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Abstract

In Infotopia, citizens enjoy a wide range of information about the organizations upon which they rely for the satisfaction of their vital interests. The provision of that information is governed by principles of democratic transparency. Democratic transparency both extends and critiques current enthusiasms about transparency. It urges us to conceptualize information politically, as a resource to turn the behavior of large organizations in socially beneficial ways. Transparency efforts have targets, and we should think of those targets as large organizations: public and civic, but especially private and corporate. Democratic transparency consists of four principles. First, information about the operations and actions of large organizations that affect citizens' interests should be rich, deep, and readily available to the public. Second, the amount of available information should be proportionate to the extent to which those organizations jeopardize citizens' interests. Third, information should be organized and provided in ways that are accessible to individuals and groups that use that information. Finally, the social, political, and economic structures of society should be organized in ways that allow individuals and groups to take action based on Infotopia's public disclosures.

Keywords

transparency, participation, information disclosure, participation, civil society, democracy, open government, open data

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Introduction

We depend upon information to guide action in nearly every dimension of our lives. In a better world, that information would not only be true and plentiful, but it would enable us to make decisions that reliably advance our interests as consumers, clients, and equal citizens of democratic societies. In the pages below, I develop “Infotopia” as an idea of that better world. Infotopia offers a perspective on the economic and political role of information that provides guidance on how we might move toward a society in which the informational environment better supports our desires for welfare and democracy.

This investigation begins from a stylized problem. In developed and developing societies alike, individuals rely upon numerous organizations that include providers of public and private services, manufacturers of consumer goods, governments that regulate their health and safety, and financial organizations that provide credit or manage their investments. People need information to assess whether such organizations protect their interests or predate upon them, to choose which organizations (and so which products and services) to rely upon, to decide whether to oppose or support various organizations, and to develop and execute strategies to affect and interact with them.

Information, then, can be a critical resource—like money, organization, social capital, or political support—that can be structured and distributed in ways that support or undermine the Real Utopian values of equality, freedom, and democracy. In every contemporary society, individuals and groups frequently lack the information they require to effectively manage their relationships with the organizations they face. Often, organizations—be they private corporations, governments, or even civic organizations—refuse to disclose information. Even when information is available, it may assume forms that are difficult to interpret or it may not come in time to be useful. Individuals may fail to acquire and assimilate information due to its cognitive costs, their own limitations, or behavioral patterns in which decisions do not rely upon that information.

Transparency¹ is a solution to the problems that lack of information pose. If the problem is that organizations possess information that individuals need to evaluate those organizations and to make them accountable, then increasing their transparency is a direct solution. The challenge is to articulate a version of transparency—principles and proposals—that can produce an informational environment that is just and democratic in that it enables individuals to protect their interests and, collectively, to control the organizations that affect their lives.² This essay develops this vision of democratic transparency.

Over the past three decades, new forms of transparency have spread across the world and the provisions for transparency have deepened in many places that already enjoyed a tradition of openness. While only five countries had national freedom of information laws in 1980, ninety-three countries had adopted them by 2012.³ More recently, spurred in part by the Internet revolution, many nations have committed to proactively making government information publicly available. In 2011, eight founding governments—Brazil, Indonesia, Mexico, Norway, Philippines, South

Africa, United Kingdom, and the United States—launched an Open Government Partnership (OGP) in which participating countries commit to policies to make their own data more readily available to their citizens. More than seventy-three countries sent some 1,200 delegates to the first meeting of the OGP in Brasilia in April 2012.⁴ In specific policy areas such as environmental regulation, health, and product and food safety, governments around the world have pursued information-based regulatory strategies.⁵

These developments lay a promising foundation from which to build upon the liberating possibilities of information, but they offer starting points rather than conclusions. Normatively, these measures are variously justified by citizens' need for political and governmental information in order to exercise their democratic rights of self-government, by a more general "right-to-know," or by utilitarian considerations that individuals will make better choices for themselves if they possess more information.⁶ While not incorrect, these positions underplay the democratic contributions of information. As a consequence, policies that follow from these justifications are frequently mis-targeted and partial.

Below, I develop the notion of democratic transparency. This account of transparency is democratic with regard to both ends and means. Regarding ends, the public provision of information is justified by democratic goals: citizens can use information to exercise influence over the organizations that affect their lives and to navigate life choices in ways that are more likely to advance their own welfare and flourishing. This account of transparency is also democratic with regard to means: it is only through the collective effort and authority of citizens—acting through the mechanism of their governments or through social action—that can compel public and private organizations to disclose information that would otherwise remain secret.

Democratic transparency is built upon four principles. The first principle is availability: information should be available to citizens so that they can protect their vital interests. Second is proportionality: organizations should provide information to citizens in proportion to the extent to which their actions threaten the interests of citizens or create risks to them. Third is accessibility: given what we know about how people acquire information and make decisions from the science of cognition and psychology, information should be provided in ways that individuals can understand. The fourth principle is actionability: political, social, and economic structures should be arranged in ways that enable individuals and organizations to take action that utilizes information to protect themselves and influence powerful organizations. I will elaborate these principles and some of their implications below.

Note that there are two important scope limitations on kinds of public information in the version of democratic transparency developed below. First, this essay examines the important, defensive, face of the informational problem: information that people need to protect themselves against the actions of large organizations and to navigate the terrain created by such organizations. There is also a more positive face of Infotopia in which individuals would have all kinds of knowledge—whether or not it relates to the activities of large organizations—to carry out their projects and conduct their lives in rich and fulfilling ways. Commonplace examples of such information

include accurate weather reports (which are, in the United States, made possible in large measure by the National Oceanographic and Atmospheric Administration) and navigational information provided by the Global Positioning System. In the pages below, however, I do not discuss this positive-face of information and focus on defensive problems for three reasons. First, defensive informational problems are more difficult to address because efforts to secure such information and make it public often face the resistance of large organizations that would otherwise control access to that information and be damaged by its publicity. Second, a rich array of processes already exist—from markets for information to democratic processes—which allow public investments to provide informational public goods (like weather and GPS satellites)—that are disposed to developing products and services to solve the positive information problem. Third, it may be that defensive information should be a priority because it addresses needs that are more basic and vital for many citizens such as serious risks to health, the environment, and the financial system.

A second scope limitation is that I focus upon information about the activities of large organizations—especially corporations and governments—rather than individuals. The actions of individuals no doubt affect others' vital interests and information is sometimes thought of as a way to help defend those interests. Many US jurisdictions have enacted so-called Megan's Laws that require those who have been convicted of sex crimes to register their location of residence in a database that is publicly available. Though there is little evidence to support their effectiveness, such requirements are motivated by the idea that neighbors will be better armed to protect themselves against sexual predation.⁷ Following the tragic December 2012 shootings at an elementary school in Sandy Hook, New Jersey, *The Journal News* of New York published an Internet map, using publicly available information, of the names and addresses of hundreds of gun owners in New York's Westchester and Rockland Counties.⁸ Perhaps the notion was to allow neighbors to protect themselves against gun owners or to shame those owners into safer behaviors. This essay does not address the principles or policy that ought to guide such publicity about *individual* conduct and instead focuses on organizational conduct for two main reasons. The first is an intuition about the priority of threats. That intuition, asserted without evidence here, is that the majority of important threats to individual interests in modern societies arise from large organizations rather than from other individuals. The second reason is a general liberalism: the conduct of large organizations, rather than individual behavior, is the priority for efforts to assert *democratic* control.

