http://opengovdata.io/2012-02/page/1/big-data-meets-open-government> (last visited Feb. 20, 2012).

or phone companies.”<sup>60</sup> True to that promise, the site quickly emerged as a powerful and popular tool for members of the public, researchers and journalists—a role it still enjoys today.

GovTrack.us, a web site launched in 2004 as a side project of then-graduate student Joshua Tauberer,<sup>61</sup> was a landmark in the convergence of open government and open data.<sup>62</sup> It focused on the same core information as THOMAS: legislative data about Congress. It included bills, votes, biographical information on members, and reusable digital maps of congressional districts, and it offered new functionality beyond THOMAS’s own for people to search, sort and monitor legislation of interest to them.

The data in THOMAS was not freely available in bulk, at the time of GovTrack’s launch—instead, Tauberer had to painstakingly write computer code to systematically scrape and re-assemble the data in THOMAS. But once he had re-assembled the data for his own use, Tauberer did not keep it to himself. Instead, he made it freely available through a computerized interface, or API, so that other web sites could dynamically access his database and provide up-to-the-minute legislative information themselves, in whatever format or context they judged best. A partial inventory on GovTrack lists at least 30 current and former online projects that rely on GovTrack’s data, including prominent sites like OpenCongress and MAPLight.org.<sup>63</sup>

Well into the 2000s, however, the concept of “open government” among public officials was still centered on fresh disclosures. The Honest Leadership and Open Government Act of 2007<sup>64</sup> dealt with requirements related to lobbying waiting periods and disclosures, earmark requests and gifts to Congress. That same year, another law with a similar title, the OPEN Government Act, modified FOIA’s fee structure and established an ombudsman to oversee FOIA’s processes.<sup>65</sup> Neither of these bills approached “open government” in the technologically innovative mode of sites like GovTrack.

### *B. Obama Adopts “Open Government” as a Label for Both Technological Innovation and Transparency*

President Obama and his team, during the campaign and in government, have shown a major commitment to both open government and open data—and they have also been the leading force behind the confusing conceptual merger of the two ideas.

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<sup>60</sup> *Welcome to Open Secrets Interactive*, CENTER FOR RESPONSIVE POLITICS (Jan. 10. 1998), <http://web.archive.org/web/19980110220043/http://opensecrets.org/> (accessed by searching for OpenSecrets.org in the Internet Archive index).

<sup>61</sup> *See About GovTrack.us*, GOVTRACK, <http://www.govtrack.us/about.xpd> (last visited Feb. 20, 2012).

<sup>62</sup> *See* David Robinson et al., *Government Data and the Invisible Hand*, 11 YALE J. L. & TECH. 160, 165-166 (2009).

<sup>63</sup> *See Sites that Use GovTrack Data*, GOVTRACK, <http://www.govtrack.us/downstream.xpd> (last visited Feb. 20, 2012).

<sup>64</sup> Honest Leadership and Open Government Act, Pub. L. No. 110-81, 121 Stat. 735 (2007).

<sup>65</sup> OPEN Government Act, Pub. L. No. 110-175, 121 Stat. 2524 (2007).

On the campaign trail, then-Senator Obama promised to “restore the American people's trust in their government by making government more open and transparent,”<sup>66</sup> responding in part to his predecessor's perceived lack of transparency. At the same time, the technology and Internet industries based in Silicon Valley served as a key source of financial and logistical support for the campaign, both through their own financial contributions and by helping to build a record-setting web based fundraising machine.<sup>67</sup> Obama was no stranger to the power of the Internet: As a Senator, he sponsored the legislation that established USASpending.gov, an online portal that gave Internet users an unprecedented degree of insight into the federal budget.<sup>68</sup> His background as a grassroots organizer also helped him appreciate the power of online networking to connect his supporters with the campaign and with each other.

Alongside their specific policy impulse toward transparency, therefore, the candidate and campaign harbored a powerful if general sense that Internet technologies could open doors for innovation, efficiency, and flexibility in government. In effect, this was a commitment to open data. “From a policy standpoint, there [were] many reasons for tech-minded types to support Obama, including his pledge to establish a chief technology officer for the federal government and to radically increase its transparency by making most government data available online.”<sup>69</sup> The campaign itself had embraced a data-driven approach to its fundraising appeals, rigorously testing alternative messages, and had devolved to its supporters a significant degree of autonomy in interacting with their friends to build support.<sup>70</sup>

During the presidential transition, a high-level working group on technology and innovation was established at a peer level with groups on economics, national security, health care, and other major issues.<sup>71</sup> The group had an ungainly name but an endearing acronym: the Technology, Innovation & Government Reform Policy Working Group, or TIGR (pronounced like Tigger, the friendly tiger from Winnie the Pooh). The group's charter was to help prepare the incoming administration to implement its Innovation Agenda, which included a range of proposals to

... create a 21st century government that is more open and effective; [that] leverages technology to grow the economy, create jobs, and solve our country's most pressing problems; [that] respects the integrity of and renews our commitment to

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<sup>66</sup> *Agenda – Ethics*, CHANGE.GOV: THE OBAMA-BIDEN TRANSITION TEAM, [http://change.gov/agenda/ethics\\_agenda](http://change.gov/agenda/ethics_agenda) (last visited Feb. 20, 2012).

