

Pathologies of Accountability: ICANN and the Challenge of “Multiple Accountabilities Disorder”

Accountability is a core concept of public administration, yet disagreement about its meaning is masked by consensus on its importance and desirability. This article proposes a five-part typology of accountability conceptions. Transparency, liability, controllability, responsibility, and responsiveness are defined as distinct dimensions of accountability, providing an improvement on the current state of conceptual fuzziness. The typology provides a vocabulary for the core argument: that conflicting expectations borne of disparate conceptions of accountability undermine organizational effectiveness. This phenomenon—labeled multiple accountabilities disorder—is illustrated with a case study. ICANN, the Internet Corporation for Assigned Names and Numbers, is a nascent organization charged with administering the Domain Name System, the Internet’s address directory. In its four-year history, ICANN has been the object of much criticism. Conflicting accountability expectations have been a source of difficulty for ICANN’s leaders as they have steered the organization through its early years.

Accountability is good—there is little disagreement on this point. Seldom is an organization branded “too accountable.” Congressional oversight committees do not excoriate bureaucrats for excessive accountability. And yet while everyone agrees on its desirability, the meaning of accountability remains elusive.

The *Public Administration Dictionary* defines accountability as “a condition in which individuals who exercise power are constrained by external means and by internal norms” (Chandler and Plano 1988). This definition provides a sense of the word and hints at its many meanings. “External means,” for example, could include the directives of citizens, legislatures, elected and appointed executives, and courts. Laws, regulations, and moral principles also “constrain individuals who exercise power.” Is an organization accountable only if it is constrained by *all* of these external means? What if, to use the language of principal-agent theory, there is conflict among principals? What if a principal’s demand conflicts with an organization’s legal mandate? The answers to these questions depend on one’s understanding of accountability.

The lack of clarity regarding the meaning of accountability is particularly striking in contemporary popular use. President George W. Bush, for example, has said that both elementary schools and countries that support terrorism

must be held accountable (O’Neill 2001; Sanger 2002). Scholarly literature reveals a similar multiplicity of usage. Accountability connotes bureaucratic control in some articles and transparency in others. Some analyses treat “accountable” as a synonym for “law-abiding,” while others envision a responsiveness to popular demands.

Relying on a single word to convey disparate conceptual understandings masks disagreement over a core issue of political science. The perpetuation of fuzziness regarding this important term is a failing of our discipline. As Pennock (1952, 791) memorably observed with respect to related terms, “Where we should have clear concepts for scientific analysis, we are confronted with thought receptacles whose unexplored ambiguities constitute standing solicitations to fallacy—solicitations, it may be added, that receive a beautiful response.”

The first objective of this article is to establish a typology of the dimensions of accountability that are generally

Jonathan GS Koppell is an assistant professor of politics, policy, and organization at the Yale School of Management. His recent book, The Politics of Quasi-Government (Cambridge University Press), considers the implications of delegating government functions to hybrid organizations such as government-sponsored enterprises and government corporations. His current work focuses on the development of transnational governance institutions, pseudo-governmental entities with authority and responsibility that span political boundaries. He holds a doctorate in political science from Berkeley. E-mail: jonathan.koppell@yale.edu.

referred to in both popular and academic use. I do not suggest a new, all-encompassing definition of the word. There are enough already!

The Problem of Multiple Accountabilities Disorder

Lack of conceptual clarity presents more than a rhetorical problem. The many meanings of accountability suggested by the varied use of the word are not consistent with each other: that is, organizations cannot be accountable in all of the senses implied by this single word. Consider the example of judges.

Judges are often said to be unaccountable because they are appointed, often for lengthy or unlimited terms. The implicit contrast is with elected officials, who are said to be accountable because they can be dismissed by voters. Similarly, judges are expected to act independently as impartial, neutral arbiters. The idea of judges following orders is anathema. But bureaucrats are often described as unaccountable precisely *because* they are beyond the control of legislators and elected executives. Are we to infer that judges are *intended* to be unaccountable? The answer, of course, is no. Judges ought to be accountable in yet another sense. Accountability, when applied to judges, involves fidelity to laws, principles, and norms of objectivity.

Ambiguity in the operative notions of accountability is not a benign problem. In this article, I argue that the lack of specificity regarding the meaning of accountability—or failure to articulate a choice—can undermine an organization's performance. First, the organization may attempt to be accountable in the wrong sense (such as a judge taking orders). Second, and perhaps worse, an organization may try to be accountable in *every* sense. Organizations trying to meet conflicting expectations are likely to be dysfunctional, pleasing no one while trying to please everyone. Ironically, this may include failures of accountability—in every sense imaginable.

The second section of this article describes this phenomenon and labels it *multiple accountabilities disorder* (MAD). The novel typology of accountability concepts is employed to show the challenges for an organization that attempts to be accountable in multiple senses. The contention is that the organization suffering from MAD oscillates between behaviors that are consistent with conflicting notions of accountability. The organization will sometimes emphasize the directives of principals, while at other times try to focus on customers. In the long run, overseers and constituents are displeased and the organization struggles. The MAD phenomenon is illustrated with a sketch of a unique organization, the Internet Corporation for Assigned Names and Numbers (ICANN).