The next section offers one way of understanding the current threads of policy development and public debate about transparency. I argue that there are three positions in contemporary discourse: information on demand, naked government, and targeted transparency. Democratic transparency extends the notion of targeted transparency developed by Mary Graham, David Weil, and me in our book *Full Disclosure: The Perils and Promise of Transparency*. The third section articulates the four principles of democratic transparency, and the fourth section sketches an application of these principles to the domain of health care products and services.

Three Transparencies

Everyone wants transparency, but the important question is: what kind of transparency should we have? There are at least three distinct kinds of transparency on offer in contemporary policy debates. Polemically, I will call them information on demand, naked government, and targeted transparency.

Information on Demand (Freedom of Information)

Though the idea was born in the wake of the New Deal in the 1930s, the United States did not adopt the Freedom of Information Act (FOIA) until 1966.⁹ Championed by journalists and reform organizations such as Ralph Nader's Center for the Study of Responsive Law, the law created a presumption that citizens should be able to obtain government documents unless there is a compelling interest—such as national security concerns—for secrecy. It created processes for citizens to request such documents and for officials to consider and comply with their requests.¹⁰ Though freedom of information seemed for a time distinctly American, with only a handful of countries implementing similar provisions between 1966 and 1980, nations around the world began adopting freedom of information provisions more rapidly after 1980. By 2012, more than ninety countries had enacted some kind of freedom of information statutes.¹¹ In the United States and elsewhere, freedom of information laws have enabled investigative journalists and civil society organizations to bring many controversies and scandals to light.

Freedom of information laws create a basic structure of information “on demand.” They create a right for citizens to request information, and an obligation upon government to either provide that information or explain why they will not. Information-on-demand provisions constitute a fundamental and broad step toward creating a democratic informational environment. But it is important to note several features and limits of such provisions.

First, information on demand requires certain civic institutions in order to improve democratic accountability. In particular, social actors must be in a position to demand information and make political use of that information. Such actors are typically not unaffiliated individuals, but rather professional media or advocacy organization or private corporations who have material or mission-driven interest in obtaining information (such as information about their competitors) and who possess the analytic capacity to make sense of it. In societies where the Fourth Estate is immature or dependent or where civil society organizations are weak, no one will be in a position to utilize the on-demand structure that freedom of information creates.¹²

Second, freedom of information provisions make it possible for citizens to demand information that government already possesses, such as records of agency decision making and the inputs into such decisions; personnel records; regulatory and investigatory record keeping; records kept in the process of policy implementation; and other such data. An apt metaphor is that the public should be able to open government's file drawers and view their contents. But much of the information important for democratic

accountability—such as information about the performance of government or the consequences of particular policies—may not exist, or may not be readily interpretable, from those files. The most democratically important kinds of information may require new efforts to collect and analyze data.

Third, freedom of information creates a right to demand information that is often focused upon the decisions or actions of a government. But as the activities of organizing collective life and providing public goods and services move toward networks of governance and are “contracted out” to private sector actors, the most democratically important kinds of information may be information about the activities of private and civic organizations rather than governments themselves. From the democratic perspective, constricted domain is the most critical limitation of the logic of freedom of information’s on-demand approach: its scope is limited principally to information about government, but the information that is most critical to citizens’ personal and political interests often concerns nongovernmental entities.

Naked Government (Open Government)

Since 2009, “open government” has emerged as an important approach to public information provision in the United States, the United Kingdom, and in many other countries. There are two main differences between the open government approach and the information on-demand provisions that preceded it. First, open government changes the default presumption about publicity. For example, US President Barack Obama Administration’s Open Government Directive indicates that “agencies should proactively ... disseminate useful information, rather than waiting for specific requests under FOIA.”¹³ Second, open government is especially attentive to the digitalization of information. Championed by technologists, open government policies in the United States and the United Kingdom often stress the release of “data-sets” and the importance of providing information in machine-readable formats that can be searched and analyzed using computational tools and methods.¹⁴

While many data sets have already been released under the banner of open government, it will be some time before we understand the complex consequences of these policies.¹⁵ In its design and ambition, however, open government is an incremental extension of information on demand. It provides information that government already possesses more readily and accessibly. That information is often information about the activities of government itself. As with freedom of information, one central limit of the open government logic is its limited scope—these efforts tend to focus upon government rather than upon the private or civic sectors.

Elsewhere, David Weil and I have argued that open government may actually work—ironically and counterproductively—in ways that undermine the broader sentiments that would support democratic transparency more broadly.¹⁶ At one limit, open government becomes naked government. In order to advance a politics of accountability, open government favors releasing vast troves of data concerning the operations of government, including information about the activities of officials, revenue and expenditure information, and so on. Perhaps the single largest open government effort

to date has been the Obama administration's collection and release of financial information associated with the American Reinvestment and Recovery Act. When President Obama introduced this effort in 2009, he said: "This is going to be a special Web site that we set up that gives you a report on where the money's going in your community, how it's being spent, how many jobs are being created, so that all of you can be the eyes and ears."¹⁷

But these data are not neutral in their political consequences. Some of the main users of open government data are journalists seeking to expose the waste or theft of public funds (one central form of accountability). It is more difficult to use these data to register the positive accomplishments of public action. Many audiences are pessimistic about government: when pollsters asked whether "this country is run by a few big interests looking out for themselves" or whether it is run "for the benefit of all the people" in 2004, 54 percent of respondents thought that it was run by a few big interests.¹⁸ Naked government may thus systematically reinforce negative perceptions of government. Simply put, the politics of accountability often associated with open government can amount to an Amazon five-star rating system in which government can only receive one or two stars.

Targeted Transparency

"Targeted Transparency" describes disclosure policies that operate according to a logic very different from that of either information on demand or naked government. In *Full Disclosure*, Mary Graham, David Weil, and I developed the concept of "targeted transparency" to describe public policies that compel organizations—sometimes governmental but often private sector actors—to disclose information in order to advance some specific public purpose such as improving public health, increasing product safety, or reducing risk.¹⁹

Philosophically, targeted transparency differs from either information on demand or naked government in its unabashed consequentialism. Targeted transparency policies—such as nicotine content warnings, fuel efficiency or crash-worthiness labels on automobiles, or organizational "report cards" that disclose hospital infection rates or patient outcomes for nursing homes—are justified primarily because they aim to improve particular outcomes—such as lower lung cancer rates, lower petroleum consumption, fewer auto fatalities, or safer hospitals and nursing homes. Information on demand and naked government may well have beneficial consequences, but those laws and policies are primarily justified as vindicating informational rights and so establishing appropriate relationships between citizens and their state.

This philosophical difference may correlate with a critical difference in the long-term political effects of these different classes of transparency policies. Targeted transparency policies rely upon regulatory and other coercive powers of government to secure information from organizations—other units of government, private sector corporations, and civil society groups—that would otherwise keep that information secret. If naked government (and, by extension, information on demand) undermines public support by continually calling into question the competence of officials and

the effectiveness of public programs, it undermines just these capabilities required for democratic transparency.

Put a different way, information on demand and naked transparency focus upon providing information about government because they presume that, democratically speaking, citizens should be most wary of their government's actions. In societies where social, economic, and political life is dominated by the state, such as authoritarian countries or some developing societies, then information about government action may indeed be the most relevant kind of information that citizens need to advance their interests. However, in many societies—especially democratic capitalist societies—the major threats to citizens' interests come not from government, but rather from corporations and sometimes secondary associations. In such societies, citizens' main informational interest—democratically speaking—is in the kinds of information that can help them to manage the risks imposed by those organizations and to tame them. Their government is often the only organization with the wherewithal to wrest this information from powerful corporate and social actors.

