

ARTICLE

TRANSPARENCY IN THE ADMINISTRATIVE STATE

*Adam Candeub**

ABSTRACT

Conventional wisdom holds that government, especially in its executive and administrative capacity, must be “transparent,” disclosing how and why it makes decisions. Transparency, it is believed, limits corruption and encourages public participation. While legal scholarship has examined in detail the policy and legal questions about how much transparency agencies should provide in light of other concerns like deliberative latitude, privacy, or national security, scholarship has not examined the question of what *is* transparency—a concept that is not, well, transparent. This Article forwards a working definition of transparency and examines the central challenges in creating an administrative transparency regime.

Most legal scholars define transparency as access to information. Finding this definition incomplete, this Article argues that transparency involves two primary elements: one cost-based and the other normative. First, transparency is about lowering the cost of accessing information, particularly the cost of physical access to information in real-time data. In other words, “transparency” or “access” does not really exist if obtaining and securing information is costly in either time or effort. Second, transparency has a “computational” or “complexity” dimension, which has an inevitable functional or normative dimension.

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In the administrative context, there is basic agreement about transparency's normative or political purposes: Transparency limits corruption, protects against opportunistic behavior by officials, and encourages public participation. This Article examines the form of transparency used by numerous statutory and regulatory regimes and suggests reform focused upon lowering the cost of information, both temporally and geographically. "Real time" disclosure will open the smoke-filled rooms to a more democratic cast of special interests. Finally, this Article examines the role of Big Data and its possibly profound effect upon government openness and the relationship between the government and the governed.

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I. INTRODUCTION

Conventional wisdom holds that government, especially in its executive and administrative capacity, must be "transparent," disclosing how and why it makes decisions.¹ Transparency, it is believed, limits corruption and encourages public

1. See Transparency and Open Government, 74 Fed. Reg. 4685, 4685 (Jan. 21, 2009). For instance, President Barack Obama issued a directive entitled "Transparency and Open Government" on his first day in office. Addressed to heads of executive departments and agencies, it stated, "My Administration is committed to creating an unprecedented level of openness in Government. We will work together to ensure the public trust and establish a system of transparency, public participation, and collaboration." *Id.*

participation.² While legal scholarship has examined in detail the policy and legal questions about how much transparency agencies should provide in light of other concerns like deliberative latitude, privacy, or national security,³ scholarship has not examined the question of what *is* transparency—a concept that is not, well, transparent. This Article forwards a working definition of transparency and examines the central challenges in creating an administrative transparency regime.

Most legal scholars define transparency as access to information.⁴ Finding this definition incomplete, this Article argues that transparency involves two primary elements: one cost-based and the other normative. First, transparency is mostly about lowering the cost of accessing information, particularly about lowering the cost of physical access to information and real-time data. “Transparency” or “access” does not really exist if obtaining and securing information is costly in either time or effort. An agency is not transparent if its records can be inspected in one office three days a week between ten o’clock and noon.

Second, transparency has a “computational” or “complexity” dimension, which has an inevitable functional or normative

2. See Mark Fenster, *The Transparency Fix: Advocating Legal Rights and Their Alternatives in the Pursuit of a Visible State*, 73 U. PITT. L. REV. 443, 473–74, 491 (2012) (“The digital-transparency movement, by contrast, imagines a state that is defined by its data and the flow of information to and from it rather than by its actions, that is more immediately responsive to the public and allows extensive citizen participation and collaboration, and that provides a ‘platform’ for government services and for the provision of public informational goods.”); Gia B. Lee, *Persuasion, Transparency, and Government Speech*, 56 HASTINGS L.J. 983, 989 (2005) (“[T]he constitutional commitment to political accountability counsels governmental actors to ensure the transparency of government communications”); Catharina Lindstedt & Daniel Naurin, *Transparency Is Not Enough: Making Transparency Effective in Reducing Corruption*, 31 INT’L POL. SCI. REV. 301, 302–05 (2010) (arguing that effective transparency requires the information be made public, easily accessible, and encourage political accountability).

3. See, e.g., Mark Fenster, *Disclosure’s Effects: WikiLeaks and Transparency*, 97 IOWA L. REV. 753, 782–83 (2012); Cass R. Sunstein, *Government Control of Information*, 74 CALIF. L. REV. 889, 895–96 (1986).

4. See Ann Florini, *Introduction: The Battle over Transparency*, in THE RIGHT TO KNOW: TRANSPARENCY FOR AN OPEN WORLD 1, 5 (Ann Florini ed., 2007) (defining transparency as “the degree to which information is available to outsiders that enables them to have informed voice in decisions and/or to assess the decisions made by insiders”); William Mock, *On the Centrality of Information Law: A Rational Choice Discussion of Information Law and Transparency*, 17 J. MARSHALL J. COMPUTER & INFO. L. 1069, 1075, 1082 (1999) (defining “transparency” as “a measure of the degree to which the existence, content, or meaning of a law, regulation, action, process, or condition is ascertainable or understandable by a party with reason to be interested in that law, regulation, action, process, or condition”); Frederick Schauer, *Transparency in Three Dimensions*, 2011 U. ILL. L. REV. 1339, 1343 (“Transparency is about availability and accessibility, but these attributes of transparency are agnostic on the question of who might take advantage of that availability or accessibility and at what cost.”).

dimension.⁵ Individuals can compute further inferences and deductions from information they are given. These inferences can be easy or hard. Consider the inferences needed to determine the influence of a large political donor. On one hand, Federal Election Commission disclosures show precise amounts given to particular candidates.⁶ In order to determine whether a donor is a major fundraiser or “bundler,” however, one needs detailed biographical information, such as where the putative bundler works or who attends his fundraising parties, in order to link him or her to a network of other wealthy donors. “How much did X contribute?” is a simple, computationally transparent issue. “Is X a major bundler?” is a computationally complex, nontransparent question.

Because questions differ as to their informational complexity, computational transparency is relative to the question that you ask; it has a normative component. Take an example from current debates in health privacy law concerning “personally identifiable information.”⁷ Many wish to release health records for research purposes, but many also demand that such records be scrubbed of “personally identifiable information” to protect privacy.⁸ The problem is that information which contains sufficient detail to have epidemiological use can be personally identifiable, even if no name is attached. For instance, consider a record indicating that a male in ZIP code 89078, born on July 7, 1975, received treatment for gonorrhoea. This bit of information seems unidentifiable, except that, for many, perhaps most, ZIP code, birth date, and sex are sufficient to identify

5. See Felix T. Wu, *Defining Privacy and Utility in Data Sets*, 84 U. COLO. L. REV. 1117, 1152–53 (2013); see also Jane Yakowitz, *Tragedy of the Data Commons*, 25 HARV. J.L. & TECH 1, 55 (2011) (arguing that human knowledge and discretion may be necessary for a data set to reveal certain information).

6. *Search Campaign Finance Data by Individual Contributor*, FED. ELECTION COMM’N, <http://www.fec.gov/finance/disclosure/norindsea.shtml> (last visited Nov. 17, 2013).

7. See, e.g., Paul Ohm, *Broken Promises of Privacy: Responding to the Surprising Failure of Anonymization*, 57 UCLA L. REV. 1701, 1736–37 (2010) (discussing deidentification in the health privacy context); Paul M. Schwartz & Daniel J. Solove, *The PII Problem: Privacy and a New Concept of Personally Identifiable Information*, 86 N.Y.U. L. REV. 1814, 1877–78 (2011) (promoting a model of PII which distinguishes between identified, identifiable, and nonidentifiable persons); Wu, *supra* note 5, at 1121–22 (questioning whether removing personally identifiable information is sufficient to protect privacy); see also Justin Brickell & Vitaly Shmatikov, *The Cost of Privacy: Destruction of Data-Mining Utility in Anonymized Data Publishing*, in PROCEEDINGS OF THE 14TH ACM SIGKDD INTERNATIONAL CONFERENCE ON KNOWLEDGE DISCOVERY AND DATA MINING 70, 70 (2008), available at http://www.cs.utexas.edu/~shmat/shmat_kdd08.pdf.

8. See Ohm, *supra* note 7, at 1708.

particular individuals.⁹ That Mr. Jones has gonorrhea can be deduced rather easily and cheaply from other information (ZIP code and sex), given readily available Internet search indices. On the other hand, relative to your interest into whether Mr. Jones prefers Coke to Pepsi or watching college basketball to college football, a ZIP code, date of birth, and sex reveal much less. Because transparency depends on a functional or normative matter—i.e., what types of information you want—computational transparency, more so than transparency over time or distance, presents normative questions.¹⁰

In the administrative context, there is basic agreement about transparency's moral or political purposes: Transparency limits corruption, protects against opportunistic behavior by officials, and encourages public participation.¹¹ Some speak of public participation as allowing individuals to have their voices heard to improve democratic processes¹² and further more informed agency deliberation.¹³

9. See Latanya Sweeney, *Simple Demographics Often Identify People Uniquely* 2, 16 (Carnegie Mellon Univ., Data Privacy Working Paper No. 3, 2000), available at <http://dataprivacylab.org/projects/identifiability/paper1.pdf>. (“About half of the U.S. population (132 million of 248 million or 53%) are likely to be uniquely identified by only {place, gender, date of birth}, where place is basically the city, town, or municipality in which the person resides. And even at the county level, {county, gender, date of birth} are likely to uniquely identify 18% of the U.S. population. In general, few characteristics are needed to uniquely identify a person.”).

10. Compare *id.* (discussing computational aspects of disclosing personally identifiable information), with Tamara Keith, *How Congress Quietly Overhauled Its Insider-Trading Law*, NPR (Apr. 16, 2013), <http://www.npr.org/blogs/itsallpolitics/2013/04/16/177496734/how-congress-quietly-overhauled-its-insider-trading-law> (noting that while financial disclosures are available, they can only be obtained by traveling to Washington, D.C.).

11. See Schauer, *supra* note 4, at 1346–49 (delineating four purposes of transparency: “Transparency as Regulation, Transparency as Democracy, Transparency as Efficiency, and Transparency as Epistemology”). Frederick Schauer considers transparency as a form of regulation to limit corrupt or otherwise undesirable behavior and “a useful facilitator of public decision making . . . an important component of democratic governance.” *Id.* at 1347–49.

12. Mark Fenster, *Seeing the State: Transparency as Metaphor*, 62 ADMIN. L. REV. 617, 628 (2010); Tina Tchen, *Make Your Voice Heard*, WHITE HOUSE (Feb. 23, 2010, 2:57 PM), <http://www.whitehouse.gov/blog/2010/02/23/make-your-voice-heard>.

13. Mary Holper, *The New Moral Turpitude Test: Failing Chevron Step Zero*, 76 BROOK. L. REV. 1241, 1271, 1306–07 (2011).

As Attorney General [Eric H.] Holder stated during his confirmation hearings, “I firmly believe that transparency is a key to good government. Openness allows the public to have faith that its government obeys the laws. Public scrutiny also provides an important check against unpersuasive legal reasoning—reasoning that is biased toward a particular conclusion.”