<sup>67</sup> See Joshua Green, *The Amazing Money Machine: How Silicon Made Barack Obama This Year's Hottest Start-Up*, ATLANTIC MONTHLY, June 2008, available at <http://www.theatlantic.com/magazine/archive/2008/06/the-amazing-money-machine/6809>.

<sup>68</sup> See Federal Funding Accountability and Transparency Act, Pub. L. No. 109-282, 120 Stat. 1186 (2006).

<sup>69</sup> *Id.*

<sup>70</sup> See DANIEL KREISS, *TAKING OUR COUNTRY BACK: THE CRAFTING OF NETWORKED POLITICS FROM HOWARD DEAN TO BARACK OBAMA* (Oxford University Press, 2012).

<sup>71</sup> See *Policy Working Groups*, CHANGE.GOV: THE OBAMA-BIDEN TRANSITION TEAM, [http://change.gov/learn/policy\\_working\\_groups](http://change.gov/learn/policy_working_groups) (last visited Feb. 20, 2012).

science; and [that] catalyzes active citizenship and partnerships in shared governance with civil society institutions.<sup>72</sup>

This charter was squarely focused on technological innovation rather than on civic accountability.<sup>73</sup>

Meanwhile, the communities of technological and political openness had continued to merge outside of government. A key meeting took place in the San Francisco Bay Area a year before the transition team's work.<sup>74</sup> The recommendations drawn up by attendees at the meeting speak in merged terms of "open government data":

This weekend, 30 open government advocates gathered to develop a set of *principles of open government data*. The meeting . . . was designed to develop a more robust understanding of why open government data is essential to democracy.

. . .

The group is offering a set of fundamental principles for open government data. By embracing [these] eight principles, governments of the world can become more effective, transparent, and relevant to our lives.

Government data shall be considered open if it is made public in a way that complies with the principles below . . .<sup>75</sup>

The language here is telling: participants understood themselves as "open government advocates," but the principles they produced specify circumstances under which "government *data* shall be considered open," rather than government itself. The eight principles, which include completeness, timeliness and freedom from license

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<sup>72</sup> *Id.*

<sup>73</sup> *See id.* Reflecting this focus, the group's three leaders were former FCC official Blair Levin, Google.org executive Sonal Shah, and Julius Genachowski, whom Obama would later appoint as his FCC chairman. The group included the future leaders of what would become the administration's Open Government Initiative: Beth Noveck (who would go on to lead these efforts as Deputy Chief Technology Officer for Open Government) and Vivek Kundra (who would go on to serve as the Chief Information Officer). *See* Jesse Lee, *Transparency and Open Government*, WHITE HOUSE (May 21, 2009, 1:00 PM), <http://www.whitehouse.gov/blog/09/05/21/Opening>. Noveck is a law professor who has long studied innovative new ways to use technology to enhance the governance process. She orchestrated a pilot project for citizens to assist patent examiners in locating prior art, and wrote a series of articles on technology-mediated governance, *see* Beth Simone Noveck, *Peer to Patent: Collective Intelligence and Intellectual Property Reform*, 20 HARV. J. L. & TECH. 123 (2006). At the time of the transition, she was finishing work on a book on technology and governance, *see* BETH SIMONE NOVECK, *WIKI GOVERNMENT: HOW TECHNOLOGY CAN MAKE GOVERNMENT BETTER, DEMOCRACY STRONGER, AND CITIZENS MORE POWERFUL* (Brookings Institution Press, 2009).

<sup>74</sup> *See* Carl Malamud, *Open Government Working Group*, PUBLIC.RESOURCE.ORG (Oct. 22, 2007), [https://public.resource.org/open\\_government\\_meeting.html](https://public.resource.org/open_government_meeting.html). The meeting was organized by Carl Malamud (a longtime advocate of putting government data online, who had led a successful effort to make the SEC filings of public companies freely available online) and Tim O'Reilly (a prominent Silicon Valley publisher and investor); the meeting received sponsorship from the Sunlight Foundation, Google, and Yahoo, *supra*.

<sup>75</sup> Open Government Working Group, *Request for Comments: Open Government Data Principles*, PUBLIC.RESOURCE.ORG (Dec. 8, 2007), [https://public.resource.org/8\\_principles.html](https://public.resource.org/8_principles.html) (emphasis added).

restrictions, are requirements that attach to disclosures, not to regimes.<sup>76</sup> It may be true in some sense that a regime becomes more open whenever it grows its provision of open data, even for mundane and apolitical topics,<sup>77</sup> but it is easy to imagine that a closed regime might disclose large amounts of data conforming to these eight requirements, without in any way advancing its actual accountability as a government.<sup>78</sup>

There was also an emerging scholarly literature in this area, which addressed itself to all the different benefits that government might get from fuller use of the Internet, rather than all the different ways (technological and otherwise) the government might achieve greater transparency. Beth Noveck, who played an important role in the Obama administration's Open Government initiatives, wrote a book in this vein,<sup>79</sup> and we ourselves made similar arguments in our paper *Government Data and the Invisible Hand*.<sup>80</sup> There, we advocated for the release of machine readable, structured government data in order to help close "the wide gap between the exciting uses of Internet technology by private parties, on the one hand, and the government's lagging technical infrastructure, on the other."<sup>81</sup>

On President Obama's first day in office, he issued two memoranda that dealt with "open government," using the term to refer both to increased transparency and to technological innovation. The first, a memorandum on the Freedom of Information Act,<sup>82</sup> was designed to encourage agencies to be more responsive to FOIA requests. It stated that FOIA

encourages accountability through transparency [and] is the most prominent expression of a profound national commitment to ensuring an *open Government*.