Targeted transparency describes the logic according to which discrete efforts to secure such information can be effective in improving outcomes valued by citizens and policy makers alike. Targeted transparency has two components. First, it specifies a consequential approach to information policies. One justification for disclosure is that it can trigger political, social, and economic dynamics that advance substantive public policy objectives such as risk reduction and organizational performance. Second, targeted transparency offers an analytic apparatus for understanding why some transparency policies advance their aims successfully while others fail to do so. Targeted transparency is a more promising starting point for building up democratic transparency—for Infotopia—than either information on demand or naked government.

Democratic transparency, then, relies heavily upon targeted transparency but it is not the same thing. Democratic transparency utilizes disclosure to achieve two specific democratic ends: enabling citizens to advance their interests in the face of large organizations that affect their lives and helping them to regulate those organizations. Democratic transparency explicitly relies upon the benevolent public power of the state. Laws and regulations are usually the only force sufficient to reliably compel public and private organizations alike to publicly disclose the most democratically valuable information. Whereas targeted transparency is primarily a policy analytic apparatus and then a normative guide to information-based regulation, democratic transparency incorporates a broader agenda that develops guidance concerning (i) who should be made more transparent and (ii) broader reforms that enable individuals and organizations to act on public disclosures. In the next section, we develop the principles of democratic transparency.

Four Principles of Democratic Transparency

Infotopia is an informational world governed by the ideal of democratic transparency. Democratic transparency, in turn, is defined by four principles of public information: availability, proportionality, accessibility, and actionability.

Availability

The first principle of democratic transparency is that the information citizens need to protect their vital interests should be available to them. A minimal sense of availability is that such information not be secret—that its access is not prohibited in principle by strictures such as governmental secrecy or proprietary intellectual property restrictions that govern much of the information produced and collected by private corporations. The on-demand provisions of freedom of information laws described above reach toward satisfying this minimal requirement for some kinds of information. Citizens have the right to certain kinds of information—so it is, in principle, available. In order to actually acquire that information, they must request it from the appropriate government organizations. Democratic transparency, however, creates a standard of availability that is more demanding in four ways.

First, akin to the ambitions of open government activists, information that citizens need should be available by default rather than upon request. That is, information should be on tap rather than on demand. For example, citizens have a vital interest in knowing whether the food that they consume is free from biological and chemical contaminants. Information regulations should not just provide that public agencies provide food production inspection information when citizens request it; that information should be publicly available by default. That information, furthermore, should be provided in ways that take advantage of modern information and communication technologies—available in digital, downloadable, and “mashable” formats.

Second, as mentioned above, democratic transparency demands a *scope* of information availability that is much broader than either on-demand or naked-government approaches. In particular, whether or not information should be available to the public depends not in the first instance on whether it is information about government action or whether government already possesses that information, but on whether that information is important to protecting citizens’ vital interests. In the food safety information example above, for example, both freedom of information and open government champions would typically favor the release of inspection information already collected by a government food inspectorate. Democratic transparency begins with the fact that the vital public health interests are affected by the actions of food manufacturers, and therefore that information about the behavior of those companies and their products should be publicly available, whether or not public authorities already possess that information.

Third, then, democratic transparency imposes proactive obligations to acquire and make information that is vital to citizens’ interests available to them. If food safety information falls into that category, as I believe it does, democratic transparency dictates either that government begin to collect the information and make it publicly available or that food manufacturers do so voluntarily.

The fourth characteristic of availability under democratic transparency is that deep levels of information should be available. In debates about disclosure regulation, some argue that government should provide citizens with very simple information—such as letter grades, color codes, or warning labels—because reams of data on chemical contents, inspection details, and more raw data can be confusing and difficult to digest. As

a matter of sheer availability, however, information relevant to citizens' interests should be offered in highly detailed and disaggregated ways. Once a deep and detailed level of information is publicly available, government agencies and third parties can analyze and package that information to make it comprehensible to citizens. On most complex issues, there will be disagreement and debate about the meaning and significance of that raw data: how much bacterial contamination is acceptable in beef? What level of capital reserves must banks have in order to remain sustainably solvent? Such debate is appropriate and can be constructive. However, informing that debate requires deep and detailed levels of information.

Proportionality

Even in Infotopia, it is not possible to collect and disseminate all of the information that citizens might possibly desire. Although digitalization has eased the way, collecting, organizing, and disseminating information nevertheless remains politically, administratively, and organizationally costly. Therefore, democratic transparency requires a regulative principle to establish informational priorities. What kinds of data merit the greatest democratic efforts to collect, publicize, analyze, and utilize?

The second principle of democratic transparency establishes that priority: information should be publicly available in proportion to the extent to which that information enables citizens to protect their vital interests. Because democratic transparency focuses upon the relationship between citizens and the large organizations upon which they depend, a more specific formulation of this second principle of proportionality is that: Information about organizations should be public available in proportion to the extent that the actions of those organizations threaten and create risks to citizens' vital interests.

The basic notion is that organizations vary in the extent to which they pose threats to citizens, and that citizens should concentrate their collective efforts to secure information from those organizations that pose the greatest threats. The application of the principle of proportionality will be inevitably controversial for at least three reasons. First, individuals vary in the risks they face from particular organizations. For example, the infirm face greater risks from health care organizations than the healthy. Second, reckoning of risk depends upon differences in values, ideology, and knowledge. For the libertarian, government is the organization that creates the greatest risk because liberty is the most vital interest. Third, the results of applying the proportionality principle vary across political-economic contexts. For example, in authoritarian countries in which the state governs social and economic life, citizens should focus their efforts on securing information about the state and its actions. In capitalist democracies, the proportionality principle directs more collective effort to liberating information from private corporations because they figure more largely in citizens' lives.

In the formulation above, the principle—not to mention its implications—is quite preliminary and incomplete. A more complete specification—which must await another occasion—would lay out citizen interests as the vital ones and the processes

through which disputes about knowledge, ideology, and judgment ought to be worked out. For example, what kinds of organizations pose greater and lesser threats to citizens' interests? Even in this underdeveloped form, however, it is important to note that the proportionality principle makes democratic transparency much more demanding than the alternative approaches of information on demand (freedom of information) and information on tap (open government). Both of those approaches are fundamentally agnostic—or at least thus far inarticulate—about what sorts of information are more or less important for the public and so where our collective energies for information provision and publicity ought to be focused.

Without working out these important components of the principle, it will help to elaborate the notion of priority by laying out three different kinds of risks that certainly threaten vital interests—product and service risk, domination risk, and social externality risk—and how information is an ingredient in citizens' efforts to defend against them.

Products and Services Risk. In every modern society, we depend upon the safety and quality of countless products and services that we consume and utilize for our health, happiness, and general welfare. Consider just a few examples. When we go to the doctor or check into a hospital, our health depends upon the quality of treatment that we receive. When we take the medicines prescribed to us, we hope that they are as effective as advertised and that we know and understand their side effects. When we purchase food at the grocery store, we hope that it is free from biological and chemical contaminants. When we drive our cars to work, we presume that the brakes and accelerator function as advertised and that the car is robust in case of accident.

In advanced industrial societies, government regulation plays a large role in controlling the risks that emerge from such products and services. This is as it should be. If government were perfectly democratic, wise, and effective, Infotopia would be superfluous. But modern governments face many challenges in protecting citizens from product and services risks. Industries lobby for standards and regulations that are weaker than they ought to be. There are too few inspectors for too many factories and facilities. Some important risks are emergent or too novel to generate the level of scientific or political consensus necessary for regulation.