Id. at 1306–07 (quoting *Nomination of Eric H. Holder, Jr., Nominee to Be Attorney General of the United States: Hearing Before the S. Comm. on the Judiciary*, 111th Cong. 257 (2009) (statement of Eric H. Holder, Jr.)).

There is, however, another view of public participation's purpose—one that might seem cynical, but arguably more realistic, and gives the proper normative approach to administrative transparency. Government agencies do not deliberate upon high-minded principles; they broker deals, adjust various political and economic interests, and agencies extract rents in various forms for their efforts.¹⁴ Parties get what they want by rewarding or threatening agency decision-makers through bringing to play various political and economic influences.¹⁵ Given the inevitably closed-door nature of these deals, effective public participation requires information as to when the deals are being made so that pressure can be brought at the right time. True transparency must make information cheap and in “real time” so that these deals are brokered in the most democratic way possible.

This Article examines the form of transparency used by numerous statutory and regulatory regimes and suggests reform focused upon lowering the cost of information, both temporally and geographically, as well as providing “real-time” disclosure to open the smoke-filled rooms to a more democratic cast of special interests.

II. REAL-TIME AND PHYSICAL TRANSPARENCY

Transparency is often a question of physical access to information in a timely manner.¹⁶ Consider the recent uproar involving the Stop Trading on Congressional Knowledge Act (the STOCK Act).¹⁷ Passed in reaction to sensational accounts of leading members of Congress trading on insider information,¹⁸

14. Rui Baptista, *Culture, Political Institutions, and the Regulation of Entry*, 28 COMP. LAB. L. & POL'Y J. 785, 786 (2007).

15. *Id.* at 786 (“Another strand of the ‘public choice’ theory holds that politicians and bureaucrats are the main beneficiaries of government regulation as they use it to extract rents from incumbents and potential entrants in the form of campaign contributions, votes, and bribes.” (citing HERNANDO DE SOTO, *THE OTHER PATH* (1989))).

16. See Keith, *supra* note 10 (contesting the transparency of a database of financial disclosures that are only available in Washington, D.C.).

17. Stop Trading on Congressional Knowledge Act of 2012, Pub. L. No. 112-105, 126 Stat. 291; see Keith, *supra* note 10 (highlighting concerns that the amended Stock Act reduces transparency).

18. Holman W. Jenkins, Jr., Op-Ed., *Congress's Insider-Trading Non-Scandal*, WALL ST. J., Nov. 16, 2011, at A15. These accounts include a November 2011 *60 Minutes* television investigation entitled “Insiders” by journalist Steve Kroft, who confronted congressional leaders, like Nancy Pelosi, about their and their family members' trading on nonpublic information. See *Insiders: The Road to the STOCK Act* (CBS News television broadcast Nov. 13, 2011), available at http://www.cbsnews.com/8301-504803_162-57323518-10391709/confronting-pelosi-on-insider-trading/. In addition, a 2011 book written by Peter Schweizer, President of the Government Accountability Institute and the

the STOCK Act requires disclosure “[n]ot later than 30 days after receiving notification of any [applicable financial] transaction . . . but in no case later than 45 days after such transaction.”¹⁹ While the Ethics in Government Act of 1978²⁰ had long required annual disclosure of federal officials’ securities transactions,²¹ the STOCK Act expanded upon these disclosures. The STOCK Act required the disclosures to be made available online, while the Ethics in Government Act merely mandated paper records.²² Finally, the STOCK Act increased the coverage of the required disclosure, expanding the Ethics in Government Act’s scope to members of Congress and their employees, as well as executive branch officials who occupy “a position classified above GS-15.”²³

On April 15, 2013, President Obama quietly amended the STOCK Act to eliminate the online requirements for the vast majority of covered individuals but retained some of the other disclosure requirements.²⁴ According to press accounts, the Senate considered the amendment for ten seconds—and the House for fourteen seconds, with passage in both houses by unanimous consent.²⁵ The disclosure statements, no longer online, are still available on paper but only in the basement of

William J. Casey Fellow at the Hoover Institution at Stanford University, sheds light on the extent of congressional trading on insider information. PETER SCHWEIZER, *THROW THEM ALL OUT: HOW POLITICIANS AND THEIR FRIENDS GET RICH OFF INSIDER STOCK TIPS, LAND DEALS, AND CRONYISM THAT WOULD SEND THE REST OF US TO PRISON* 44–45 (2011).

19. Stop Trading on Congressional Knowledge Act of 2012 § 6; see also JACK MASKELL, CONG. RESEARCH SERV., R42495, *THE STOCK ACT, INSIDER TRADING, AND PUBLIC FINANCIAL REPORTING BY FEDERAL OFFICIALS* 1 (2013).

20. 5 U.S.C. app. § 101 (2012).

21. *Id.* § 101(c)–(e).

22. *Id.* § 105(b)(1); Stop Trading on Congressional Knowledge Act of 2012 § 11(b); see also MASKELL, *supra* note 19, at 3 (explaining that disclosures are made accessible “to the public for viewing at the office of the agency ethics officer, or a copy may be furnished to those requesting a copy”).

23. 5 U.S.C. app. § 101(f)(3); Stop Trading on Congressional Knowledge Act of 2012 §§ 8(a)(1), 11(a)(1).

24. Act of Apr. 15, 2013, Pub. L. No. 113-7, 127 Stat. 438 (2013) (rendering ineffective sections 8(a) and 11(a) of the STOCK Act); Steven T. Dennis, *Obama Signs Partial Repeal of STOCK Act*, ROLL CALL (Apr. 15, 2013), http://www.rollcall.com/news/obama_signs_partial_repeal_of_stock_act-224019-1.html.

25. Dennis Kleinfeld, *Change in Insider Trading Law Protects Politicians, Not You*, MONEYNEWS (Apr. 22, 2013), <http://www.moneynews.com/Kleinfeld/Congress-STOCK-Act-insider-trading-vote/2013/04/22/id/500637>; David Lawder & Richard Cowan, *Congress Quietly Repeals Plan for Internet Financial Disclosures*, REUTERS (Apr. 12, 2013), <http://www.reuters.com/article/2013/04/12/net-us-usa-congress-security-idUSBRE93B0ZJ20130412>.

the Cannon House Office Building.²⁶ Good government groups and others denounced Congress for betraying the STOCK Act's transparency goals.²⁷

Of course, under both the original and amended STOCK Act, information was "accessible."²⁸ The difference—the difference that inspired outrage—was the cost of obtaining information. By providing information online and close to real time, the original version lowered cost across all times and physical distances. The amended STOCK Act made the information almost prohibitively costly, particularly if you lived in Alaska and wanted information about a transaction the day after it was completed.

Perhaps the most important government transparency statutory regime is the Freedom of Information Act (FOIA).²⁹ Amended in 1974, FOIA requires disclosure of documents in the possession of all federal agencies, subject to large exceptions for classified documents, personnel records, specifically exempted records, trade secrets and privileged information, certain inter-agency and intra-agency memorandums, personnel and medical records, records compiled for law enforcement, documents related to regulating financial institutions, and geological and geophysical information.³⁰ According to which commentator you read, FOIA has been either a success or a failure. On the plus side, it certainly has led to more disclosure.³¹ On the minus, many

26. Keith, *supra* note 10.

27. See, e.g., Lawder & Cowan, *supra* note 25 ("Lisa Rosenberg of the Sunlight Foundation, a nonprofit public interest group, said the repeal 'undermines the intent' of the law to ensure that government insiders are not profiting from nonpublic information. 'Are we going to return to the days when the public can use the Internet to research everything except what their government is doing?'); see also Craig Holman, *Shame on Congress for Repealing Major Provision of STOCK Act; Obama Should Veto*, PUB. CITIZEN (Apr. 12, 2013), <http://www.citizen.org/pressroom/pressroomredirect.cfm?ID=3863>.

28. Compare Stop Trading on Congressional Knowledge Act of 2012 §§ 8, 11 (requiring online financial disclosures for members of Congress, congressional staff, and certain executive branch employees), with Act of Apr. 15, 2013 § 1 (providing that the online disclosure provision of the STOCK Act shall not take effect).

29. Freedom of Information Act, 5 U.S.C. § 552 (2012); RonNell Andersen Jones, *Litigation, Legislation, and Democracy in a Post-Newspaper America*, 68 WASH. & LEE L. REV. 557, 598 (2011).

30. 5 U.S.C. §§ 552(a), (b)(1)–(9).

31. See, e.g., Seth F. Kreimer, *The Freedom of Information Act and the Ecology of Transparency*, 10 U. PA. J. CONST. L. 1011, 1015–16 (2008) ("FOIA must be understood as functioning within a broader ecology of transparency. As part of that system, it has done underappreciated service in the past half-decade and partakes of virtues of resiliency and efficacy that should be acknowledged and preserved."); David S. Levine, *Bring in the Nerds: Secrecy, National Security, and the Creation of International Intellectual Property Law*, 30 CARDOZO ARTS & ENT. L.J. 105, 149 (2012) ("[T]he continued success of FOIA in revealing information that some in government would rather be kept from the public means that a public official's personal ability to keep information from the public only goes so far."); Daniel E. Toomey & Joseph S. Ferretti, *The Freedom of Information Act: A*

argue that FOIA has done little to eliminate unreasonable government secrecy or provide genuine insight into government workings.³²

Much of the dissatisfaction with FOIA stems from its lack of real-time transparency.³³ If you consider transparency as allowing all interested groups, both those with and without high-priced lobbyists, to bring pressure, then FOIA is fairly useless. First, FOIA only reveals information memorialized in some document, and the details of *sub rosa* deals are not simultaneously, or even ever, so memorialized.³⁴ Second, FOIA gives agencies twenty days to respond to a request for records.³⁵ In reality, they usually take much more time.³⁶ And, if agencies do not so comply, the remedies—going to court and attempting to obtain

Refresher and Primer for the Construction Lawyer, CONSTRUCTION LAW., Winter 2011, at 17 (“The Federal Freedom of Information Act (FOIA), facilitating broad access to public documents, has been a part of the legal landscape for 43 years. As a testament to the success of the concept, most states (and many counties and municipalities) have their own version of FOIA, based largely on the federal version, and often rely upon federal courts’ interpretations in determining how to apply their own statutes.”); Aziz Z. Huq, *Binding the Executive (by Law or by Politics)*, 79 U. CHI. L. REV. 777, 795 n.74 (2012) (reviewing ERIC A. POSNER & ADRIAN VERMEULE, *THE EXECUTIVE UNBOUND: AFTER THE MADISONIAN REPUBLIC* (2010)) (“While both [the Foreign Intelligence Surveillance Act of 1978] and FOIA have their limits, and have been violated, neither is a wholesale failure.”).