. . .

All agencies should adopt a presumption in favor of disclosure, in order to renew their commitment to the principles embodied in FOIA, and to usher in a *new era of open Government*.<sup>83</sup>

The creators of FOIA, as described above, had political objectives, not technological ones, and this memorandum focused squarely on those political goals—transparency and accountability.<sup>84</sup> The word "innovation" does not appear, and

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<sup>76</sup> See *id.* The remaining five criteria are that the data be primary, accessible, machine processable, non-discriminatory and non-proprietary.

<sup>77</sup> See *infra* Part IV.

<sup>78</sup> An electronic release of the propaganda statements made by North Korea's political leadership, for example, might satisfy all eight of these requirements, and might not tend to promote any additional transparency or accountability on the part of the notoriously closed and unaccountable regime.

<sup>79</sup> See NOVECK, *supra* note 73.

<sup>80</sup> Robinson, *supra* note 62.

<sup>81</sup> *Id.* at 2.

<sup>82</sup> Barack Obama, Memorandum of Jan. 21 2009 on Freedom of Information Act, 74 Fed. Reg. 4683 (Jan. 26, 2009), available at [http://www.whitehouse.gov/the\\_press\\_office/FreedomofInformationAct](http://www.whitehouse.gov/the_press_office/FreedomofInformationAct) [hereinafter *Obama FOIA Memo*].

<sup>83</sup> *Id.* at 4683 (emphasis added).

<sup>84</sup> See *supra* Part II.A.

technology earns a mention not as an end itself, but rather as one of the key means of achieving the political objective: “All agencies should use modern technology to inform citizens . . . [Future OMB guidance should] increase and improve information dissemination to the public, *including through the use of new technologies*.”<sup>85</sup>

The second memorandum, on Transparency and Open Government,<sup>86</sup> took a much broader view. Whereas the FOIA memorandum suggested that a “new era of open Government” could be achieved through the transparency entailed by FOIA compliance,<sup>87</sup> the Open Government memorandum treated transparency as just one among a trio of goals, setting out in separate paragraphs that an “open” government is transparent, participatory, and collaborative.<sup>88</sup> Transparency was just one among the features of open government, and public trust was just one among the benefits: “We will work together to ensure the public trust and establish a system of transparency, public participation, and collaboration. Openness will strengthen our democracy and promote efficiency and effectiveness in Government.”<sup>89</sup>

The new administration thus began to move toward a broader conception “open” government than had existed before—one that drew on the technological and philosophical commitments to innovation that the word already carried in technical circles. The President’s memoranda set the stage for the Open Government Directive and Initiative that were to follow. Being transparent and accountable were just one part of what made a government “open”—participatory or collaborative measures that enhanced “efficiency” or “effectiveness” might equally claim to be making the government more “open.”

The central practical mandate of the final Open Government Directive,<sup>90</sup> issued 11 months later, was an open data requirement, not a political transparency requirement: agencies were required to “publish online in an open format at least three high-value datasets” via the new federal data portal at Data.gov.<sup>91</sup> High-value, in turn, did not necessarily mean politically sensitive: aside from making the agency more transparent or accountable, data might also be high-value if it would “improve public knowledge of the agency and its operations”<sup>92</sup> or “create economic opportunity.”<sup>93</sup>

Predictably, agencies responding to this mandate have tended to release data that helps them serve their existing goals, without throwing open many doors for uncomfortable increases in public scrutiny. In many cases, agencies published datasets on

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<sup>85</sup> *Obama FOIA Memo*, *supra* note 82, at 4683 (emphasis added).

<sup>86</sup> Barack Obama, Memorandum of Jan. 21 2009 on Transparency and Open Government, 74 Fed. Reg. 4685 (Jan. 26, 2009), *available at* [http://www.whitehouse.gov/the\\_press\\_office/Transparency\\_and\\_Open\\_Government](http://www.whitehouse.gov/the_press_office/Transparency_and_Open_Government) [hereinafter *Obama Open Government Memo*].

<sup>87</sup> *See Obama FOIA Memo*, *supra* note 82, at 4683.

<sup>88</sup> *See Obama Open Government Memo*, *supra* note 86, at 4685.

<sup>89</sup> *Id.*

<sup>90</sup> ORSZAG, *supra* note 1.

<sup>91</sup> *Id.* at 2.

<sup>92</sup> *Id.* at 7.

<sup>93</sup> *Id.* at 8.