In Infotopia, citizens possess information as an additional, more direct, path of self-defense and corporate accountability. Citizens would have information about the risks that such products and services pose at their fingertips so that they could better navigate such risks. In the arena of health services, for example, people would know about the comparative safety records of hospitals (e.g., rates of secondary infection and medical mistakes) as well as cost, provider qualification, patient satisfaction, and outcome information. For drugs and medical devices, the full records of reported side effects and “adverse events” would help patients and their advocates establish and assess the real risks they face. Details of food production, including ingredients, processes, biological modifications, contamination rates, and hygiene practices would equip consumers and safety organizations to assess nutritional risks and press for higher quality food. Similarly, for cars and other such products, information not just

about design, testing, and production, but also about accidents and malfunctions would be publicly available in Infotopia.

The principle of proportionality works across and within this category of products and services risks. Across categories, risks posed by products and services are obviously hugely important in the lives of most citizens. Yet, the received perspectives of freedom of information and open government accord no special priority to such risks because they focus on making public information that governments already possess, with insufficient regard for what sorts of information governments should take pains to acquire and make public. Articulating the extent of the risks that dangerous products and services create for citizens serves to underscore the importance of making information about the organizations that create these risks available to the public. To the extent that resources to collect and disseminate information are constrained, as they inevitably are, the principle of proportionality directs sustained effort to creating information about products and services because they pose a high proportion of the threats to citizens' well-being.

Within this category, the proportionality principle suggests that collective efforts to gather and disseminate information focus on products and services that pose the greatest risks to our well-being—upon which we rely for our health and safety or those that endanger us.

Domination Risk. Large organizations—especially governments—create laws, regulations, and other rules that order our social, economic, and political lives together. In confronting these organizations, citizens face the risk of domination: that the order under which they live is not one that they chose to live under nor one that serves their interests. Political freedom is certainly a vital interest, and so the proportionality principle directs attention to collecting the kinds of information that can help citizens assess and guard against domination risk. Though their language is different, mitigating domination risk is a central concern of many transparency activists.²⁰

Four different kinds of information about political processes are relevant for efforts to mitigate domination risk: transparency of the actors who influence the political process, of the formulation of laws and other rules that create social order, of the implementation and execution of that policy, and of its substantive consequences and outcomes.

First, citizens must be able to know the identity of social actors who seek to influence governance processes—to make rules in their favor, that comport with their ideology, or to disenfranchise others—and the character of their political activities. Existing requirements for the disclosure of campaign contributions advance this kind of political transparency. Political transparency requires even fuller public disclosure by any organization—whether wealthy donor, lobbying group, political association, or corporation—that influences the political process. Each of these groups seeks to impose its views—in large ways and small ones—upon the larger society through the political process. By their very nature, this enterprise creates domination risk for citizens. Thoroughgoing information about those activities is a necessary, though far from sufficient, condition for citizens to understand and defend against that risk.

A second important resource against domination risk is information about the internal decision-making processes of rule making. Citizens should have access to the justifications for different laws and policies, evidence that figured in those justifications, and full debate about rejected alternatives and rationales. Publicity requirements for lawmaking—such as sunshine laws and notice-and-comment provisions—help to satisfy this informational requirement. Only with such information can citizens gauge whether the reasons that justify laws are ones that they endorse and whether laws and other rules satisfy their intended purposes.

Beyond these inputs—political actors, their investments, and their arguments—to the rules that create social order, a third important kind of information to protect against domination risk makes transparent the implementation of laws and policies. For example, transparency activists in many different societies attempt to monitor actual flows of public funds to identify the kinds of theft, corruption, and abuse of power in which powerful political and social actors exploit their proximity to political power to plunder public coffers. Constructively, activists often utilize this information to increase the proportion of resources that fulfill their stated purposes. To address corruption at the village level, for instance, organizations such as the MKSS in Rajasthan, India, have pioneered social audits as a tool to identify and correct discrepancies between actual and stated spending upon village-level public goods.²¹ At the national level, the United States government made vast amounts of data regarding spending of more than \$275 billion under the American Reinvestment and Recovery Act publicly available.²²

A fourth kind of information concerns the outputs of state action. Detailed records of what the governments actually do—its “outputs”—can help citizens to assess whether some social and political groups are using rule-making processes to dominate others. For example, the collection and analysis of differential police enforcement (e.g., profiling), sentencing, and incarceration actions has supported criticisms that the criminal justice apparatus in the United States enforces an order of racial domination and discrimination. On the other end of the spectrum of advantage, records of regulatory enforcement actions on powerful industrial actors—such as banks, mining and extractives industry operators, pharmaceutical companies, and automobile manufacturers—can indicate the extent to which the systems that are meant to regulate these industries for public benefit have instead been captured by them.

The proportionality principle directs us to collect and publicize information that reveals, and so creates a basis for combatting, domination risks. What kinds of domination take priority over others as threats to citizens vital interests? This is not the occasion to develop such a scale. Different kinds of domination, however, clearly threaten basic liberties (e.g. incarceration and even the death penalty), basic needs (e.g. to critical infrastructure and services), and equality of opportunity of citizens. Collective efforts to develop transparency as a counterforce against domination should perhaps focus on the arenas in which liberty, needs, and fairness are most threatened.

Externalities, Spillovers, and Systemic Risk. Information can also help citizens manage a third major kind of risk that comes from harmful externalities produced as

consequence of the ordinary activities of large private and public organizations.²³ The most familiar instances of this phenomena come from the environmental area—think of toxic pollution, carbon releases, and consequent global climate change. Or, consider catastrophic accidents such as the industrial release of Methyl Isocyanate gas from a Union Carbide facility in Bhopal, India in 1984, the Exxon Valdez oil tanker spill in Prince William Sound in 1989, or the Deepwater Horizon blowout in the Gulf of Mexico in 2010. In the wake of the global financial crisis, the world has become acutely aware of the harms that can result from the spillover effects of financial decisions by large private and public organizations. These decisions wreak havoc, not just for the narrow sellers and buyers of complex instruments, but for all who rely on the integrity of financial systems for housing, productive economic investment, pensions and security, and countless other domains. That is to say everyone. At the limit, some of these externalities create systemic risks for natural and socioeconomic systems.

Under the proportionality principle, Infotopia requires that information about organizations that produce such spillovers and systemic risks be plentiful and widely available. Such information enables publicly interest organizations—such as civil society groups, watchdog organizations, and independent journalists—to monitor the production of externalities and to call attention to them. As with the other kinds of risk discussed above, these public activities do not substitute for the regulatory activities of a well-constituted government. Tragic events repeatedly demonstrate, however, that the efforts of government—either for want of capacity or will—frequently fail to control negative environmental and economic externalities. Informationally empowered civic efforts can thus complement formal regulatory efforts in this domain.

In the pollution domain, a family of efforts called Pollution Release and Transfer Registries (PRTR) illustrates how information can help society tame negative externalities. The registries require industrial facilities to publicly report the quantities of certain listed pollutants that they release into the ecosystem or transfer elsewhere. One of the oldest and best-studied PRTRs is the Toxics Release Inventory (TRI) in the United States.²⁴ Created in the late 1980s, the TRI now requires operators of some 20,000 facilities across the United States to report the volumes of their releases of any of 600 chemicals. The US Environmental Protection Agency makes these data public, but several environmental and watchdog organizations repackage and “mash-up” these data to make them more comprehensible. Citizen groups can use TRI data to monitor the pollution performance of facilities in their communities. For journalists, TRI has proven to be a useful resource for generating rankings of top polluters. Corporate and facilities managers, up to the level of chief executives of major chemical corporations, have attributed embracing pollution reduction as an organizational priority to the existence of TRI data.