32. See, e.g., Steven Aftergood, *Reducing Government Secrecy: Finding What Works*, 27 YALE L. & POL’Y REV. 399, 406 (2009) (“[A]t its best, FOIA only facilitates access to specific records; it does not and cannot alter the practices and procedures that make them inaccessible in the first place. Thus, indispensable as it was and remains, FOIA did not provide an effective remedy for the excesses of government secrecy”); Michael Herz, *Law Lags Behind: FOIA and Affirmative Disclosure of Information*, 7 CARDOZO PUB. L. POL’Y & ETHICS J. 577, 578 (2009) (“This article will describe and comment on the way in which FOIA has become more peripheral than it once was and than it should be. FOIA’s fundamental limitation is its failure to impose affirmative responsibilities on agencies.”); Michele Bush Kimball, *Shining the Light from the Inside: Access Professionals’ Perceptions of Government Transparency*, 17 COMM. L. & POL’Y 299, 299 (2012) (“Hundreds of audits of open government statutes across the United States during the past fifteen years have one finding in common: Not once has there been complete compliance with transparency statutes.” (citing Michele Bush Kimball, *Mandated State-Level Open Government Training Programs*, 28 GOV’T INFO. Q. 474, 474 (2011))).

33. See S. REP. NO. 110-59, at 3 (2007) (“Chief among the problems with FOIA are the major delays encountered by FOIA requesters.”); Herz, *supra* note 32, at 583 (“Of course, in the real world, these firm and strikingly short deadlines are routinely exceeded. Delays in handling FOIA requests seem to be an ineradicable feature of the statute’s administration.”).

34. See Herz, *supra* note 32, at 584–85 (suggesting that public access to information results in a “disincentive to create records”).

35. 5 U.S.C. § 552(a)(6)(A).

36. *Findings Regarding Administrative Processing of FOIA Requests*, NAT’L SEC. ARCHIVE, http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB84/findings_admin.htm (last visited Nov. 17, 2013) (“[M]ost agencies are unable to substantively respond to an [sic] FOIA request within 20 days.”).

mandamus or injunctive relief—take more time.³⁷ In short, if your goal is to line up an impressive writing campaign from members of Congress and interested citizens to influence a bureaucrat's decision, FOIA is not going to tell you much.

The importance of up-to-date information—and dissemination of that information—has long been evidenced in legislative struggles. Indeed, one of lobbyists' chief duties is to provide clients with the most up-to-date information—not publicly available—so that their clients can engage in more effective deal-making.³⁸ To demonstrate the point, compare FOIA's relative ineffectiveness to the tremendous success of leading Internet firms, like Google, to block the Stop Online Piracy Act (SOPA) and the Protect IP Act (PIPA).³⁹ These two bills, which Congress considered in 2012, would have greatly increased the liability of Internet firms to police and monitor users for potential copyright violations.⁴⁰ These bills can be fairly interpreted as legislative sops to the content industry, with groups such as the Motion Pictures Association of America and the Recording Industry Association of America pushing the bill.⁴¹ As many have lamented, intellectual property laws are the product of these types of political pressure and capture.⁴² Many expected a

37. *Id.*; see, e.g., *Ning Ye v. Holder*, 624 F. Supp. 2d 121, 122–24 (D.D.C. 2009) (discussing the writ of mandamus in the FOIA context).

38. Sharyl Attkisson, *Behind the Closed Doors of Washington Lobbyists*, CBS NEWS (Oct. 7, 2012), http://www.cbsnews.com/2102-3445_162-57527490.html.

39. Dana Liebelson, *New Cybersecurity Act Would Undermine FOIA and Whistleblower Protections*, PROJECT ON GOVERNMENT OVERSIGHT BLOG (Feb. 17, 2012, 1:55 PM), <http://pogoblog.typepad.com/pogo/2012/02/new-cybersecurity-act-would-undermine-foia-and-whistleblower-protections.html>; Ned Potter, 'Wikipedia Blackout,' *SOPA and PIPA Explained*, ABC NEWS (Jan. 17, 2012), <http://abcnews.go.com/blogs/technology/2012/01/wikipedia-blackout-sopa-and-pipa-explained/>; *Take Action*, GOOGLE, <https://www.google.com/takeaction/> (last visited Nov. 17, 2013).

40. Stop Online Piracy Act, H.R. 3261, 112th Cong. §§ 102(b)(3), (c) (2011); Protect IP Act of 2011, S. 968, 112th Cong. § 3(d) (2011).

41. See Derek Broes, *Why Should You Fear SOPA and PIPA?*, FORBES (Jan. 20, 2012), <http://www.forbes.com/sites/derekbros/2012/01/20/why-should-you-fear-sopa-and-pipa/> ("The birth of SOPA and PIPA has been established through the efforts of the lobbying arms of the studios and labels The MPAA and RIAA."); Stephanie Condon, *SOPA, PIPA: What You Need to Know*, CBS NEWS (Jan. 18, 2012), http://www.cbsnews.com/8301-503544_162-57360665-503544/sopa-pipa-what-you-need-to-know/.

42. See Rick Boucher, *Limiting Progress of Science and Useful Arts: Legislating as a Means of Enhancing Market Leverage*, 18 STAN. L. & POLY REV. 7, 13–18 (2007); Erika Morphy, *A Timely Reminder that MPAA and RIAA Shouldn't Be Trusted with Too Much Enforcement Power*, FORBES (Jan. 23, 2012), <http://www.forbes.com/sites/erikamorphy/2012/01/23/a-timely-reminder-that-mpaa-and-riaa-shouldnt-be-trusted-with-too-much-enforcement-power/3/> (discussing the forceful manner with which copyright owners have used lobbying power and campaign donations in recent attempts to push copyright legislation through Congress).

In recent years, however, Congress increasingly has been asked by copyright owners to use [the Article I power "[t]o promote the Progress of

PIPA or SOPA-like bill to pass given the past success of the content industry's similar legislation, such as the Digital Millennium Copyright Act of 1998.⁴³ The success of these prior laws stems, in part at least, by the quiet way they were pushed through Congress.⁴⁴

Something different happened in 2012. Google and other Internet firms that would have borne significant compliance costs under PIPA or SOPA launched a campaign against these proposed laws.⁴⁵ Through tactics like “going black for a day,” Internet firms brought the information to the public—and tremendous public pressure on Congress—just as it was preparing votes on these measures.⁴⁶ While the information about these votes was always there, the opposing Internet firms rendered this information easy to get *at the right time*. In legislation, as in life, timing is vital.

The temporal transparency of various types of administrative procedure has been too little examined. While the merits of various types of administrative procedures, including formal rulemaking,

Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries”] to stifle the development of new technology. Over the past two years in particular, the legislative process in the copyright field seems principally focused on leveraging private-sector behavior rather than in achieving actual changes to the law. No doubt my colleagues who have introduced legislation to modify the Copyright Act have done so out of a sincere desire to address concerns raised by content owners. Nonetheless, it increasingly appears that the private-sector interests pushing these initiatives see the legislative process as a mechanism to encourage manufacturers of consumer electronics to ‘design out’ features to which they object, to discourage them from introducing new products, or to leverage them to pay increased royalties as the price for peace.

Boucher, *supra*, at 7–8 (footnotes omitted); *see also* U.S. CONST. art. I, § 8, cl. 8.

43. Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998); *see also* Boucher, *supra* note 42, at 8–9, 18–19 (predicting that Congress will enact legislation favoring the interests of content owners over the fair use rights of consumers); Bill D. Herman, *A Political History of DRM and Related Copyright Debates, 1987–2012*, 14 YALE J.L. & TECH. 162, 214 (2012) (“[T]he conventional political analysis would have cast the odds of something like SOPA passing as very strong.”).

44. David Nimmer & Peter S. Menell, *Sound Recordings, Works for Hire, and the Termination-of-Transfers Time Bomb*, 49 J. COPYRIGHT SOC’Y USA 387, 391–92 (2001).

45. Condon, *supra* note 41.

46. Lewis Dowling, *Internet Giants Threaten ‘Blackout’ Protest Against SOPA*, TOTAL TELECOM (Jan. 13, 2012), <http://www.totaltele.com/view.aspx?ID=470424> (“Wikipedia founder, Jimmy Wales and Website entrepreneur Ben Huh have declared their support for a coordinated protest against controversial U.S. antipiracy legislation. Their announcements follow a similar one made by user-driven news Website Reddit, which declared on Tuesday that it will be ‘blacking out’ on 18 January from 8am to 8pm . . .”); *Wikipedia Blackout: 11 Huge Sites Protest SOPA, PIPA on January 18*, HUFFINGTON POST (Jan. 18, 2012), http://www.huffingtonpost.com/2012/01/17/wikipedia-blackout_n_1212096.html (reporting that over 7,000 websites participated in the opposition campaign by either “going dark” or directing visitors towards information on SOPA and PIPA).

informal rulemaking, and adjudication, have been debated ad nauseum, little attention has been devoted to how these procedures differ in transparency.⁴⁷ In other words, among the various administrative procedures, does one provide “real-time transparency” to shed light on events as they are occurring so that individuals can effectively influence the procedure?

Formal rulemaking, as set forth in sections 556 and 557 of the Administrative Procedure Act,⁴⁸ is transparent in theory yet may be less so in practice.⁴⁹ Under formal rulemaking, an agency entity (board, commissioner, administrative law judge, or some other body or individual) receives information during a trial-like proceeding, with a record of all argument and evidence formally entered—subject to examination by the opposing party.⁵⁰ Formal rulemaking is transparent because all evidence that the decision-maker should rely upon is public. Further, *ex parte* discussions are generally prohibited so that the decision-maker can *only* make his decision on the formally presented evidence.⁵¹

The problem is, of course, that the agency can exert pressures on the decision-makers, which can escape public view. On one hand, some agencies require from their decision-makers judicial-like silence on pending matters, strictly prohibiting *ex parte* contacts or opportunities for improper influence.⁵² On the other hand, where the decision-makers lack lifetime tenure and rely on their bosses for advancement, their employing agencies can exert

47. See, e.g., Michael Ray Harris, *Intervention of Right in Judicial Proceedings to Review Informal Federal Rulemakings*, 40 HOFSTRA L. REV. 879, 881–82, 886, 904–05 (2012) (discussing the uses of administrative actions under the Administrative Procedure Act while omitting debate of their various levels of transparency); Edward Rubin, *It's Time to Make the Administrative Procedure Act Administrative*, 89 CORNELL L. REV. 95, 110–12 (2003) (debating the effectiveness of rulemaking under the Administrative Procedure Act without discussion of rulemaking's transparency).

48. 5 U.S.C. §§ 556–557 (2012).

49. CARY COGLIANESE, HEATHER KILMARTIN & EVAN MENDELSON, TRANSPARENCY AND PUBLIC PARTICIPATION IN THE RULEMAKING PROCESS: A NONPARTISAN PRESIDENTIAL TRANSITION TASK FORCE REPORT vi (2008), available at <http://www.hks.harvard.edu/hepg/Papers/transparencyReport.pdf>.