Data.gov that were already available in other online locations.<sup>94</sup> While some of these datasets were packaged into more usable machine-readable formats, critics questioned how these disclosures were adding to the public's "insight into agency management, deliberations, or results."<sup>95</sup> They saw the repackaging of old information as providing only "marginal value" and urged the government to make available "public data that holds an agency accountable for its policy and spending decisions."<sup>96</sup> A broader study of Data.gov in 2011 noted a significant downward trend in agency dataset publication over the site's first year.<sup>97</sup> It concluded that most federal agencies "appear[ed] to cooperate with the program while in fact effectively ignoring it," and that Data.gov had become "the playground for a tiny group of agencies."<sup>98</sup>

Even as the administration's political momentum for its Open Government Initiative waned, local and state governments began to adapt these ideas for their own purposes. From New York to San Francisco, city and state leaders launched new web sites devoted to sharing public data, often describing these as "open data" projects.<sup>99</sup> But the rhetoric among localities was more focused on service delivery than on transparency. City leaders in particular put an emphasis on improving communities through better services. San Francisco mayor Gavin Newsom highlighted his hope that DataSF.org would "stimulate local industry, create jobs and highlight San Francisco's creative culture and attractiveness as a place to live and work," and only briefly acknowledged the possibility for greater transparency.<sup>100</sup>

Meanwhile, similar ideas have gained momentum internationally, reflecting other nations' growing recognition of the new technological realities. The European Union's 2003 Directive on the Re-use of Public Sector Information instructed that "[w]here

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<sup>94</sup> See Bill Allison, *Surveying the First Fruits of the Open Government Directive*, SUNLIGHT FOUNDATION REPORTING GROUP (Jan. 25, 2010, 5:48 PM), <http://reporting.sunlightfoundation.com/2010/data-gov-opinion>.

<sup>95</sup> Jim Harper, *Grading Agencies' High-Value Data Sets*, Cato at Liberty, CATO @ LIBERTY (Feb. 5, 2010, 12:27 PM), <http://www.cato-at-liberty.org/grading-agencies-high-value-data-sets>.

<sup>96</sup> Letter from Gary Bass, Executive Director, OMB Watch et al., to Vivek Kundra, Federal Chief Information Officer (Feb. 3, 2010), *available at* [http://www.ombwatch.org/files/info/Kundra-HVD\\_letterFinal.pdf](http://www.ombwatch.org/files/info/Kundra-HVD_letterFinal.pdf).

<sup>97</sup> Alon Peled, *When Transparency and Collaboration Collide: The USA Open Data Program*, 62 J. AM. SOC'Y FOR INFO. SCI. & TECH. 2085, 2088 (2011).

<sup>98</sup> *Id.* at 2085.

<sup>99</sup> See, e.g., *About Data.ca.gov*, STATE OF CALIFORNIA, <http://www.data.ca.gov/about> (last visited Feb. 20, 2012) ("The State of California was one of the first states to launch an open data repository. Data.ca.gov was designed to provide a single source of raw data in the state. By posting state government data in raw, machine-readable formats, it can be reformatted and reused in different ways, allowing the public greater access to build custom applications in order to analyze and display the information."); *NYC OpenData*, CITY OF NEW YORK, <http://nycopendata.socrata.com> (last visited Feb. 20, 2012) ("The data sets are now available as APIs and in a variety of machine-readable formats, making it easier than ever to consume City data and better serve New York City's residents, visitors, developer community and all[.]"); *Open Data*, TEXAS.GOV, <http://www.texas.gov/en/Connect/Pages/open-data.aspx> (last visited Feb. 20, 2012) (displaying rural health, school performance, and other data for the State of Texas).

<sup>100</sup> See Gavin Newsom, *San Francisco Opens The City's Data*, TECHCRUNCH (Aug. 19, 2009), <http://techcrunch.com/2009/08/19/san-francisco-opens-the-city%E2%80%99s-data>.



possible, documents shall be made available through electronic means,”<sup>101</sup> and the EU now operates a web site and program to encourage member states to develop their own national data portals.<sup>102</sup> Independent efforts were underway in the United Kingdom by 2007,<sup>103</sup> leading to the creation in 2008 of a “Power of Information Task Force” to explore the benefits of adaptable government data.<sup>104</sup> Data.gov.uk, launched in October 2009, appears to have been the first site of its kind outside the United States.<sup>105</sup>

A new multilateral initiative, instigated by the United States, has dramatically accelerated the spread of these ideas over the past year. In October 2010, President Obama addressed the United Nations General Assembly and urged member states that

In all parts of the world, we see the promise of innovation to make government more open and accountable. And now, we must build on that progress. And when we gather back here [in 2011], we should bring specific commitments to promote transparency; to fight corruption; to energize civic engagement; and to leverage new technologies so that we strengthen the foundation of freedom in our own countries, while living up to ideals that can light the world.<sup>106</sup>

Following up on this idea over the next year, the State Department organized a series of meetings leading to what became the multilateral Open Government Partnership (OGP).<sup>107</sup> As conditions of entry into the OGP, prospective member countries are required to meet a minimum set of standards which are based on traditional contours of government accountability: the timely publication of essential budget documents, an access to information law, anti-corruption disclosure requirements for public officials, and measures for citizen participation and engagement.<sup>108</sup> These factors are

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<sup>101</sup> Directive 2003/98/EC, of the European Parliament and of the Council of 17 November 2003 on the Re-use of Public Sector Information (L. 345/93) art. 3, *available at* <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:345:0090:0096:EN:PDF>.

<sup>102</sup> See European Public Sector Information Platform, EUROPEAN COMMISSION ECONTENTPLUS PROGRAMME, <http://epsiplatform.eu> (last visited Feb. 20, 2012).

<sup>103</sup> See Ed Mayo & Tom Steinberg, *The Power of Information: An Independent Review* (2007), <http://www.epractice.eu/files/media/media1300.pdf>; see also Chancellor of the Duchy of Lancaster by Command of Her Majesty, *Government Response to the Power of Information Review* (2007), <http://www.official-documents.gov.uk/document/cm71/7157/7157.pdf>.