Five Dimensions of Accountability

Layering every imagined meaning of accountability into a single definition would render the concept meaningless. That is, in essence, the current state of affairs. The proposed typology will facilitate clearer discussions of accountability. In the political context, one's conception of accountability is tied to beliefs about the nature of a just government, the role of the citizenry in setting policy, and the interaction between elected officials and career civil servants. Thus, the operative definition of accountability reflects one's understanding of the place of bureaucracy in a democratic state.

In other contexts, one's definition of accountability reflects beliefs about the ideal relationship between actors. For example, the definition of an "accountable chief executive" depends on one's vision of the relationship among the board of directors, management, the stockholders, and so on. For nonprofits, accountability reflects the ideal relationship among leaders, contributors (living and dead), the community, and society.

Such expectations are never static. The sentiment that government organizations should satisfy their customers, for example, represents a shift away from traditional expectations of hierarchical control. The accountability typology provides a vocabulary to describe such shifts.

Scholars have offered typologies of accountability to help us articulate the value emphasis underpinning approaches to public administration. In substance and spirit, this article relates most directly to the typology of accountability types that Romzek (with several coauthors) has applied in multiple public-sector contexts. In one article, Radin and Romzek characterize accountability relationships on two dimensions: "the source of control (whether it is internal or external to the agency) and the degree of control (whether it involves a high degree of control and close scrutiny or a low degree of control and minimal scrutiny)" (1996, 61). This approach yields four accountability types—hierarchical, legal, professional, and political—each of which is associated with a different "value emphasis" (Romzek and Ingraham 2000). Romzek and her coauthors demonstrate how different accountability types are operative in different contexts.

The weakness in this schema is its focus on control. This approach seems to mix together types of accountability that are substantively different. For example, political accountability is marked by an expectation of "responsive [ness] to key stakeholders" (Romzek and Dubnick 1987). The source of control is external and the degree of autonomy is high. This approach conflates an organization's responsiveness to entities that have formal authority (such as Congress) and organizations that have influence but no formal authority (such as interest groups). It makes more

sense, in my view, to treat these as distinct conceptions of accountability.

Some typologies of accountability focus on the substantive issues at the heart of an organization's oversight. Behn (2001), for example, sorts disparate cries for accountability into four categories: accountability for finances, accountability for fairness, accountability for abuse of power, and accountability for performance. He argues there is an "accountability bias" because of the relative ease of holding an individual or organization accountable on the grounds of fairness or finances. The higher probability of finding wrongdoing increases the likely payoff for those charged with holding others accountable.

While this insight is useful, Behn gives less attention to the *nature* of accountability. What makes an organization accountable for finances? That it manages finances as ordered? That it manages finances well (that is, such that a surplus is generated)? Does it mean the organization manages finances in accordance with accepted procedures? Or that it manages finances in an open and reviewable fashion? These questions hint at the dimensions of accountability described in this article.

The five dimensions of accountability offered are transparency, liability, controllability, responsibility, and responsiveness. These categories are not mutually exclusive—that is, organizations may be accountable in more than one sense. Indeed, the first two kinds of accountability (transparency and liability) can be thought of as foundations, supporting notions that underpin accountability in all of its manifestations. This is an important point because it implies that MAD is not inevitable. Some organizations do not face conflicts, while others are better able to manage conflicts when they do arise. There is greater tension between the three substantive conceptions of accountability (controllability, responsibility, and responsiveness), which are discussed later.

For each dimension of accountability, a critical question is articulated. This question is the practical extension of the concept. That is, for each dimension of accountability there is a question to be asked of an organization or individual to determine its accountability in that sense (table 1).

Table 1 Conceptions of Accountability

Conception of accountability	Key determination
Transparency	Did the organization reveal the facts of its performance?
Liability	Did the organization face consequences for its performance?
Controllability	Did the organization do what the principal (e.g., Congress, president) desired?
Responsibility	Did the organization follow the rules?
Responsiveness	Did the organization fulfill the substantive expectation (demand/need)?

Transparency

Transparency is the literal value of accountability, the idea that an accountable bureaucrat and organization must explain or account for its actions. Thus, an accountable organization cannot obfuscate its mistakes to avoid scrutiny. The scandal over federal law enforcement agencies' handling of the post-Waco investigation—the FBI and Bureau of Alcohol, Tobacco, and Firearms seemed to cover up questionable decisions—essentially concerns a violation of this type of accountability (Labaton 1993).

Transparency is most important as an instrument for assessing organizational performance, a key requirement for all other dimensions of accountability. Thus, transparency is a critical tool. It is also an end in itself. Belief in the openness of government to regular inspection is so firmly ingrained in our collective consciousness that transparency has innate value.