50. 5 U.S.C. § 556(d); VANESSA K. BURROWS & TODD GARVEY, CONG. RESEARCH SERV., R41546, A BRIEF OVERVIEW OF RULEMAKING AND JUDICIAL REVIEW 3 (2011).

51. 5 U.S.C. § 557(d)(1); BURROWS & GARVEY, *supra* note 50, at 3.

52. See, e.g., Rules of Practice and Procedure for Administrative Hearings Before the Office of Administrative Law Judges, 29 C.F.R. § 18.38 (2012) (“The administrative law judge shall not consult any person, or party, on any fact in issue unless upon notice and opportunity for all parties to participate.”); *id.* § 2200.105 (restricting *ex parte* communications between parties to a case not yet concluded and an administrative law judge, the commissioner, or other employees of the Occupational Safety and Health Review Commission).

influence.⁵³ Agency decision-makers are more susceptible than federal judges by *sub rosa* influence from special interests.⁵⁴

Over the last few decades, agencies have largely abandoned formal rulemaking, opting instead for informal rulemaking.⁵⁵ Agencies publish a proposed rule and interested parties submit comments.⁵⁶ Agencies often will also meet *ex parte* with parties and discuss matters, although there are no formal hearings.⁵⁷ From a transparency perspective, there are clear disadvantages to this approach. It is much more difficult to keep track of who is speaking to whom; the various bits of evidence (and their sources) are more obscure and difficult to assemble, requiring combing through agency filings.⁵⁸

Online record systems that document these meetings and submissions can eliminate some of these concerns. Consider the Federal Communications Commission's Electronic Comment Filing System (ECFS).⁵⁹ It places all written submissions on the Internet a

53. See Mark Seidenfeld, *Bending the Rules: Flexible Regulation and Constraints on Agency Discretion*, 51 ADMIN. L. REV. 429, 468 (1999) (recognizing improper political influence in administrative agencies through "managerial techniques" that influence low level decision-makers such as basing performance evaluations on the outcome of a matter).

54. Compare *id.* (recognizing that lower-level decision-makers in administrative agencies are susceptible to influence by those who control their career advancement), with THOMAS F. HOGAN, *THE FEDERAL COURT SYSTEM IN THE UNITED STATES: AN INTRODUCTION FOR JUDGES AND JUDICIAL ADMINISTRATORS IN OTHER COUNTRIES* 9 (2010), available at <http://www.uscourts.gov/uscourts/FederalCourts/Publications/English.pdf> (arguing that life tenure and guaranteed compensation insulate Article III federal judges from outside influence).

55. Harris, *supra* note 47, at 905 n.163 ("It should also be noted that while both formal and informal rulemaking are available to an agency under Section 553 of the APA . . . formal rulemaking procedure is rarely, if ever, utilized by modern administrative agencies."); Rubin, *supra* note 47, at 106–07 (2003) (noting that "formal rulemaking has turned out to be a null set" and because "the impracticalities of formal rulemaking are well known, Congress rarely requires this technique, and courts avoid interpreting statutes to require it, even in the rare cases where the statute seems to do so").

56. 5 U.S.C. § 553(b)–(c).

57. See, e.g., Permit-But-Disclose Proceedings, 47 C.F.R. § 1.1206 (2012) (requiring notice for all oral *ex parte* presentations in "permit-but-disclose proceedings," not just those involving new information or arguments); Amendment of the Commission's *Ex Parte* Rules and Other Procedural Rules, 26 FCC Rcd. 4517, 4521 (2011); Commission's *Ex Parte* Rules and Other Procedural Rules, 76 Fed. Reg. 24,376 (May 2, 2011) (providing that notice was only required for *ex parte* communication if the information or argument was not already in the record); see also Commission's *Ex Parte* Rules and Other Procedural Rules, 76 Fed. Reg. 30,551 (May 26, 2011) (announcing that the Federal Communication Commission adopted the permit-but-disclose proceedings, now available in the C.F.R., and that it would be effective June 1, 2011).

58. See 1 C.F.R. § 305.77-3 (1993); Amendment of the Commission's *Ex Parte* Rules and Other Procedural Rules, 26 FCC Rcd. at 4521.

59. See *Electronic Comment Filing System*, FED. COMM'NS COMM'N, <http://apps.fcc.gov/ecfs/> (last visited Nov. 17, 2013).

few days after receipt.⁶⁰ In addition, the FCC has fairly strict disclosure requirements for ex parte meetings.⁶¹ Parties disclose by letter to the FCC with whom they met and what they discussed, though at a high level of generality.⁶² Reports are relatively easy to produce so that interested parties can keep track of who is meeting whom.⁶³ And, indeed, it is part of most communications law associates' jobs in big Washington firms to keep track of who is speaking to which commissioner. ECFS can produce reports like the following that show what parties met which bureau and what proceeding was discussed:

Figure 1: Federal Communications Commission, Sample ECFS Report

05/06/2013	DOC TYPE: SUBMISSION FOR THE RECORD APPL: Verizon	PROCEEDING: 96-98
03/05/2013	DOC TYPE: LETTER APPL: Teresa A Sawyer	PROCEEDING: 96-98
11/06/2012	DOC TYPE: OTHER APPL: Fairpoint Communications ATT: Barbara Galardo	PROCEEDING: 96-98
11/06/2012	DOC TYPE: COMMENT APPL: Fairpoint Communications	PROCEEDING: 96-98
10/19/2012	DOC TYPE: NOTICE OF EXPARTE EXPARTE APPL: CostQuest Associates, Inc.	PROCEEDING: 96-98
08/27/2012	DOC TYPE: NOTICE OF EXPARTE EXPARTE APPL: Google Inc. ATT: E. Ashton Johnston LAW FIRM: Lampert, O'Connor & Johnston, P.C.	PROCEEDING: 96-98
07/17/2012	DOC TYPE: COMMENT APPL: ACS of Anchorage, Inc.	PROCEEDING: 96-98
07/17/2012	DOC TYPE: NOTICE OF EXPARTE EXPARTE APPL: Google Inc. ATT: E. Ashton Johnston LAW FIRM: Lampert, O'Connor & Johnston, P.C.	PROCEEDING: 96-98
06/21/2012	DOC TYPE: OTHER APPL: ACS of Fairbanks	PROCEEDING: 96-98

On the other hand, the same risk for *sub rosa* influence is evident. First, as discussed below, agencies do not have an incentive to be completely transparent, and even the FCC, as we will discuss below, renders its ex parte disclosures opaque in

60. *How to Comment*, FED. COMM'NS COMM'N 1-2, <http://transition.fcc.gov/cgb/consumerfacts/howtocomment.pdf> (last visited Nov. 17, 2013).

61. 47 C.F.R. §§ 1.1200-1.1216 (2012).

62. *See, e.g.*, Letter from Ari Fitzgerald, Counsel to the Alliance of Auto. Mfrs. & Ass'n of Global Automakers, to Marlene Dortch, Sec'y, Fed. Comm'ns Comm'n (Sept. 13, 2013) [hereinafter Fitzgerald Letter], available at <http://apps.fcc.gov/ecfs/document/view?id=7520943443> (disclosing a meeting of the Alliance of Automobile Manufacturers and the Association of Global Automakers with David Goldman, Legal Advisor to Federal Communications Commissioner Rosenworcel).

63. *See id.* (reporting an ex parte communication two days after it occurred); *see also How to Comment*, *supra* note 60 (noting that filings may be both made and viewed electronically).

certain ways.⁶⁴ As Figure 1 above shows, the metadata does not make clear with *which* of the five FCC commissioners a party has met.⁶⁵ Second, agencies that wish to be influenced in a *sub rosa* way could easily be so.⁶⁶ However, the advantage of ex parte disclosure—combined with a computerized database—is that with minimal analysis one can detect patterns of influence. Few parties are so powerful that they can abandon completely normal channels of lobbying, even if in the end, they rely on more secret efforts. Thus, the patterns of influence should be decipherable and rendered clear in “real time,” particularly through “big data” analysis, as the final Part discusses.⁶⁷

III. TRANSPARENCY AND PHYSICAL PLACE

Information is not transparent if it is not easily physically available, as the anecdote in Part I demonstrates.⁶⁸ Congress ceased to be transparent about its financial trading when its STOCK Act disclosures became available only on paper and in the basement of the Cannon Office Building.⁶⁹ As a good example of the need of physical availability for government transparency, consider the Federal Depository Library Program (FDLP), established by Congress in the early nineteenth century when communication was difficult and expensive, which “ensure[s] that the American public has access to its Government’s information.”⁷⁰ Participating libraries receive free government documents (statutes, regulations, reports, etc.) from the Government Printing Office in exchange for making these materials available.⁷¹ The FDLP endeavored to bring government information to as many geographic locations as possible; it does the opposite of what the amendments to the STOCK Act did.⁷² Of

64. See Amendment of the Commission’s *Ex Parte* Rules and Other Procedural Rules, 26 FCC Rcd. 4517, 4521 (2011); *infra* Part V (discussing reasons why politicians lack incentives to be transparent).

65. See *supra* Figure 1. “The FCC is directed by five commissioners appointed by the president of the United States and confirmed by the U.S. Senate for five-year terms, except when filling an unexpired term.” *FCC Leadership*, FED. COMM’NS COMM’N, <http://www.fcc.gov/leadership> (last visited Nov. 17, 2013).

66. Florini, *supra* note 4, at 6–7.

67. See *infra* Part VII.

68. See *supra* Part I (discussing the availability of information in relation to the transparency of hypothetical Mr. Jones’s personal identifying information).

69. Keith, *supra* note 10.

70. *About the FDLP*, FDLP DESKTOP, <http://fdlp.gov/home/about> (last visited Nov. 17, 2013).

71. *Id.*

72. See Act of Apr. 15, 2013, Pub. L. No. 113-7, 127 Stat. 438 (2013) (rendering ineffective sections 8(a) and 11(a) of the STOCK Act); *Federal Depository Library*

course, the FDLP seems largely archaic in light of the Internet which has essentially eliminated physical place as a barrier to transparency. If you can get online anywhere in the world, you have potential access to all the information in the world—provided that the information is online.

Law and regulation have long recognized the power of place to reduce transparency—sometimes for good reason. As an excellent example, consider the Privacy Act of 1974.⁷³ Even in 1974, many within and outside of government realized how computerization would render information, once kept safe in filing cabinets and warehouses, effortlessly available to countless government workers.⁷⁴ Congress passed the Privacy Act of 1974 “in response to concerns about how the creation and use of computerized databases might impact individuals’ privacy rights.”⁷⁵

The Privacy Act places barriers “on how agencies can share an individual’s data with other people and agencies.”⁷⁶ In other words, simply because the Department of Health and Human Services has some information, an employee in the Commerce Department should not have access to it—let alone a member of the public.⁷⁷ By creating legal walls around information, the Privacy Act cordons off information into the various government departments and agencies, placing physical limits on where information flows.⁷⁸

Outside agencies, the Fourth Amendment privacy protections can be seen as precisely this sort of transparency reduction. The Fourth Amendment requires that, under most circumstances, the government must acquire a warrant to obtain information.⁷⁹ Like the Privacy Act, the Fourth

Program, U.S. GOV’T PRINTING OFFICE, <http://www.gpo.gov/libraries/> (last visited Nov. 17, 2013); *see also supra* text accompanying notes 24–27.