Pollution certainly remains a large environmental concern in the United States and other societies with PRTRs. The TRI lacks neither flaws nor critics. Nevertheless, data such as those provided by the TRI offer important resources for citizens to monitor externalities and even systemic risk in this important domain. The principle of proportionality instructs transparency advocates to direct their attention to liberating information and constructing data sets that illuminate the most threatening kinds of

externalities and potential systemic risks—for example to the financial system, to systems of pensions and old-age provision, and other environmental arenas such as global climate change.

Consider a financial analog to pollution. Toxicologists and environmental health experts have for decades devoted themselves to establishing and publicizing the identities of noxious pollutants and their health effects. In Infotopia, data and metrics regarding the contents and risks of complex financial assets would be available and broadly understood. Pollution registries do not just report volumes of pollutants, but associate those emissions with particular facilities and the corporate entities that own them. In doing so, they enable citizens to grapple not just with levels of risk, but to identify the organizations that create that risk. Similarly, in a financial Infotopia, information about the risks associated with underlying assets and activities of all sorts of financial actors—banks, pension funds, corporate holdings, governments, nonprofit institutions—would be publicly available so that citizens could better assess the externalities and systemic risks facing them, and decide which financial actors create the largest such risks.

The political challenges to creating rich information about externalities and systemic risks are daunting. Compared to product and services or domination risk, those who stand to suffer from externalities and systemic risk are in almost all cases much more diffuse in the intensity of their interest in preventing those externalities. It will therefore be more difficult for them to mobilize and organize to create the relevant kinds of transparency. The success of the Toxics Release Inventory in the United States has depended upon a vibrant environmental movement and political discourse, developing for two decades prior, that sought to remove threats to the environment. There is as yet no analogous political or social force in the financial arena, devoted to assuring the integrity of the system as a common good upon which we all depend by seeking to understand and publicize the many threats to it.

Stopping Rules? As cast above, one worry is that there is no limit to the degree of information that the proportionality principle demands. By itself, therefore, the proportionality principle is incomplete because it does not guide judgments about when information should *not* be made public. What, then, are the Infotopia's stopping rules? What are the rules that tell us when there is too much information?

Infotopia rejects one obvious stopping rule: concerns about privacy *as a first-order consideration*. It is critical to distinguish between two kinds of information: information about *individuals* (e.g., health conditions, library books they read or Internet sites they visit, their genetic information, their search behavior, other conduct) and information about *organizations* (e.g., features of the products they produce, their manufacturing or service delivery processes, their policy- and decision-making methods, their impacts on employees or the environment). Individuals have vital interests in privacy. Organizations do not. Infotopia, as described above in the discussion of scope, concerns information about organizations, not about individuals. As laid out here, Infotopia is silent regarding the ways in which individuals should publicly disclose information

about themselves. Therefore, privacy is poor starting point from which to develop the stopping rules for Infotopia.

At a high level of abstraction, it is more appropriate to develop the stopping rules from the very same concerns that give rise to the need for information in the first place: citizens' vital interests. Just as more information about large organizations can help citizens to protect their interests in the face of these large organizations, it is also true that compelling these organizations to provide some kinds of information may harm citizens' interests. The stopping rule, then, is simply this: *Information about organizations and their activities should not be made public when such publicity would threaten citizens' vital interests.*

This stopping rule has implications for many different kinds of information policy, and working it out its implications will often be controversial.

In the arena of sunshine laws and publicity about government decision making, for example, it may well be the case that limiting the transparency of policy-making debates can increase candor, compromise, and so result in the laws and policies that better protect citizens' interests.²⁵ In the 1990s, a Boston organization called the Public Conversations Project hosted a conversation between pro-life and pro-choice leaders in the wake of a 1994 tragedy in which John Salvi shot a receptionist to death and wounded several others in a Planned Parenthood clinic in Brookline, Mass. These organizational leaders agreed to reduce the vitriol of their public struggle and to open continuing lines of communication to deal with conflicts with the potential for violence. One notable feature of these conversations is that they were very secret—the leaders believed that “talking with the enemy” would not have been possible if rank-and-file movement members were aware that such a conversation was taking place.²⁶

Trade secrets and “proprietary information” are frequently deployed as arguments against transparency. In Infotopia, those arguments are successful when there is a case that making such information public would do more harm, or less good, to citizens' vital interests than keeping it secret. But in Infotopia, large organizations do not have bases for confidential information (e.g., an organizational right to privacy or propriety) outside of that relationship to citizens' vital interests. When demands for confidentiality and publicity clash, Infotopians seek to resolve the conflict by devising informational strategies that will allow citizens to protect themselves while nevertheless protecting some realms of secrecy when justified.

Suppose, for example, that a pharmaceutical manufacturer claims secrecy for its products and processes on the basis that such secrecy will incentivize the company to invest in research that yields life-saving drugs. Yet, consumer advocates demand greater transparency to allow them to detect harmful side effects and to assess the efficacy of those very same drugs. A balanced informational strategy might be to allow the company to keep its manufacturing process and formulations secret, while requiring full disclosure with respect to the conduct of the clinical trials (and identity and compensation of clinicians) as well as the reported positive and negative experiences of patients who take the drugs.

Finally, privacy does figure as a second-order concern for stopping transparency. Governments and private sector organizations now hold an enormous amount of information about individuals. There are many situations in which disclosing individual information would help citizens to protect their vital information. In the drug case above, full information—including personal identities and health histories—of patients taking particular drugs might indeed enable patient protection advocates and analysts to more quickly understand the harms and benefits of drugs. But those individual patients also have a vital interest in privacy. Infotopia might seek to advance both vital interests by, for example, disclosing anonymized information.

Accessibility

The third principle of Infotopia is that information should be accessible. As I use the term here, accessibility differs from availability in that it is a cognitive condition. Information is accessible to someone if they can make sense of that information as a factor that guides the formation of their views, decisions, and actions. Accessibility, then, depends upon but does not end with the availability of information. Accessibility requires agents who are motivated to acquire information and capable of processing it in specific ways. In considering the principle of accessibility, it is important to note that there are two broad categories of potential information users (the “someones” for whom information ought to be accessible): individuals and intermediary organizations. In thinking about information and transparency, we are tempted to focus on the first, but both kinds of information users are critical, and mutually supportive, in Infotopia. Each has different conditions of accessibility.²⁷

Individuals. In their roles as consumers, investors, clients, and citizens, individuals rely upon information to make choices about cars, restaurants, breakfast cereals, houses, residential communities, pension plans, health care providers and political representatives. For information to be accessible and so figure constructively in such decisions, that information must be (i) salient to individuals’ values, (ii) offered in a time and manner that matches their habits of information acquisition, and is (iii) compatible with individuals’ economies of information processing and behavioral limitations.

A simple but powerful illustration of accessibility comes from the system of ranking restaurant hygiene in Los Angeles County. Since 1998, the Los Angeles County Department of Health Services has required all restaurants to post a letter grade—A, B, or C—that reflects their most recent health and safety inspection rating. Researchers have shown that this system has contributed to improvements in the cleanliness of restaurants as well as reductions in hospitalizations for foodborne illness.²⁸ The Los Angeles restaurant report card system is highly accessible.