<sup>104</sup> See *About the Taskforce*, POWER OF INFORMATION TASKFORCE, <http://powerofinformation.wordpress.com/about> (last visited, Feb. 20, 2012).

<sup>105</sup> See Tim Davies, *Open Data, Democracy, and Public Sector Reform: A Look at Open Government Data Use from Data.gov.uk* (Aug. 2010), <http://practicalparticipation.co.uk/odi/report/wp-content/uploads/2010/08/How-is-open-government-data-being-used-in-practice.pdf>.

<sup>106</sup> Press Release, White House, Remarks by the President to the United Nations General Assembly (Sept. 23, 2010), <http://www.whitehouse.gov/the-press-office/2010/09/23/remarks-president-united-nations-general-assembly>.

<sup>107</sup> See, e.g., Working Agenda for Meeting of July 12, 2011, OPEN GOVERNMENT PARTNERSHIP, <http://www.state.gov/documents/organization/167614.pdf> (last visited Feb. 20, 2012).

<sup>108</sup> See OGP Minimum Eligibility Criteria, OPEN GOVERNMENT PARTNERSHIP, <http://www.opengovpartnership.org/eligibility> (last visited February 17, 2012).

fundamentally political, so the “open government” goals of the OGP initially appear to be centered on public accountability.

However, the Open Government Declaration, to be signed by OGP member countries, takes a broader approach toward “openness,” as signatories commit to “seeking ways to make their governments more transparent, responsive, accountable, and effective.”<sup>109</sup> In addition to transparency and accountability, OGP member countries promise to “uphold the value of openness in our engagement with citizens to improve services, manage public resources, promote innovation, and create safer communities.”<sup>110</sup> Thus, the stated goals of the OGP span the gamut of governmental transparency and service delivery, and it remains to be seen how much focus each of these competing goals will receive.

The framing value of “open government data” has not gone unnoticed in the private sector, either, where a growing list of companies have repackaged their government-oriented information technology products under this attractive new label. Microsoft, for example, has created an “Open Government Data Initiative,” which promotes the use of Microsoft's Windows Azure online platform as a technological underpinning for open data efforts.<sup>111</sup> Adobe is best known in the government data context as the creator of the PDF document format, which is the baseline digital format for scanned paper documents (and which, like paper documents, tends to be difficult for downstream innovators to reuse). Notwithstanding the frustrations associated with the PDF format, however, the company undertook a major federal government marketing campaign in 2009 under the tagline “Adobe Opens Up,” triggering consternation among some activists.<sup>112</sup> One company, Socrata, has even dedicated itself exclusively to the governmental open data market, with a “Customer Spotlight” on its web site that touts work for Medicare, the State of Oregon, Data.gov, and the cities of Chicago and Seattle.<sup>113</sup>

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<sup>109</sup> See OGP, *supra* note 3, at 1.

<sup>110</sup> *Id.* at 1.

<sup>111</sup> See Open Government Data Initiative, MICROSOFT, <http://www.microsoft.com/industry/government/opengovdata/Default.aspx> (last visited Feb. 20, 2012).

<sup>112</sup> See Clay Johnson, *Adobe is Bad for Open Government*, SUNLIGHT LABS BLOG (Oct. 28, 2009, 12:57 PM), <http://sunlightlabs.com/blog/2009/adobe-bad-open-government> (“They've spent what seems to be millions of dollars wrapping buses in DC with Adobe marketing materials all designed to tell us how necessary Adobe products are to Obama's Open Government Initiative. . . . Here at the Sunlight Foundation, we spend a lot of time with Adobe's products-- mainly trying to reverse the damage that these technologies create when government discloses information. . . . As ubiquitous as a PDF file is, often times they're non-parsable by software, unfindable by search engines, and unreliable if text is extracted.”); see also Chris Foresman, *Adobe Pushes Flash and PDF for Open Government, Misses Irony*, ARS TECHNICA (Oct. 30 2009, 8:58 AM), <http://arstechnica.com/tech-policy/news/2009/10/adobe-pushes-flash-and-pdf-for-open-government-misses-irony.ars> (“we can't help but notice how the entire site—designed in [a proprietary Adobe format called] Flash—is practically inaccessible. . . . Wrapping all publicly accessible information in proprietary formats is neither a good nor complete solution. Providing documents in PDF form, or augmenting a website with additional Flash content is certainly useful. However, the goal of open government would be better served using open standards, like HTML, XML, JSON, ODF, and other formats that are both accessible and machine-readable.”)

<sup>113</sup> See SOCRATA, <http://www.socrata.com> (last visited Feb. 20, 2012).

### C. Assessing the Merger

Taken together, these developments have caused a major change in the conceptual landscape: “open government” policies no longer entail transparency. New modes of citizen engagement, and new efficiencies in government services, now share the spotlight with the older goal of governmental accountability, which once had this felicitous phrase all to itself.

The shift has real-world consequences, for good and for ill: Policies that *encourage* open government now promote a broader range of good developments, while policies that *require* open government have become more permissive. A government’s commitment to be more “open” can now be fulfilled in a wider variety of ways, which makes such a promise less concrete than it used to be. Whether used as a campaign slogan, in a speech or policy brief, or in a binding national or international policy instrument, the phrase “open government” no longer has the force it once did. Existing documents and historical arguments that refer to open government may have lost some of their force, becoming more ambiguous in retrospect than they were when first authored.