73. Privacy Act of 1974, 5 U.S.C. § 552a (2012).

74. The Act was passed, in part, in response to the report from the Department Health, Education, and Welfare (HEW) outlining the risks of the emerging large computerized databases. *See* SEC’Y’S ADVISORY COMM. ON AUTOMATED PERS. DATA SYS., U.S. DEP’T OF HEALTH, EDUC. & WELFARE, RECORDS, COMPUTERS, AND THE RIGHTS OF CITIZENS (1973); *see also The Privacy Act of 1974*, ELEC. PRIVACY INFO. CENT., <http://epic.org/privacy/1974act/> (last visited Nov. 17, 2013) (contemplating potential abuse of compiled personal data that had become readily available).

75. *The Privacy Act of 1974*, *supra* note 74.

76. 5 U.S.C. § 552a(b); *The Privacy Act of 1974*, *supra* note 74.

77. *See* 5 U.S.C. § 552a(a)–(f).

78. *Id.* § 552a(b).

79. U.S. CONST. amend. IV (requiring a warrant and probable cause before overcoming a person’s right “to be secure in their persons, houses, papers, and effects”).

Amendment creates barriers around certain physical places to reduce the flow of information and decrease transparency.⁸⁰

The *Kyllo* case is a good example.⁸¹ It involved the use of infrared heat sensors to obtain information about heat usage inside a building—a very convenient police technology for detecting indoor marijuana farms that use grow lamps.⁸² However, in the words of Justice Scalia, “[t]he Agema Thermovision 210 [the infrared scanner] might disclose, for example, at what hour each night the lady of the house takes her daily sauna and bath—a detail that many would consider ‘intimate.’”⁸³ In finding such heat detectors to be an unreasonable search without a warrant under the Fourth Amendment, the Supreme Court created a physical barrier keeping information, at least that information communicable via infrared radiation, within buildings’ interior.⁸⁴ Again, law creates a physical barrier for the flow of information.

Viewing transparency in terms of reducing the cost of information has important implications for privacy law. In a sense, privacy law is the mirror image of transparency. The former *increases* the cost of obtaining information, the latter *decreases* its costs.⁸⁵ Identifying the parameters of this cost is the central question of both regulatory concerns.⁸⁶ The previous Part discussed the cost of providing real-time data, this Part discussed the cost of providing actual physical access, and the subsequent Part will discuss what this Article terms “computational transparency.”⁸⁷

IV. COMPUTATIONAL OR INFORMATION COMPLEXITY AND TRANSPARENCY

An old movie, *The Seven-Per-Cent Solution*, has as its motivating conceit a plan by which Dr. Watson tricks Sherlock Holmes, played by Nicol Williamson, to journey to Vienna to cure

80. Compare 5 U.S.C. § 552a(b) (placing a barrier around the physical place of information, as well as how agencies can share such information), with U.S. CONST. amend. IV (creating a barrier around a person’s home, a physical place, and thus reducing the flow of information).

81. *Kyllo v. United States*, 533 U.S. 27 (2001).

82. *Id.* at 29.

83. *Id.* at 38.

84. *Id.* at 40.

85. Lindstedt & Naurin, *supra* note 2, at 304; Ohm, *supra* note 7, at 1736, 1741, 1756.

86. Lindstedt & Naurin, *supra* note 2, at 303–04; Schwartz & Solove, *supra* note 7, at 1865–66.

87. See *supra* Parts II, III; *infra* Part IV.

his cocaine addiction.⁸⁸ Watson plans for Holmes to be treated by the then-largely-unknown physician, Sigmund Freud, played by Alan Arkin.⁸⁹ When Holmes finally arrives in Vienna and confronts Freud about the ruse, the founder of psychoanalysis responds, “Who am I that your friends should wish us to meet?”⁹⁰ Freud intends this question to elicit from Holmes reflection upon his drug addiction and need for medical treatment.⁹¹

The question did not have its intended effect. After “observing” the famous flat at Berggasse 19 for only a few moments, Holmes does not engage in reflection about his addiction but rather directly responds to Freud’s question.⁹²

“Beyond the fact that you are a brilliant Jewish physician,” Holmes answers, “who was born in Hungary and studied for a while in Paris and that certain radical theories of yours have alienated the respectable medical community so that you have severed your connection with various hospitals and branches of the medical fraternity. Beyond this I can deduce little. You are married with a child of five. You enjoy Shakespeare and possess a sense of honor.”⁹³

Amazed, Freud asks how Holmes could “guess” these facts from a brief inspection of his study.⁹⁴

“I never guess. It is an appalling habit, destructive to the logical faculty,” snaps Holmes.⁹⁵ He then explains how the little details of Freud’s study—from the selection and placement of books, the patterns of dust accumulation, the spaces on the walls where certificates, awards, and diplomas were once hung, his accent, his wedding ring, and the toy soldier on the rug—disclose all these facts, making them transparent, at least to Holmes.⁹⁶

For our purposes, this scene presents a central question about transparency. Was Freud’s flat at Berggasse 19 “transparent” as to all of these facts about Freud? And, the answer is yes—if you’re Sherlock Holmes. He possesses, as he admits, powers of “deduction”—or, as we might say, computation—that allow him to infer important facts from those

88. THE SEVEN-PER-CENT SOLUTION (Universal Pictures 1976).

89. *Id.*

90. *Id.* at 28:03.

91. *See id.*

92. *Id.* at 28:07.

93. *Id.*

94. *Id.* at 28:31.

95. *Id.* at 28:38.

96. *Id.* at 28:43.

most would not notice.⁹⁷ Computational transparency, therefore, allows individuals who have less computing power between their ears than Holmes, i.e., the rest of us, to deduce the facts we want from those that are given to us.⁹⁸

The rise of the Internet, big data, and cheap computation has transformed questions about computational transparency.⁹⁹ Again, privacy law is illustrative. The existence of easily accessible databases allows more people to derive more facts from less data.¹⁰⁰ Many are concerned about the easy electronic availability of medical records.¹⁰¹ Epidemiological data is, of course, very valuable for medical research, allowing scientists to examine the impact of treatment on populations.¹⁰² Part of the promise of the Patient Protection and Affordable Care Act (PPACA) and universal electronic records is that enormous amounts of data will facilitate these types of investigations.¹⁰³

Say you wish to examine the effect of smoking cessation programs. You obtain healthcare records in which every individual is identified by birth date, sex, and ZIP code. These are important bits of data as they allow you to control for age, sex, and approximate socio-economic level.¹⁰⁴ These data seem anonymous—but they are not. As many have argued, these three bits of data are personally identifying, i.e., there may be only one person, or at most a handful, with a particular sex and birth date within most ZIP codes.¹⁰⁵ And given easily obtainable information on the Internet, you do not have to be Sherlock Holmes to complete the deduction.

Thus, transparency should aim to be “computationally transparent,” or to use another phrase, present uncomplex information. As argued in Part I, this question has inevitable normative components. Information is only complex—or uncomplex—relative to the questions one wants answered. In other words, Holmes no doubt *could* have deduced a huge number of facts from the flat on Berggasse 19—from where the family bought its torten to his wife’s preferences in wall paper—

97. *See id.*

98. *See Sweeney, supra* note 9, at 2 (demonstrating how it is possible to deduce a person’s identity from publicly available information).

99. Wu, *supra* note 5, at 1120, 1122, 1153, 1157.

100. *See Sweeney, supra* note 9, at 16, 28.

101. Wu, *supra* note 5, at 1156–57.

102. Schwartz & Solove, *supra* note 7, at 1866.

103. Patient Protection and Affordable Care Act, Pub. L. No. 111-148, 124 Stat. 740 (2010); Schwartz & Solove, *supra* note 7, at 1866–67.

104. *See Sweeney, supra* note 9, at 2, 16, 28.

105. *Id.* at 5; Wu, *supra* note 5, at 1119–20.

but he was interested in *one* thing: who was this man that Dr. Watson tricked me to visit?¹⁰⁶ Thus, computational transparency is always relative to a particular question.¹⁰⁷

But, which question is relevant in government transparency? This question is fairly simple, or so this Article argues. Government transparency is about revealing influence in order to limit corruption and provide, as this Article argues, information about the best timing for rewarding or threatening decision-makers.¹⁰⁸ Data should be disclosed in ways that makes information about influence easier to obtain.

While simple in theory, this question can be quite difficult. And, indeed, much depends upon details. Consider two examples. The Federal Communications Commission's ECFS system, as discussed above, provides information about *ex parte* meetings.¹⁰⁹ From a perspective of influence, one would want to see which parties were meeting with which commissioners. This information is revealed in the text of the letter that parties must submit which, in turn, is made available in PDF form on the Internet.¹¹⁰ However, the information is *not* contained in metadata of the computer file of the letter.¹¹¹ Thus, if you want to find out who is meeting whom, you must extract the information from the PDF. The extraction is an extra computational step, easy to do one time, but quite time consuming if one wishes to detect patterns of influence over time.

Similarly, consider the efforts of Daniel Katz, Michael Bommarito, and Jonathan Zelner to analyze whether the Cash for Clunkers program favored particular congressional districts.¹¹² The information on where payments were made was categorized by ZIP code.¹¹³ The researchers were motivated to discover differences in the payments received among congressional districts and other geographical and political units.

106. See THE SEVEN-PER-CENT SOLUTION, *supra* note 88.

107. Wu, *supra* note 5, at 1157.

108. See Lindstedt & Naurin, *supra* note 2, at 302, 306; *supra* Part I.

109. See *Electronic Comment Filing System*, *supra* note 59 and accompanying text; *supra* text accompanying notes 60–63; *supra* Figure 1.

110. See Amendment of the Commission's *Ex Parte* Rules and Other Procedural Rules, 26 FCC Rcd. 4517, 4547 (2011) (requiring that *ex parte* presentations and all attachments be filed in a "native format (e.g., .doc, .xml, .ppt, searchable .pdf)"); Fitzgerald Letter, *supra* note 62.

111. See *Electronic Comment Filing System Search Results*, FED. COMM'NS COMM'N, <http://www.fcc.gov/search/results/ecfs/> (last visited Nov. 17, 2013).

112. Daniel Martin Katz, Michael Bommarito & Jonathan Zelner, *Cash for Clunkers*, COMPUTATIONAL LEGAL STUDIES (Dec. 9, 2009), <http://computationallegalstudies.com/2009/12/09/cash-for-clunkers-visualization-and-analysis/>.