First, the system offers information that is highly salient to the values of most restaurant goers: they don’t want to get sick. Second, report card information is provided in a time and manner—near the front entrances of restaurants—that is well suited to the ways in which consumers acquire information about restaurants generally: from street and building signage. Third, the information is provided in a way that requires

little cognitive energy. Consumers receive a summary rating (as opposed to a disaggregated breakdown of inspection elements such as refrigeration temperatures, food storage practices, cleaning routines, and so on) that is keyed to an index that is familiar to most of them from primary school.

Though it serves to illustrate the main elements of individual information accessibility, the Los Angeles Restaurant Report Card example is also deceptive in its simplicity. Measures that ensure accessibility differ between issues and applications and elude any simple guidelines. The way in which individuals search out information to choose breakfast cereals, restaurants, surgeons, pension funds and cars all differ, so measures to assure appropriate time and manner will vary. While some information may be best offered at a point-of-purchase or service, online resources may be better suited to decisions in which individuals conduct research prior to a decision (as with cars or houses).

Solutions to accessibility must be especially attentive to the limits of cognition and the insights of behavioral decision making without taking behavior insights to the mistaken conclusion that individuals simply do not respond to information. In this way, Infotopia differs from many kinds of “nudges” and from libertarian paternalism generally.²⁹ Both libertarian paternalism and transparency begin with a common problem: individuals make decisions that are not good for them. The libertarian paternalist responds by creating a default selection for that individual that is generally superior from a welfare perspective. In New York City, for example, the Bloomberg administration attempted to ban the sale of soft drinks over 16 ounces in size and thus created a 16-ounce default serving size. Individuals may, of course, still drink 32 ounces by purchasing two 16-ounce servings.³⁰ In the pensions arena, many employers have begun to offer a standard, default option of an age-balanced portfolio that automatically shifts the investment balance to a lower proportion of (higher-risk) equities as a beneficiary ages.

From a cognitive perspective, libertarian paternalism has the marked advantage of requiring no cognitive effort from the individuals at all. Individuals simply accept the defaults that benevolent technocrats have determined to be good for them: for example, the 16-ounce soft drink and the age-adjusted pension investment plan. One objection to libertarian paternalism is that defaults may be difficult to properly set in some domains—perhaps because individuals’ needs are diverse (consider the restaurant hygiene example or the problem of automobile purchases). Another is that the technocrats who set the defaults may be themselves subject to inappropriate influences.

In its accessibility principle, democratic transparency responds to criticisms about cognitive and behavioral limits of individual decision making—that strong rational choice views make heroic assumptions about individual willingness and capacity to incorporate new information into decision making—while still presuming that individuals can and will make use of information under particular conditions. When individuals view the information as relevant to values they seek, when they can easily acquire that information in the course of their ordinary search routines, and when assimilating that information is worthwhile for them, compared to the importance of improving the decision that is at stake (e.g. report cards for small choices such as

restaurants and more detailed information for major choices such as mortgages, cars, and flat screen televisions).

Intermediary Organizations. Discussions of transparency usually focus upon individual users of information such as those just described. In actually existing transparency systems and in Infotopia, however, intermediary organizations often constitute the most democratically significant users of information. Think here of professionals in large organizations such as newspapers and television news, advocacy and watchdog organizations, investment analysts and institutional investors, and government inspectors and managers.

In the category of products and services risks described above, we can expect individual users to engage effectively when transparency systems are well designed—by complying with these four principles of democratic transparency—because their own needs and values are directly at stake. For the other two categories of risk—political domination and externalities and systemic risks—it is not individuals but larger organizational aggregates who will figure more largely, by exposing, advocating, mobilizing, and generating other forms of countervailing power to the organizations responsible for creating those risks.

One reason for the importance of such professional organizations (including civic groups and social movement organizations) is that those harmed by problems such as political domination and externality risk form large groups and so are often unmotivated as individuals to utilize information about such risks. In domains—such as political accountability, environmental protection, health care, employer behavior, pension fund investments—there are often professional and advocacy organizations that devote themselves to understanding and sometimes mitigating such risks, sometimes for their own narrow organizational aims and sometimes to advance a larger public purpose.

These organizations can be both end users of information and intermediaries who interpret and repackage that information for others. As end users, professional organizations consume data produced by transparency measures to advance their narrow organizational purposes, hopefully with the side benefit of mitigating important public risks. Pension funds and other institutional investors, for example, try to utilize corporate financial disclosures to make sound investments for the sake of their beneficiaries. Environmental interest groups use public information from databases such as the TRI and from regulatory enforcement agencies to support their lobbying efforts. In the 1980s, housing advocates used federally disclosed information about private bank lending activity to protest banks that they accused of engaging in racial discrimination (red-lining) and to negotiate with those banks to reform their lending practices.

Professional organizations also function as information intermediaries who process information and make it more accessible to their individual constituents. The Sunlight Foundation,³¹ for example, has created a large number of digital applications and platforms to make data about campaign spending, private sector lobbying, and legislative activity more accessible to individuals (and to journalists and others). Similarly, intermediary organizations have developed digital platforms that make pollution and other environmental data more accessible to their constituents.

Such informational intermediaries are critical in Infotopia because they are best suited to connect broader audiences with complex information and make it accessible to them. First, many of these organizations serve commercial, political, or social constituencies. As such, they are well suited to determine the informational needs of their constituents. Second, they possess channels of communication with their constituents (e.g., those who frequent their websites, publication subscribers, mailing list members) that facilitate the targeted transfer of important information. Third, professional organizations are more likely to possess the analytic capabilities necessary to organize complex information in sensible ways.

A key component of the accessibility principle, then, is that public information be provided in ways that are accessible to this vast array of intermediary organizations. As a matter of governance, disclosure requirements and transparency systems should be codesigned by public authorities working with those intermediary organizations that are likely to utilize information in ways that mitigate risks to citizens vital interests. As motivated and sophisticated users, these organizations are best suited to identify the most important kinds of information and for articulating how that information ought to be provided (data structures, formats, timing, etc.) so that it is most accessible and useful.

Actionability

Democratic transparency's fourth principle is that information should be actionable. Information that does not alter decisions and actions of its audiences—or its targets—cannot fulfill the central aim of Infotopia: to provide information that enables citizens to protect their vital interests. And yet, discussions of transparency focus largely upon assuring that information is available without sufficient attention to whether and how that information is used. Infotopia requires not just the disclosure of information, but economic, political, and social structures that appropriately facilitate action based on that information. A full inquiry of the structural conditions under which information leads to democratically constructive action is far beyond the scope of this paper. However, in this section, we considered three broad categories of action associated with information and some structural implications of those categories.

Individual Choices. Infotopia aims to inform and improve—either directly or indirectly—the quality of individual actions. That information is much more likely to be efficacious when individuals enjoy meaningful choices when they apply information. Information about the quality of a hospital or health care provider, for example, will be more helpful to a person who can travel to more than one hospital or clinic. Conversely, consider information about financial contributions to politicians' campaigns to mitigate political domination. This information is not automatically useful to a voter. In order to inform a choice on the dimension of money and politics, there are two necessary structural conditions that frequently do not hold. First, there must be competitive elections in which there is more than one serious candidate. But many elections in the United States are not competitive; Congressional incumbent reelection

rates typically surpass 90 percent.³² Second, there must be a meaningful difference between candidates regarding the quantity and sources of their political financing. If major candidates receive financing from very similar private sources, or in which the sources for each seem equally noxious after different fashions, campaign finance disclosures does not usefully inform individual choices.