This new ambiguity might be helpful: A government could commit to an open data program for economic reasons—creating, say, a new online clearinghouse for public contracting opportunities—only to discover that the same systems make it easier for observers to document and rectify corruption. In any case, there is much to like about economic opportunity, innovation, and efficiency, and a convenient label could be a good way of promoting them all. Also, the new breadth of “open government” creates a natural cognitive association between civic accountability and the Internet, which may be for the best. Transparency policies that embrace the Internet are often a great deal more effective than those that do not. (It might even make sense to say that if a government is not transparent through the Internet, it is effectively not transparent at all.<sup>114</sup>)

But this shift might also allow government officials to placate the public’s appetite for transparency by providing less nourishing substitutes. If open government displaces transparency as the conceptual focus of public reform efforts, transparency is less likely to be achieved.

Last April, in response to criticism that its Open Government Initiative was not doing enough for transparency and accountability, the Obama administration launched a new site on “Good Government.”<sup>115</sup> The new site focuses on harder-edged issues like shutting down superfluous federal buildings, publicizing the White House visitor logs, and ethics reforms that restrict the lobbying activities of former administration staff.

Meanwhile, the Open Government Initiative and Data.gov appear to be focusing more and more on technological innovation and service delivery. Beth Noveck, who launched and led the program as the U.S. Deputy CTO for Open Government, has

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<sup>114</sup> The Sunlight Foundation, a key actor in this area, goes so far as to say it is “committed to improving access to government information by making it available online, indeed redefining ‘public’ information as meaning ‘online.’” *Our Mission*, SUNLIGHT FOUNDATION, <http://sunlightfoundation.com/about> (last visited Feb. 20, 2012).

<sup>115</sup> 21st Century Government, WHITE HOUSE, <http://www.whitehouse.gov/21stcenturygov> (last accessed Feb. 20, 2012) (originally located at <http://www.whitehouse.gov/goodgovernment>).

returned to private life; her successor, Chris Vein, is described instead as the Deputy CTO for Government Innovation, a title seemingly more appropriate to Data.gov's accomplishments.<sup>116</sup>

Noveck herself now regrets the decision to adopt “open government” as the umbrella term for Internet technologies’ transformative potential in the public sector:

[T]he White House Open Government Initiative that I directed and the Open Government Directive . . . were never exclusively about making transparent information about the workings of government.

. . .

In retrospect, “open government” was a bad choice. It has generated too much confusion. Many people, even in the White House, still assume that open government means transparency about government.<sup>117</sup>

Instead, she writes, the term was meant to be “a shorthand for open innovation or the idea that working in a transparent, participatory, and collaborative fashion helps improve performance, inform decision-making, encourage entrepreneurship, and solve problems more effectively. By working together as [a] team with government in [a] productive fashion, the public can then also help to foster accountability.”<sup>118</sup> She suggests that the new White House structure, with separate focuses for transparency and for public sector innovation, may be more effective.<sup>119</sup>

Notwithstanding a possible change of heart at the White House, however, the ambiguity of open government remains alive and well in the international sphere. In some foreign countries, the need for transparency is far more acute, and the opportunity cost of deprioritizing it may be far greater. One of the clearest statements of this view comes from Nathaniel Heller, who directs an NGO called Global Integrity and is a key participant in the creation of the Open Government Partnership. He raised the question after Kenya launched an open data website:

The obvious explanation (in my mind) for why “open data” gets so much attention in the context of “open government” is that it is the sexiest, flashiest reform of the bunch. It’s much cooler (and frankly less politically controversial) for any government to put government health databases online . . . than it is for the same government to provide greater transparency around the financing of political parties in the country.

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<sup>116</sup> OSTP Leadership & Staff, WHITE HOUSE, <http://www.whitehouse.gov/cto> (last visited Feb. 20, 2012).

<sup>117</sup> Beth Simone Noveck, *Defining Open Government*, CAIRNS BLOG (Apr. 14, 2011, 12:57 PM), <http://cairns.typepad.com/blog/2011/04/whats-in-a-name-open-gov-we-gov-gov-20-collaborative-government.html>.

<sup>118</sup> *Id.*

<sup>119</sup> *Id.*

[O]pen data [may provide] an easy way out for some governments to avoid the much harder, and likely more transformative, open government reforms that should probably be higher up on their lists.

[W]hen I see the Kenyan government's new open data portal . . . I can only wonder whether the time, expenses, and political capital devoted to building that website were really the best uses of resources. To vastly understate the problem, Kenya has a range of governance and open government challenges that go far beyond the lack of a website where citizens (many of whom are not online) can chart government datasets.<sup>120</sup>

The common thread to these observations is that “open government” is vogue but vague, an agreeable sounding term with amorphous meaning. We need better conceptual and linguistic tools, both for keeping governments honest and for exploring the transformative potential of information technologies in civic life.