113. See *id.*

This relationship required connecting ZIP codes to congressional districts and census data.

This connection is difficult to make. ZIP codes, interestingly enough, are protected intellectual property owned by the U.S. Post Office.¹¹⁴ They are subject to change and often cross state and local boundaries. They bear little relationship to political boundaries—or census track—as overlay maps indicate.¹¹⁵

On the other hand, congressional districting is largely a province of state governments, which use census data to construct district boundaries.¹¹⁶ The U.S. Census Bureau does not collect data using ZIP code maps.¹¹⁷ While it does collect data using ZIP Code Tabulation Areas (ZCTAs) that are built from census blocks, ZCTA's do not perfectly track ZIP code areas.¹¹⁸ While certain tools exist that can translate between ZIP code and congressional district, they are often incomplete.¹¹⁹ For instance, ZCTAs, which only track populated areas, do not include post office-specific ZIP codes.¹²⁰

Government data that categorizes by ZIP code is not as transparent as one might think because it is computationally difficult to “translate” ZIP codes into other geographical and political boundaries. In this way, tracking government behavior becomes more difficult, and transparency is diminished.

114. See 17 U.S.C. § 105 (2012) (“Copyright protection under this title is not available for any work of the United States Government, but the United States Government is not precluded from receiving and holding copyrights transferred to it by assignment, bequest, or otherwise.”). *But see* COMPENDIUM II: COMPENDIUM OF COPYRIGHT OFFICE PRACTICES § 206.02(b) (1984) (“Works of the U.S. Postal Service, as now constituted, are not considered U.S. Government works.”). The Post Office publishes a yearly book demarcating ZIP code boundaries and claims copyright protection for these mappings. U.S. POSTAL SERV., AIS VIEWER USER’S GUIDE (2013), available at https://ribbs.usps.gov/addressing/documents/tech_guides/pubs/AIS_VIEWER_USER.PDF.

115. See *ZIP Code Demographics by Congressional District*, PROXIMITY, <http://proximityone.com/zip-cd.htm> (last visited Nov. 17, 2013).

116. Professor Justin Levitt of Loyola Law School, Los Angeles writes a web resource that explains the process. See Justin Levitt, *All About Redistricting*, <http://redistricting.lls.edu/who.php> (last visited Nov. 17, 2013).

117. See *Geography*, U.S. CENSUS BUREAU, <http://www.census.gov/geo/reference/zctas.html> (last updated June 20, 2013).

118. See *id.* (“In most instances the ZCTA code is the same as the ZIP Code for an area.”).

119. *Find Your Representative*, U.S. HOUSE OF REPRESENTATIVES, <http://www.house.gov/htbin/findrep?> (last visited Nov. 17, 2013); *ZIP Code Demographics by Congressional District*, PROXIMITY, <http://proximityone.com/zip-cd.htm#details> (last visited Nov. 17, 2013).

120. *Glossary*, PROXIMITY, http://proximityone.com/glossary.htm#zip_code_tabulation_area_zcta (last visited Nov. 17, 2013) (“ZCTAs do not precisely depict the area within which mail deliveries associated with that ZIP Code occur.”).

Computational transparency is relative to what you want to be transparent. In government transparency, the argument is, of course, influence. This goal must be analyzed in light of deduction resources available, i.e., ZIP codes and congressional district maps as with the Bommarito and Katz efforts, automated PDF readers as with the FCC, or perhaps Sherlock Holmes, if he is available. Only a careful statement of what is to be revealed—and an understanding of the computational steps necessary to reveal it—can lead to true transparency.

V. TRANSPARENCY'S INCENTIVES

Few in government have long-term incentives to be transparent about their work.¹²¹ While some politicians support transparency efforts—or how else would the Freedom of Information Act or the Sunshine Act ever be passed?—politicians lack incentives to maintain these transparency efforts over time.¹²² Secrecy in government allows politicians and bureaucrats to make deals without public accountability—thereby maximizing financial and/or political support by taking positions or allying themselves with groups to which their electorate might object.¹²³ Minimal transparency allows politicians to have their cake and eat it, too.¹²⁴

The fact that politicians have few incentives to create and maintain transparency has several legal and policy implications. First, when transparency regimes are created—under some public pressure or gaze—careful attention must be paid to the *form* of transparency. It must reduce the cost of obtaining information in real time and in physical form. Further, in the administrative context, it must be computationally transparent to issues of interest, namely political influence.

One way to counter the tendency to let transparency be lost in the details is to standardize disclosure. Such a prototype has

121. Florini, *supra* note 4, at 6 (explaining why government officials have incentives to keep information secret, thereby lacking incentives to be transparent over time).

122. *Id.*; *see also* Freedom of Information Act, 5 U.S.C. § 552 (2012) (showing politicians' support for transparency efforts by requiring agencies to make information available to the public); Government in the Sunshine Act, 5 U.S.C. § 552b (showing politicians' support for transparency efforts by requiring open meetings).

123. *See* Florini, *supra* note 4, at 6–7.

124. Steven J. Mulroy, *Sunlight's Glare: How Overboard Open Government Laws Chill Free Speech and Hamper Effective Democracy*, 78 TENN. L. REV. 309, 360–62 (2011); Kenneth Corbin, *The Toxic Effect of the Sunshine Act*, INTERNET NEWS (Jan. 6, 2009), <http://www.internetnews.com/kcorbin/2009/01/the-toxic-effect-of-the-sunshi.html> (showing how the Sunshine Act allows for minimal or token transparency by technically complying with the letter of the law but not with the spirit of the law).

been envisioned by the Obama administration.¹²⁵ Cass Sunstein, in his capacity as Administrator of the Office of Information and Regulatory Affairs, issued a memorandum, pressing agencies to provide information “in an open format that enables the public to download, analyze, and visualize any information and data.”¹²⁶ But, as this Article argues, the devil is in the details. Transparent government requires at a minimum that data be released in an easily searchable format, like XML.¹²⁷ It requires computational transparency: the careful analysis of what information is important and relevant to disclosing influence.

Second, there is the problem of “dynamic” reaction to disclosure requirements. The transparency of congressional proceedings offers a striking illustration of this phenomenon. Originally, Congress met in secret, as did the Constitutional Convention of 1787.¹²⁸ While Congress opened some of its meetings to the public early on, it was not until 1929 that Congress opened nomination, confirmation, and treaty deliberations.¹²⁹ However, as congressional proceedings became more public, important legislative activity moved to the Senate and House committees, which were private until opened to the public in 1970.¹³⁰

Once the committees became more important (and public), Congress got its work done elsewhere. “[W]hile congressional debates and committee meetings are open to the public, there is no legal restriction on members of Congress conferring in private to hold substantive discussions on public business. Indeed, the practice is quite frequent.”¹³¹ Thus, as Congress became more transparent with respect to its proceedings and its committee meetings, it began to rely more on its caucus meetings, which remained secret.¹³² In other words, even as public pressure opens certain aspects of government proceedings, government has the power to control its proceedings to maintain secrecy.

125. Transparency and Open Government: Memorandum for the Heads of Executive Departments and Agencies, 74 Fed. Reg. 4685 (Jan. 21, 2009).

126. Memorandum for the Heads of Executive Departments and Agencies from Cass Sunstein, Adm’r, Office of Mgmt. & Budget 1 (Apr. 25, 2011), available at <http://www.whitehouse.gov/sites/default/files/omb/memoranda/2011/m11-25.pdf>.

127. W.M.P. van der Aalst & Akhil Kumar, *XML-Based Schema Definition for Support of Interorganizational Workflow*, 14 INFO. SYS. RESEARCH 23, 26 (2003).

128. Mulroy, *supra* note 124, at 326.

129. CHRISTOPHER M. DAVIS, CONG. RESEARCH SERV., R42106, SECRET SESSIONS OF THE HOUSE AND SENATE: AUTHORITY, CONFIDENTIALITY, AND FREQUENCY (2013).

130. Mulroy, *supra* note 124, at 326.

131. *Id.*

132. *Id.* at 322, 326, 343.

This principle applies with less force to administrative agencies. On one hand, agencies do not have complete latitude in writing their rules of procedure; on the other hand, they often enjoy enough latitude to evade requirements.¹³³ For instance, the 1976 Sunshine Act¹³⁴ requires that every “meeting” of a federal agency be held in public, pursuant to notice.¹³⁵ This requirement has often led to criticism, particularly from members of multi-person commissions or boards.¹³⁶ The Sunshine Act forbids them from meeting as a deliberative body, except in public.¹³⁷ Commissioners often argue that this requirement limits their ability to make collegial decisions and limits their flexibility to compromise.¹³⁸

On the other hand, this criticism may be somewhat exaggerated. At the FCC, each commissioner has a staff of legal advisors who meet weekly and negotiate outcomes at their bosses’ request.¹³⁹ These meetings, like congressional caucuses, are secret—and that is where most of the horse-trading is done.¹⁴⁰

133. Fenster, *supra* note 12, at 619, 629, 637, 640–41; David A. Barrett, Note, *Facilitating Government Decision Making: Distinguishing Between Meetings and Nonmeetings Under the Federal Sunshine Act*, 66 TEX. L. REV. 1195, 1207–10 (1988).

134. Government in the Sunshine Act, 5 U.S.C. § 552b (2012).

135. *Id.* §§ 552b(b), (e).

136. Fenster, *supra* note 12, at 639–41; Barrett, *supra* note 133, at 1208–11; Kenneth Corbin, *The Toxic Effect of the Sunshine Act*, INTERNET NEWS, (Jan. 6, 2009), <http://www.internetnews.com/kcorbin/2009/01/the-toxic-effect-of-the-sunshi.html> (“The Sunshine Act prohibits a majority of commissioners (there are five) from meeting to conduct official FCC business while behind closed doors. As a result, the commission roughly once a month holds an open meeting, where members of the public and press can watch as the commissioners read prepared statements and cast votes on the items on the agenda. . . . But to critics, the problem is that the Sunshine Act has had the unintended consequence of bleeding the debate and honest dialogue out of the commission’s consideration of the issues. Paradoxically, it has made the FCC a more secretive place. ‘The Sunshine Act is one of the biggest barriers to dialogue among the commissioners,’ Kathleen Abernathy, a former commissioner, recently said at a seminar in Washington on reforming the FCC. . . . [She] lamented the effect of prohibiting the commissioners from collaborating on the various draft proposals to arrive at some meeting of the minds ahead of the open meetings.”).

137. 5 U.S.C. § 552b; Corbin, *supra* note 136.

138. Corbin, *supra* note 136; see Letter from Michael K. Powell, Chairman, Fed. Comm’ns Comm’n, & Michael J. Copps, Comm’r, Fed. Comm’ns Comm’n, to Hon. Ted Stevens, Chairman, S. Comm. on Commerce, Sci. & Transp. 1–2 (Feb. 2, 2005), available at http://www.freestatefoundation.org/images/Powell_Copps_Joint_Letter.pdf.