The value of Infotopia, then, depends not just upon systems that provide information in the ways described above (available, proportionate, accessible), but the much more demanding requirement of social, political, and economic structures in which there are meaningful choices that can be guided by that information. Of course, the existence and development of such choices lies far beyond the bounds of even an ambitious informational agenda. Noting this connection between information and the structure of available choices has two implications for how transparency champions can focus their incremental efforts to build Infotopia.

First, in areas of public life that create great threats to vital interests, those who favor transparency should also favor structural reforms that create the relevant choices. The success of the information agenda frequently depends upon the success of other reform agendas. Those who favor disclosure of political spending should support and ally with those who favor reforms that increase the scope of political choice more broadly: efforts to increase political competition and choice through redistricting reforms, reforms to rules governing political parties, and to the electoral system more broadly.

Second, the “low-hanging fruit” of Infotopia lies in those arenas of economic and political life in which meaningful choices exist because there is variation among the class of organizations that threaten citizens’ interests, but in which salient information is spare. The Los Angeles Restaurant Report Card system illustrates this case perfectly. There is wide variation among the hygiene practices of restaurants, but it was difficult for consumers to understand the quality of those practices prior to the report card policy. In the short and medium term, transparency activities should focus their efforts on arenas in which such underlying variation and individual choice exist.

Civic Immune System. As we have discussed, organizations and professionals of different sorts, rather than individual citizens, often utilize disclosed information to good democratic effect. This is necessarily the case, not least because problems like political domination, spillovers, and systemic risk generate free-rider problems that hamper individual action for those who would organize to control these risks. Therefore, Infotopia requires a favorable structure of advocacy organizations, public interest groups, and other civic associations that are disposed toward transparency and capable of using the information that comes from it. The civic structure of Infotopia has two broad elements.

First, Infotopia requires an ecology of public interest civic associations that monitor and seek to limit the important threats to citizens’ vital interests. This ecology constitutes a kind of social immune system in which civic associations generate sources of countervailing power to the organizations—governments, private corporations, other civic organizations—that generate the various risks discussed above.

Groups that address products and services risks include consumer advocates, patients rights groups, parent associations, and the like. In the domain of political domination, the civic immune system includes anti-corruption campaigners, small “d” democratic reformers, good government organizations, and perhaps trade unions. Groups that address spillover externality risk—and at the limit systemic risk—include financial reform advocates and environmental groups. Consistent with the principle of proportionality, the density and capacity of such groups would ideally be greater where there are more serious risks and threats.

Second, Infotopia requires not just that there be capable countervailing civic organizations, but that they operate in ways that leverage the information rich environment that defines Infotopia. It is by no means a given that advocacy organizations will utilize data at their disposal, because they may be habituated to other strategies. Consider two contrasting strategies for fighting pollution. An environmental group might seek to reduce pollution by fighting for stricter environmental regulations and the enforcement of those regulations. This is a highly conventional advocacy strategy that does not rely on detailed information about actual pollution patterns.

Alternative information-based strategies are made possible by the presence of rich data such as that provided by the TRI. With facility-level information, it becomes possible for environmental groups to identify the worst polluters and target individual violators. In order to employ data for risk-mitigation advocacy, however, such groups require new capabilities and strategies. Rather than simply lobbying for stronger government action, they would use complex environmental disclosures to help guide that government action in a more nuanced way. Such groups would also utilize data to inform and mobilize popular constituencies. That is, they would use environmental disclosure data not just to make their case for pollution prevention to legislators and state regulators, but to citizens and even to private sector managers.

An Informationally Responsive State. In Infotopia, public disclosures catalyze not just individual and civil society activity, but also state action. Beyond this, levels of governmental investigation, regulation, and enforcement are structured in ways that create avenues for individuals and groups to themselves act more effectively by using information to trigger governmental action.

Government agencies typically employ internal inspections and other methods to gather specialized data to conduct their management and regulatory activities. In Infotopia, state agents can rely on sources of data that are much richer—though often less specialized—because they result from broader and more politically potent efforts to secure information from target organizations. In state-level management of US federal stimulus funds, for example, governors’ offices made use of recovery act spending disclosures—intended largely for broader public consumption—to improve the quality of their own public management. Similarly, regulatory agencies in Infotopia can draw upon a much wider array of information including employment conditions at workplaces, patient outcomes at health care facilities, pollution emissions of manufacturers, and investment and lending behavior of financial institutions.

But regarding state action, the real promise of democratic transparency lies not in the direct use of information by governments, but in collaborative synergies in which civil society actors use data to collaborate with government agencies to combat threats to citizens' vital interests. In Infotopia, state agencies are positively disposed toward such cooperation and so amplify the efforts of civic groups and citizens to act on information. To illustrate, consider the synergy between bank regulators and community organizations around Home Mortgage Disclosure Act (HMDA) data and efforts to combat racial discrimination in lending.³³ First passed in 1975 and then expanded subsequently in various years, HMDA requires banks to report disaggregated details about their home loan behavior to the federal regulatory authorities. As the name of the law suggests, those data are also disclosed publicly. Beginning in the 1980s, community organizations in urban communities used HMDA data to make a public argument that banks were engaging in discriminatory lending behavior. They then used HMDA data to identify the worst banks and target them with protests and subsequent negotiation. In this highly political process, the government did not simply make information available; in effect, it supported the activities of the community organizations through its enforcement role. It is, after all, illegal for banks to engage in discriminatory lending. The Community Reinvestment Act provides some levers for regulators and community organizations to make good on this regulatory aim by taking into account the actual behavior of banks. Federal regulators took into account the evidence and arguments amassed by community organizations in their decisions about regulatory approvals and enforcement. In this way, regulators used their regulatory powers in ways that incorporated priorities articulated by civic organizations, utilized their analytic capabilities, and created incentives for these community groups to become more organized and competent.

In Infotopia, these information-based state-society collaborations would be much more common than they now are. From the democratic perspective, they marry the power of the state to the energies and priorities of civil society. David Weil³⁴ and Janice Fine³⁵ have articulated similar proposals in the arena of labor standards regulation. But such state-civil society synergies are controversial compared to more traditional approaches that rely solely on governmental efforts, not least because those who are regulated fear biased and overzealous enforcement.

Infotopia in Health Care

To make the idea of Infotopia more concrete, consider briefly—and very speculatively—how the principles of democratic transparency might apply in health care (an important component in the category of products and services risk).

Each of us relies on a complex array of organizations to provide health care through a wide range of products and services. When those organizations act incompetently or without due regard for us, they threaten an interest that is literally vital—health itself. In Infotopia, these organizations would disclose information that enables individuals to protect themselves against health care risks and equips civic groups and government to more effectively reduce those risks. Consider three important kinds of organizations that create health care risks: health care providers, pharmaceutical companies, and insurers.

In a health care Infotopia, there would be much more information available about the comparative operations and performance of hospitals and health care providers. Providers would make public data about their operations that are directly relevant to preventable sources of death and illness: medical errors,³⁶ secondary infections, and so on. Information about success and failure rates for various treatments and therapies would also be publicly available, as would disaggregated cost data.