To some ears, the idea of “open government data” has also developed a more threatening cast. Wikileaks, first launched in 2008, has created what some call “involuntary transparency,”<sup>121</sup> reshaping the conversation over leaks of secret government information to the press.<sup>122</sup> In earlier instances such as the Pentagon Papers, secret government documents reached a single journalist or a small group of journalists, and the public gained access not directly to the secret information itself, but instead to the finished journalistic product.<sup>123</sup> The raw material was summarized, adapted, or otherwise filtered before it reached the masses, sometimes including changes that reflected the requests of incumbent government officials. Now, however, Wikileaks has made a series of large-scale disclosures of secret government information readily available to individual members of the public, often with little or no redaction of sensitive information. The site has provoked complaint from sources as diverse as the U.S. Department of Defense and Amnesty International, particularly after a trove of 250,000 unredacted documents—

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<sup>120</sup> Nathaniel Heller, *Is Open Data a Good Idea for the Open Government Partnership?*, GLOBAL INTEGRITY COMMONS (Sept. 15, 2011, 12:41 PM), <http://www.globalintegrity.org/blog/open-data-for-ogp>.

<sup>121</sup> See Andy Greenberg, *WikiLeaks' Julian Assange Wants to Spill Your Corporate Secrets*, FORBES, Nov. 29, 2010, available at <http://www.forbes.com/sites/andygreenberg/2010/11/29/wikileaks-julian-assange-wants-to-spill-your-corporate-secrets> (“Admire Assange or revile him, he is the prophet of a coming age of involuntary transparency. . . . Long gone are the days when Daniel Ellsberg had to photocopy thousands of Vietnam War documents to leak the Pentagon Papers. Modern whistleblowers, or employees with a grudge, can zip up their troves of incriminating documents on a laptop, USB stick or portable hard drive, spirit them out through personal e-mail accounts or online drop sites—or simply submit them directly to WikiLeaks.”).

<sup>122</sup> See Curt Hopkins, *ReadWriteWeb's Comprehensive WikiLeaks Timeline*, READWRITEWEB (Dec. 29, 2010, 7:02 PM), [http://www.readwriteweb.com/archives/readwritewebs\\_wikileaks\\_timeline.php](http://www.readwriteweb.com/archives/readwritewebs_wikileaks_timeline.php).

<sup>123</sup> For a review of the Pentagon Papers case, written in light of the WikiLeaks events, see Tom Kiely, *Pentagon Papers: National Security and Prior Restraint*, 20 HISTORIA 138 (2011), available at [castle.eiu.edu/historia/archives/2011/2011Hostetler.pdf](http://castle.eiu.edu/historia/archives/2011/2011Hostetler.pdf).

apparently released by accident—put the lives of some foreign supporters of U.S. policy at risk.<sup>124</sup>

Privacy risk may be a second fundamental objection to these new technologies: The more easily disparate sources of information can be analyzed, combined, and cross-referenced, the greater the chance that previously anonymous or pseudonymous information can be deanonymized, tied to the identities of particular real people.<sup>125</sup> On the other hand, a rush to limit adaptability, in order to reduce an anticipated privacy risk, could create a “tragedy of the data commons,” in which privacy fears foreclose valuable new insights into public issues.<sup>126</sup>

“Mosaic” risks in national security present an analogous problem: Even if it is not sensitive when considered in isolation, a release of seemingly innocuous data may become useful to America’s adversaries, if it can be combined to yield sensitive inferences about America’s defense and intelligence posture.<sup>127</sup>

Our goal here is not to take a position as to the salience or implications of these risks, but rather simply to point out that they can complicate the cost/benefit calculus of the governmental “open data” trend.

#### IV. Our Proposal

Clearer language is possible, and it will serve everyone well.

From civic accountability to transit data to health statistics, and across the world, online disclosures of government data share one exciting feature: They are far more *adaptable* than ever before. Statistics can be mapped, schedules automated, disparate trends cross-referenced, and useful information localized and personalized to a historically unprecedented extent. Online data—particularly if it is structured, machine readable, and available for interested users to download in bulk—can be more readily adapted to new formats, new uses, and new combinations than ever before. Adaptability is independent of subject matter: any subject, from transit, to regulation, to schools or crime or housing can be a source of data, and that data may be more or less adaptable depending on the format in which it is gathered and presented.

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<sup>124</sup> See Gloria Goodale, *Who Released the Trove of Unredacted WikiLeaks Documents?*, CHRISTIAN SCIENCE MONITOR, Sept. 1, 2011, available at <http://www.csmonitor.com/USA/2011/0901/Who-released-the-trove-of-unredacted-WikiLeaks-documents>.

<sup>125</sup> See Paul Ohm, *Broken Promises of Privacy: Responding to the Surprising Failure of Anonymization*, 57 UCLA L. REV. 1701, 1701 (2010) (“Computer scientists have recently undermined our faith in the privacy-protecting power of anonymization, the name for techniques that protect the privacy of individuals in large databases by deleting information like names and social security numbers.”).