139. U.S. GOV’T ACCOUNTING OFFICE, GAO-10-79, FCC MANAGEMENT: IMPROVEMENTS NEEDED IN COMMUNICATION, DECISION-MAKING PROCESSES, AND WORKFORCE PLANNING 15–17 (2009); Paul Kirby, Ted Gotsch & Lynn Stanton, *As Martin Touts Achievements, Copps Seeks to Fix FCC Faults on Communication, Openness*, TELECOMM. REP., Feb. 1, 2009, at 1, 35.

140. See William N. Eskridge, Jr., *Vetogates*, Chevron, *Preemption*, 83 NOTRE DAME L. REV. 1441, 1448 (2008) (“[H]urdles for major legislation are reduced through informal cooperation among legislators who agree not to block most measures they oppose and

Congress could eliminate, or at least decrease, such meetings by forbidding commissioners from having such staffs—but it, of course, has limited power to flush out all secrecy.

This analysis suggests two issues: whether transparency in the administrative context is valuable at all and where its limits lie. The following sections examine these issues in turn.

VI. THE CASE FOR ADMINISTRATIVE TRANSPARENCY

The case for transparency in agency deliberations inevitably assumes an ideological cast, as it turns on the role agencies should play. On one hand, if one likes the administrative state, one tends to have less support for transparency.¹⁴¹ Congress can legitimately delegate to agencies the authority to make law through regulation. As lawmakers, agencies must engage in deal-making—and that is okay. Transparency can chill discussion and, therefore, decrease collegial decision-making and thwart compromise.¹⁴² On the other hand, if one harbors suspicions of the administrative state, then one would welcome transparency's stymying of agency deal-making.¹⁴³ Agencies should simply enforce the law in a manner as faithful to congressional mandates as possible.

The anti-transparency position needs a bit more unpacking. Why does transparency limit discussion? In legislatures, secrecy allows individuals to make certain comments or take positions that would offend members of their electorate. This freedom, as many legal scholars maintain, leads to compromise and efficient decision-making. Indeed, most legal scholars believe that is the

through deals worked out by congressional, executive, and/or party officials through legislator-executive 'summits,' as well as legislative caucuses or conference committees." (citing JOHN B. GILMOUR, STRATEGIC DISAGREEMENT: STALEMATE IN AMERICAN POLITICS 132–64 (1995)).

141. See, e.g., Mark Fenster, *The Opacity of Transparency*, 91 IOWA L. REV. 885, 900–02, 921–30 (2006) ("[E]fforts to stop bureaucratic secrecy or to impose disclosure requirements to mitigate it run counter to the necessary and inevitable dynamics of the bureaucratic state, as well as its resistance to change."); Scott M. Lassman, *Transparency and Innuendo: An Alternative to Reactive Over-Disclosure*, 69 LAW & CONTEMP. PROBS., Summer 2006, at 69, 73 (cautioning, in regard to the FDA, that "[a]lthough transparency should be vigorously pursued as a public policy objective, it must be balanced against other important public policy objectives").

142. Carrie Menkel-Meadow, *Scaling Up Deliberative Democracy as Dispute Resolution in Healthcare Reform: A Work in Progress*, 74 LAW & CONTEMP. PROBS., Summer 2011, at 1, 21; Corbin, *supra*, note 136.

143. See Jennifer Shkabatur, *Transparency With(out) Accountability: Open Government in the United States*, 31 YALE L. & POL'Y REV. 79, 83 (2012) ("Throughout American history, it has been well understood that '[d]emocracies die behind closed doors,' and that 'to be held accountable and to perform well, [government] must be visible to the public.'" (alterations in original) (quoting Fenster, *supra* note 12, at 619)).

case.¹⁴⁴ Those who have faith in such deliberation, like the civic republicans, would wish to encourage it and, therefore, look askance at transparency.¹⁴⁵ Those who view the democratic process as simply the interplay of special interests, like the public choice theorists, would likely support greater transparency as a tool to limit lawmakers' rent extraction.¹⁴⁶

In the administrative context, those who support the administrative state would see agencies as engaged in legitimate lawmaking, and therefore, transparency would not be an unalloyed good.¹⁴⁷ Agencies must have full freedom to negotiate, compromise, and deliberate.

There is, however, a difference between legislatures and agencies. Legislatures must compromise competing sets of political interests. If they get the compromise wrong, the electorate kicks them out.¹⁴⁸ Arguably, they have the incentive to make compromises that advance the greatest good for the greatest number.¹⁴⁹

On the other hand, bureaucratic incentives are much more obscure. Often operating far removed from the public gaze, bureaucrats with civil service protection operate under very different incentive structures than politicians.¹⁵⁰ Their deals often

144. See, e.g., Fenster, *supra* note 141, at 908 ("Transparency also harms government decisionmaking by adversely affecting the ability of government officials to deliberate over policy matters outside of the public eye . . ."); Menkel-Meadow, *supra* note 142, at 21 ("In some theoretical models of disputing, [secrecy] would be a good thing—many different interests could be used to trade and bargain across differently valued preferences on different issues, and trades and bargains could be made. But as this issue developed in a partisan political environment and in a very public forum (in contrast to Hillary Clinton's initial desire to keep the healthcare-reform process more private, which Elster suggested was a good thing in the American constitutional-formation process), it became particularly difficult to make 'trades' across class, interest, and role (professional and political) lines." (footnotes omitted)); Barrett, *supra* note 133, at 1208–11 (elucidating the argument against government transparency).

145. See Barrett, *supra* note 133, at 1208–11.

146. See Colin S. Diver, *The Optimal Precision of Administrative Rules*, 93 YALE L. J. 65, 106 (1983); Fenster, *supra* note 141, at 928.

147. See Fenster, *supra* note 141, at 902–10.

148. See, e.g., Michael S. Kang, *Sore Loser Laws and Democratic Contestation*, 99 GEO. L.J. 1013, 1050–51 (2011) (chronicling how Senator Joe Lieberman lost the Democratic Party primary in 2006 after vocally supporting President George W. Bush and the Iraq War); Phil Tenser, *State Senators John Morse and Angela Giron Recalled in Historic Elections*, THE DENVER CHANNEL.COM (Sept. 10, 2013), <http://www.thedenverchannel.com/news/politics/polls-open-for-colorados-first-ever-recall-elections-at-7-am> (demonstrating that the electorate will remove legislators from office when they do not agree with their actions).

149. See Edward L. Rubin, *Public Choice and Legal Scholarship*, 46 J. LEGAL EDUC. 490, 491–93 (1996) (describing how elected officials will choose positions and make compromises "in order to maximize their chance of reelection").

150. Compare *id.* at 491–95 (describing how politicians' main motivation is reelection), with John Nichols, *FCC Rejects Public Interest*, NATION (June 2, 2003),

will maximize their own job security or even the chance for employment with the entities they regulate.¹⁵¹ Similarly, political appointees who run these agencies often have incentives to serve their own short-term political advancement, not the public good.¹⁵² Thus, by using secrecy *against* their political sponsors, bureaucratic deal-making undermines legislative compromises, which possess some incentive to maximize the greatest good for the greatest number.¹⁵³ Thus, capture, though it plays a role with legislatures, seems more prevalent and more dangerous in agencies.¹⁵⁴ While it is, of course, an ideological debate as to which one of these incentive structures predominates, it is hard to argue that the bureaucracy has less of an incentive to obtain compromises and deals that offer the greatest good for the greatest many.

In sum, this Article suggests that the heightened possibility of special interest capture strengthens the need for transparency in agencies. Or, to put the matter another way, agency capture should be a game that should be as open and democratic as possible to give the greatest number and diversity of parties an opportunity to win. As argued above, easy physical access and real-time transparency can contribute to this goal, as such transparency lowers the cost of democratizing the process of pressuring decision-makers.

VII. E-ECTOPANOPTICA AND BIG DATA

Mark Fenster first proposed the notion of the inverted Panopticon and applied it to government transparency.¹⁵⁵ He borrows the notion from Jeremy Bentham—elaborated in the

<http://www.thenation.com/blog/fcc-rejects-public-interest#> (suggesting that bureaucrats are incentivized to act in favor of industries and corporations that bribe them with “first-class flights, luxury hotel suites and other favors that the [corporations use] to influence the decision-making process”).

151. See N. Adam Dietrich II, *BP's Deepwater Horizon: "The Goldman Sachs of the Sea"*, 13 *TRANSACTIONS: TENN. J. BUS. L.* 315, 333–34 (2012) (discussing how Mineral Management Service officials would favor the oil and gas industry “if they expected rewards in the form of future employment”); Nichols, *supra* note 150 (discussing the “incestuous relationships between regulators and the industries they are supposed to regulate”).

152. See Dietrich, *supra* note 151, at 333–34; Nichols, *supra* note 150.

153. Rubin, *supra* note 149, at 492 (noting that legislative compromise may result from the minimum winning coalition, which results in agreements benefitting a greater number of constituents).

154. Paul Rose & Christopher J. Walker, *Dodd-Frank Regulators, Cost-Benefit Analysis, and Agency Capture*, 66 *STAN. L. REV. ONLINE* 9, 14–15 (2013); Tom Udall, *Amend the Constitution to Restore Public Trust in the Political System: A Practitioner's Perspective on Campaign Finance Reform*, 29 *YALE L. & POL'Y REV.* 235, 240 (2010) (describing that legislature capture occurs “when elected officials are responsive to special interests to the exclusion, or detriment, of their own constituents”).

155. Fenster, *supra* note 12, at 668–69.

works of post-structuralist theorist Michel Foucault.¹⁵⁶ Bentham envisioned the Panopticon as a penitentiary, in which the jailors could constantly watch inmates through a wheel-and-spoke prison architecture.¹⁵⁷ The inmates' cells were placed on the periphery, with the prison guard watching from the center.¹⁵⁸ Foucault applied the idea to the state watching its citizens in his best seller of French post-structuralism, *Discipline and Punish*.¹⁵⁹

Applying this idea of government, Fenster inverts the Panopticon so that under what he terms the "metaphor" of transparency, the citizens watch the state:

In all of its guises, the transparency metaphor urges the construction of an inverted panoptic penal facility, one that puts the public—or some subset thereof—in the position of the guard and that casts government officials as the incarcerated. Jeremy Bentham's original design for his Panopticon arranged and illuminated cells so that the inmates would be constantly visible to prison guards located securely in a central tower. Prisoners could see the tower but could not see into it, and could constantly be seen, despite being confined to a cell from which they could not escape. . . . The Panopticon thus makes its subjects transparent to authority.¹⁶⁰

Fenster rejects this perfect notion of transparency due to the complexity of agency action, concluding

because the state cannot be made wholly visible, short of dismantling it or imposing a maddening (and likely impossible to construct) panoptic apparatus, such a desire will lead only to cycles of frustration. . . . Second, the will to see the state is so much a part of American democratic, populist political culture that is skeptical of the state that it cannot itself be wished away.¹⁶¹

This Article questions that conclusion at least in the administrative context—returning to the notion of the Panopticon and, in particular, its relationship to electronic data. Coining the term "E-Ectopanopticon" (the outside all seeing), this Article argues that big data and decentralized data processing can in fact render the government decipherable in key ways and, indeed, seems necessary given

156. *Id.*

157. *Id.*

158. *Id.*

159. MICHEL FOUCAULT, DISCIPLINE AND PUNISH: THE BIRTH OF THE PRISON 195–201 (Alan Sheridan trans., Vintage Books 1979) (1977).