Further up the treatment chain, pharmaceutical companies and medical device manufacturers create health risks when they introduce unsafe or ineffective products.³⁷ In Infotopia, at least two kinds of disclosure would help to tame these organizations. The first is a more thorough regime of disclosure to address potential conflicts of interest around the research, development, and testing practices for new drugs and devices. Here, institutional corruption is one prime danger.³⁸ We rely upon individuals, such as doctors, and institutions, such as research hospitals and universities, to check the temptation of pharmaceutical and device companies to sell more products, even when their safety or efficacy is uncertain. A large conflict of interest—and potential threat to citizens' interest in health—arises when many of these individuals receive payments and perks from the very manufacturers whose products they assess. Systematic and thoroughgoing disclosure of the relationships between the producers and evaluators of health products in this domain would involve not simply knowing the sponsors and funding sources for particular studies, but also information on the extent of all manner of financial support for studies, scholars, and institutions by manufacturers. The second is actual performance information about drugs and devices—including not just academic studies, but field results as reported by clinical surveillance, reporting of adverse events, and even patient self-reports.

In the United States, the degree and quality of health insurance presents a third organizational threat to citizens' interests in health. Individuals frequently cannot access health care services because they lack insurance and so cannot pay for it, because their insurance coverage does not cover the treatments they require, or because insurers deny claims. Infotopia would create information bases about both (i) the formal coverage and cost provisions of health care plans, (ii) their substantive, realized performance on dimensions such as provider choice, claim approval/denial rates, and (iii) client satisfaction. Through individual and social information processing, these data would allow individuals to identify the plans that best suit their needs, arm civic and watchdog organizations with information that identifies poor insurers that threaten citizens' health, and create competitive pressures as employers, governments, and individuals use these data to select more effective insurance companies and plans.

To recap, the proportionality principle of democratic transparency indicates that Infotopia should generate plentiful data regarding health care products and services because health is a vital citizen interest. Within the domain of health care, the proportionality principle requires wide-ranging disclosures from providers, manufacturers, and insurers because those organizations create the greatest risks within health care. The availability principle indicates that many sorts of data about these three kinds of organizations should be publicly available—not just data about the promised characteristics of the those organizations' products and services, but also data about potential

conflicts of interest, actual performance (health outcomes, claim denial rates), and client satisfaction.

The availability of such data, however, is no guarantee at all that information will be accessible or actionable by those who rely on health care products and services. The satisfaction of those principles depends upon the complex interaction of public policies, civil society organizations, target organizations themselves, and the organization of political and economic structures that lie beyond the scope of Infotopia.

Because of its complexity and multidimensionality, health care information will only be accessible to individuals when informational intermediaries—for example, governments, employers, or consumer groups—process and package that information in ways that suit the values, needs, habits, and capabilities of consumers. For individuals, accessibility depends, in part, on information being provided at times when they face health care choices—selecting insurers, providers, or drugs and therapies, for example. It is unlikely that a database constructed by a public health agency will provide data (even if it is the right data to have) at such choice points. Instead, intermediary groups like employers and consumer health advocates are better positioned to know when individuals will actually use that health information, how to get it to them, and how to provide it in ways that people will comprehend.

For health care information to be actionable by individuals, they must have real choices. If there is only one health care provider within driving distance or if an employer offers only one health insurer, then comparative data about provider quality will not matter much. More intimately, comparative information about drugs, devices, and courses of treatment matter less for a patient whose physician does not discuss alternative medicines or therapies. In a world where health care information is both accessible and actionable by individuals, citizens' vital interests in health are protected in at least two important ways. First, people protect themselves by choosing less risky, more capable, providers of health products and services. Second, the revelation of comparative differences and the competitive pressures forced by individual choices compel health care organizations to improve their performance. Though these dynamics depend upon a world in which individuals enjoy meaningful, high-quality choices on these dimensions, an examination of how such choices might be expanded lies beyond the scope of this inquiry.

Infotopia in health care, however, does not rely solely, or even primarily, upon individual action to reduce health risks. As I have stressed throughout, to see individuals as the primary actors in the dynamics of transparency is often simple-minded and mistaken. This is certainly the case for health care: precisely because information is complex and multidimensional, and because target organizations are large and often face few competitors, large organizations play an essential role. Consumer health advocates, for example, would use comparative performance information to shame poorly performing insurers and providers and press them to improve, as community organizations used home loan data to pressure banks. Patient organizations would use conflict-of-interest and medical products outcome data to develop assessments of emergent and competing therapies and practices for their respective disease groups. Employers would utilize more plentiful outcome data to select between insurers, and

insurers to select providers. Infotopia aims to generate information that feeds virtuous dynamics in which countervailing power reduces health risks through political, social, and economic dynamics.

Toward Infotopia

The sections above sketch organizing principles so that information can be harnessed by democratic agents to reduce threats to citizens' vital interests. A society governed by those principles is an Infotopia. Compared to some of the proposals in the Real Utopias series—for example, the notion of a universal basic income³⁹ or for wide-ranging participatory democracy⁴⁰—Infotopia enjoys greater support in the current political discourse across much of the world. Whereas there are many skeptics of participatory democracy (who favor traditional representative government) and many more opponents of income and asset redistribution, the basic notion of transparency finds widespread support and few, perhaps too few, critics. Among governments, this support is manifest in the dramatic expansion of freedom of information laws, the Obama Administration's early commitment to open government, and the international Open Government Partnership. In global civil society, organizations such as Transparency International and the International Budget Partnership represent the leading edge of transparency.

Infotopia's four principles of democratic transparency offer both a critique and an extension of this current enthusiasm for transparency. That critique has five main components. First, transparency advocates should not focus just on governmental informational, but on information held by any large organization—including corporations and nonprofit organizations—that threatens citizen interests. Indeed, the focus on government may be counterproductive insofar as the politics of public accountability can work to undermine support for government generally, and government is the major force capable of bringing about democratic transparency. Second, transparency efforts should conceptualize information politically, as a resource to turn the behavior of large organizations in socially beneficial ways. Transparency efforts have targets, and we should think of those targets as large organizations—public and civic, but especially private and corporate—that would rather not provide information to the public. Third, the principle of proportionality should guide champions of transparency. Rather than focusing their efforts on the information that government happens to have or on the richest data sets, they should target the organizations that most threaten citizens' vital interests. Among views of transparency, the principle of proportionality is perhaps the most novel and distinctive component of democratic transparency. Fourth, we should avoid the common habit of thinking of individuals as the principal users and beneficiaries of transparency. Instead, professionals and organizations often constitute the most important users of public disclosures. Indeed, Infotopia depends upon a favorable structure of civic associations that are disposed and capable of using information in sophisticated ways. This structure is the "civic immune system" described in section 3 above. Fifth, the actionability principle directs our attention to the economic,

political, and social structures that determine whether individuals and organizations can use information to guide their choices and strategies. Though the reform of these structures is part of a broad agenda that extends far beyond the politics of information, the success of democratic transparency depends upon favorable structures of choice and action.

Even in a society in which these principles were fulfilled, Infotopia would not achieve Utopia. Information is never sufficient to secure important democratic values: welfare, public and private accountability, the protection of our other vital interests. But information about organizations upon which we depend is necessary for determining the extent to which those organizations advance or jeopardize our interests. Information is also a necessary ingredient for effective individual and social action that reorients those organizations in positive directions. The current discourse of transparency recognizes the importance dislodging information from reluctant and secretive organizations. Infotopia's four principles of democratic transparency extend and guide that basic insight by specifying the focus of such efforts and articulating the conditions under which information can produce consequences that are more desirable from the democratic point of view.

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Notes

1. The discussion in this paper builds upon, and extends, the discussion of transparency in Archon Fung, Mary Graham, and David Weil, *Full Disclosure: The Perils and Promise of Transparency* (Cambridge: Cambridge University Press, 2007).
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