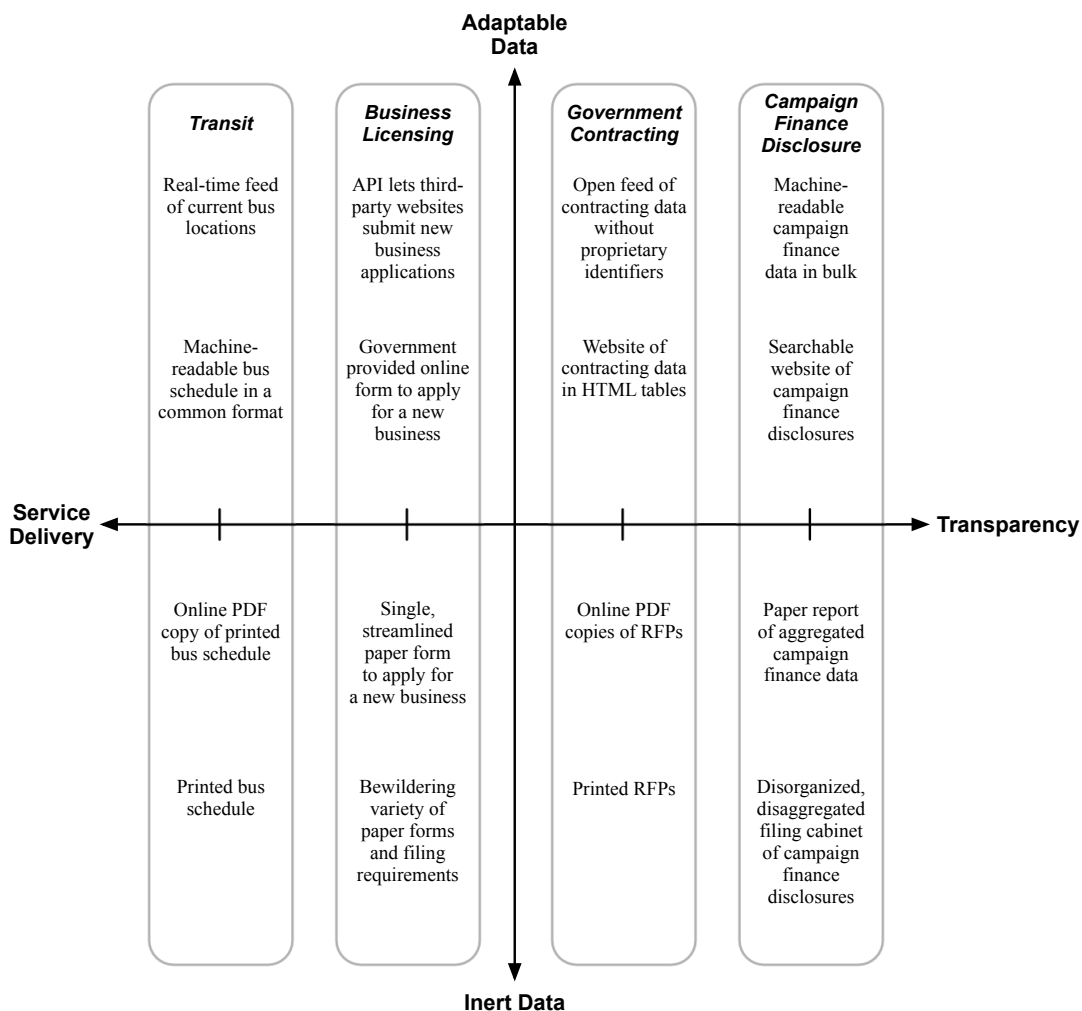
<sup>126</sup> See Jane Yakowitz, *Tragedy of the Data Commons*, 25 HARV. J. L. & TECH. 1, 3-4 (2011) (“[P]roposals that inhibit the dissemination of research data dispose of an important public resource without reducing the privacy risks . . . [I]t is in fact the research data that is now in great need of protection. People have begun to defensively guard anonymized information about themselves. We are witnessing a modern example of a tragedy of the commons.”).

<sup>127</sup> See David E. Pozen, *The Mosaic Theory, National Security, and the Freedom of Information Act*, 115 YALE L.J. 628 (2005) (drawing attention to the growing use of mosaic claims to deny FOIA requests in the wake of the September 11, 2001 terrorist attacks).

Offline data is very different: gathering dust in filing cabinets, often disorganized and disregarded. An obscure bit of information remains apart from the handful of people who might really benefit from knowing it, because it would cost too much to search, sort, or reorganize. Offline data, though available in principle, is physically and psychologically heavy, encumbered by brick and mortar logistics, tucked away in rooms with limited opening hours. Offline data is *inert*.

Public disclosures thus occupy a spectrum, from the most adaptable data to the most inert. Adaptability may depend not only on the format of the data itself, but also on the prevalence and cost of the human and technological capital necessary to take advantage of it.

Disclosures also vary in a second dimension: they differ markedly in their actual or anticipated impact. A machine-readable bus schedule aims to promote convenience, commerce and a higher quality of life—it enhances *service delivery*. Disclosures of public contracting opportunities play a dual role, potentially enhancing both economic opportunity and public integrity. And core civic data, such as legislative or campaign finance information, serves a more purely civic role, enhancing *transparency*.



The diagram displays this conceptual model, and gives several examples. The vertical axis describes the data itself, in terms of its degree of adaptability. The lateral axis is continuum from purely pragmatic to purely civic disclosures.

## V. Conclusion

Separating technological from political “openness”—separating the ideal of adaptable data from that of transparent politics—will yield benefits for all sides. New technologies, cut free from the heavy political burdens they have recently been made to carry, will be free to assume their widely varied natural roles, spreading throughout government in nimble and unpredictable ways, and helping governments at every level pursue all kinds of objectives. The Internet will still help, where it can, to make regimes more transparent.

At the same time, a clearer focus on transparency will give political reformers, who will no longer be shoehorned together with technologists, more freedom to focus on the political questions that motivate them in the first place. From their perspective, technology will do what it always does when working well: fade into the background and make room for human concerns.