160. Fenster, *supra* note 12, at 657, 668–69 (footnote omitted).

161. *Id.* at 671–72.

the increased government electronic surveillance of its citizens.

Returning once again to privacy law, it is conventionally—and quite reasonably—held that the government, by leveraging the shift in human affairs to cyberspace, has greatly increased its ability to monitor citizen activity.¹⁶² Often without a formal search warrant, the government can legally monitor and read e-mail activity, Facebook accounts, financial records, geo-location data from cellphones, and Internet Service Provider (ISP) account records and log files, showing all Internet sites visited.¹⁶³ Thus, communications that, in pre-Internet days, had been conducted via U.S. mail, in person, or by telephone—all of which require warrants to discover their content—has shifted to the Internet, which is more easily accessible by law enforcement and other arms of the government. Indeed, the recent scandals of the PRISM project simply reinforced what everybody knows.¹⁶⁴

At the same time, computerization has made records more easily discoverable, such as credit card purchasing history, credit history, mortgage payments, electronic highway toll activity—let alone social media, such as blogs, Twitter, and Facebook.¹⁶⁵ Widespread use of cameras particularly in urban areas—and, no doubt in the future, drones—to read faces and license plates, provide easily accessible, complete electronic records of citizens' movements.¹⁶⁶ Information that would have taken months to

162. See Foreign Intelligence Service Act of 1978, 50 U.S.C. § 1881a (2012); Press Release, Office of the Dir. of Nat'l Intelligence, Facts on the Collection of Intelligence Pursuant to Section 702 of the Foreign Intelligence Surveillance Act 1–3 (June 8, 2013), available at <http://www.dni.gov/files/documents/Facts%20on%20the%20Collection%20of%20Intelligence%20Pursuant%20to%20Section%20702.pdf>; Brian Barrett, *What Is PRISM?*, GIZMODO.COM (Jun. 7, 2013), <http://gizmodo.com/what-is-prism-511875267>.

163. Emily Flitter, Stella Dawson & Mark Hosenball, *Exclusive—U.S. to Let Spy Agencies Scour Americans' Finances*, REUTERS (Mar. 13, 2013), <http://www.reuters.com/article/2013/03/13/usa-banks-spying-idINDEE92C0EH20130313>; Glenn Greenwald, *XKeyscore: NSA Tool Collects 'Nearly Everything a User Does on the Internet'*, GUARDIAN, (July 31, 2013), <http://www.theguardian.com/world/2013/jul/31/nsa-top-secret-program-online-data;NSA Slides Explain the PRISM Data-Collection Program>, WASH. POST (Jun. 6, 2013), <http://www.washingtonpost.com/wp-srv/special/politics/prism-collection-documents/>; Dominic Rushe & James Ball, *PRISM Scandal: Tech Giants Flatly Deny Allowing NSA Direct Access to Servers*, GUARDIAN (Jun. 6, 2013), <http://www.guardian.co.uk/world/2013/jun/07/prism-tech-giants-shock-nsa-data-mining>.

164. See Barrett, *supra* note 162; *NSA Slides Explain the PRISM Data-Collection Program*, *supra* note 163; Rushe & Ball, *supra* note 163.

165. See Jon D. Michaels, *All the President's Spies: Private—Public Intelligence Partnerships in the War on Terror*, 96 CAL. L. REV. 901, 902–08 (2008) (discussing how electronic personal and business transactions have “generated an unprecedented number of data points about individuals”).

166. Dan Farmer & Charles C. Mann, *Surveillance Nation*, 106 TECH. REV., Apr. 2003, at 34, 36–40.

obtain from paper documents is now available with a few computer clicks. Even without search warrants, the government can simply buy most of this information from third-party vendors who collect it for market researching purposes.¹⁶⁷

To the degree, therefore, that the governed should have information parity with their government, transparency should keep pace with surveillance. Further, just as electronic computerized records make surveillance easier, they also can improve transparency.¹⁶⁸ Return to the example of the Federal Communications Commission. While not immediately apparent from the ECFS, it is possible to construct from the ex parte data a detailed analysis of where the commissioners got their information and to whom they were speaking.¹⁶⁹ As argued above, the continued standardization of data formats will only encourage the better tracking of government actors.¹⁷⁰

This Article ends with a radical vision, the E-Ectopanopticon. “Radical,” which comes from the Latin for “root,” denotes an idea that is not only at odds with current thinking but returns to older ideas.¹⁷¹ Here, we consider the Rector’s Palace in fourteenth century Dubrovnik.¹⁷² The Croatian city of Dubrovnik, during much of the Middle Ages and late Renaissance, rivaled Venice in control of the trade routes of the Eastern Mediterranean.¹⁷³ Ruled by an oligarchy of commercial families, the city had a figurehead rule, the Rector.¹⁷⁴ To guard against his seizing real power, the law limited his term to one month during which time he had to live in the Rector’s Palace, a lovely building

167. See Michaels, *supra* note 165 (describing how the government gets “unparalleled access to the American public’s intimate affairs” from corporations).

168. See Memorandum for the Heads of Executive Departments and Agencies and Independent Agencies from Jeffrey D. Zients, Acting Dir., Office of Mgmt. & Budget, and David S. Ferriero, Archivist, Nat’l Archives & Records Admin. 1–3, 5 (Aug. 24, 2012), available at <http://www.whitehouse.gov/sites/default/files/omb/memoranda/2012/m-12-18.pdf> (“This Directive requires that to the fullest extent possible, agencies eliminate paper and use electronic recordkeeping.”).

169. See *supra* notes 59–67 and accompanying text (discussing the Federal Communication Commission’s Electronic Comment Filing System).

170. See *supra* notes 125–27 and accompanying text.

171. THE NEW OXFORD AMERICAN DICTIONARY 1403–04 (Elizabeth J. Jewell & Frank Abate eds., 2001).

172. Stanko Kokole, *Cyracus of Ancona and the Revival of Two Forgotten Ancient Personifications in the Rector’s Palace of Dubrovnik*, 49 RENAISSANCE Q. 225, 226 (2006).

173. See F.W. Carter, *Dubrovnik: The Early Development of a Pre-Industrial City*, 47 SLAVONIC & E. EUR. REV. 355, 358–68 (1969) (chronicling the growth of Dubrovnik as a major trade power and its relationship with Venice).

174. See Robert Appelbaum, *Utopian Dubrovnik, 1659: An English Fantasy*, 7 UTOPIAN STUD. 66, 69, 84–85 (1996) (describing Dubrovnik’s governing body as limited to a select number of noble families who effectively ruled the city while the Rector lacked real authority).

that tourists can still visit.¹⁷⁵ The Palace was simply a Panopticon (rather nice, though awfully hot in the summer).¹⁷⁶ Through the Palace's servants and inescapable public rituals and public placement in the middle of the town, the tight-knit group of merchant families watched the Rector's every move.¹⁷⁷

In an age in which government can watch our every move, why can't we watch its moves? The E-Ectopanopticon could achieve this end in a variety of ways. Government actors could be required to videotape their *ex parte* meetings with private entities and place them online, along with automatically produced, easily searchable transcripts. Officials could even be placed in remote offices, such as in Montana or Alaska. They could, of course, still communicate with regulated parties, but only by email, which would be open to the public. Similarly, if the PRISM project records the metadata from our every phone call and Internet request, government phone calls should be equally transparent, particularly because the public foots the bill for all the chatter.¹⁷⁸ The E-Ectopanopticon could even be a bit wacky. Using a technology like Google street view, as well as face recognition software, firms could easily track who eats lunch with whom at Washington, D.C. lobbying lunch hotspots, like The Palms or Tosca's.¹⁷⁹

Of course, such transparency might induce government actors to take evasive measures, such as the Federal Communications Commission's legal advisors' meetings to evade the Sunshine Act or the emergence of congressional caucuses to evade the open committee meetings, as discussed above.¹⁸⁰ Yet, the same difficulties that individuals face in evading government surveillance would encumber government officials facing the E-Ectopanopticon. Our diminishing ability to evade electronic, computerized tracking is both the peril in terms of privacy—and the promise in terms of transparency—of our ever more online existence.

175. *Id.* at 85.

176. Compare Kokole, *supra* note 172, at 225–37 (describing the architectural structure of the Rector's Palace), with Fenster, *supra* note 12, at 668–69 (studying the structure of a Panopticon and analyzing how it makes subjects transparent to authority).

177. See Appelbaum, *supra* note 174, at 69, 85 (describing how the Rector's primary role was to perform ceremonial and ritualistic practices); Carter, *supra* note 173, at 357 fig.2 (providing a map with the location of the Rector's Palace within Dubrovnik).

178. See David Bender, *What You Need to Know About NSA Mass Acquisition of Telephony Metadata*, 30 COMPUTER & INTERNET LAW, Sept. 2013, at 1, 9 (describing the PRISM project as “a massive program” where the NSA has open access to surveillance data).

179. Manuel Roig-Franzia, *Lunch at the 'Power Section'*, WASH. POST, Sept. 20, 2009, at A1.

180. See *supra* text accompanying notes 134–40.

VIII. CONCLUSION

This Article has described a more complete understanding of transparency. The Article argues that transparency is a cost function that looks primarily at three factors: physical access, real-time information, and “computational” cost—the effort needed to derive useful and desired conclusions and deductions from the information provided.¹⁸¹ Computational transparency is inevitably normative because it requires government to conclude what is important or valuable for people to know.¹⁸²

In administrative functions, most would agree that keeping track of political and special interests is of great importance. Transparency, with attention to physical access, real-time information, and “computational” cost has the promise of providing a true portrait of political and special interest influence.¹⁸³ The E-Ectopanopticon simply applies to the government those techniques that the government uses to track us and, arguably, offers a goal for agency disclosure.¹⁸⁴

181. See *supra* Part II (discussing real-time information); Part III (discussing physical access); Part IV (discussing computational cost).

182. See *supra* text accompanying notes 5–10 (discussing normative nature of computational transparency).

183. See *supra* Part I (discussing how this transparency aims “to open the smoked-filled rooms to a more democratic cast of special interests”).

184. See *supra* Part VII (proposing the idea of the E-Ectopanopticon to watch government actors in the same way the government watches its citizens).