In practice, transparency requires that bureaucrats be subject to regular review and questioning. Alleged wrongdoing or perceived failure must be investigated and explained. A transparent public organization grants access to the public, the press, interest groups, and other parties interested in the organization's activities. In the American context, transparency has been institutionalized in the form of Freedom of Information Act requirements, sunshine laws, and other regulations that open up the governmental process to review. Private-sector organizations are subject to similar requirements, especially those that are publicly traded or issue securities. Transparency here requires the presentation of truthful information to stockholders, creditors, analysts, customers, and regulators in required reports, prospectuses, and filings.

The critical question for evaluating organizational accountability along the transparency dimension is straightforward: Did the organization reveal the facts of its performance?

Liability

Some conceptions of accountability require individuals and organizations to face consequences that are attached to performance. This conception attaches culpability to transparency. In this view, individuals and organizations should be held liable for their actions, punished for malfeasance, and rewarded for success.

The liability dimension of accountability, although seemingly alien in the public sector, is quite familiar with respect to elected officials. Elected representatives are said to be accountable because voters can "punish" them by removing them from office (Goodin 2000). It is in this sense that bureaucrats and judges are sometimes said to be unaccountable.

Liability for unelected persons and organizations may involve alternative forms of punishment. In the public and

the private sectors, bureaucrats are criminally liable for stealing funds, misappropriating resources, or abuse of authority. Similarly, organizations can be held criminally liable for illegal activities. Witness the indictment and plea bargain of the Arthur Andersen accounting firm for its actions related to Enron. Negative consequences do not have to involve criminal penalties to fulfill the liability vision. Poor performance evaluations, with a consequent impact on compensation, are consistent with this dimension of accountability. This also applies to organizations. For example, proposals for reforming education have suggested schools that fail to meet performance standards should face budget cuts (Scales 1999).

Remunerating managers based on their individual or organizational performance is consistent with the liability vision of accountability. This is, of course, most familiar in the private sector. Employees in a host of jobs receive bonuses tied to their performance, and many are compensated based on performance (for instance, sales personnel who are compensated on a commission system). This approach has been imported into the public sector. Some government agencies provide cash bonuses to employees who are cited for outstanding performance. New York City school superintendents, for example, are now eligible for bonuses (New York City Department of Education 2002). This approach has been adapted to whole governments. Under a provision of the 1996 welfare reform law, for example, the federal government granted \$20 million to select states based on their ability to reduce the number of children born to unwed mothers (Healy 1999). The five states with the best performance were “rewarded” for their achievement in reducing the number of births to single mothers.

The animating principle of liability as an element of accountability is that the mere revelation of wrongdoing or poor performance does not constitute accountability. Consequences must be attached to performance in the form of professional rewards or setbacks, added or diminished budget authority, increased or diminished discretion, or reduced or increased monitoring.

The key question, then, in assessing the liability dimension of accountability is this: Does the individual or organization face consequences related to performance?

Controllability

Three substantive dimensions of accountability are built on the foundation of transparency and liability. The dominant conception of accountability revolves around *control*.

If X can induce the behavior of Y, it is said that X controls Y—and that Y is accountable to X. Although few relationships between bureaucratic principals and agents are so straightforward, this conception is the starting point for many analyses of organizational accountability. The plausibility of bureaucratic control has been the subject of de-

bate from the early days of public administration (Barnard 1938; Selznick 1957). Wilson (1887) and Goodnow (1900) offered the normative ideal of a politics–administration dichotomy. In their vision, elected officials should reach consensus on public policy objectives and rely on bureaucrats to implement their chosen policies.

Consistent with this conception, Herman Finer, in his seminal dialogue with Carl Friedrich, laid out the case for indirect popular control of government bureaucracies as the critical element of accountability. He argued that government bureaucracies should carry out the will of the people as expressed through their elected representatives. An accountable government, according to Finer, is one in which the people possess “the authority and power to exercise an effect upon the course which the latter are to pursue, the power to exact obedience to orders” (Finer 1941). Thus, an organization’s accountability depends on the answer to this key question: Did the organization do what its principal (Congress, the president, etc.) commanded?

Much recent political science research has investigated this question. Using formal, social choice and transaction costs models, several scholars have assessed the degree of congressional control over federal bureaucracies (Ferejohn and Shipan 1990; Hill and Brazier 1991; Horn and Shepsle 1989; McCubbins, Noll, and Weingast 1987; Robinson 1989; Weingast and Moran 1983). The ability of presidents (and their appointees) to control bureaucrats has also been examined (Aberbach and Rockman 1988; Beck 1982; Eisner and Meier 1990; Golden 1992; Krause 1994; Moe 1982; Wood and Waterman 1994). Some such studies have focused on the competition for control among the president and Congress, interest groups, and career civil servants (Hammond and Knott 1996; Hecl 1978; Wilson 1989). The courts have also been the focus of investigation (Mashaw 1994; Melnick 1983).

A more nuanced understanding of controllability is reflected in the public administration literature. As I described earlier, Romzek differentiates four accountability relationships (Romzek and Dubnick 1987; Radin and Romzek 1996; Romzek 1996; Romzek and Ingraham 2000). This typology is based on a characterization of the degree (low/high) and source (internal/external) of control over organizations. In her research, Romzek demonstrates that, contrary to the underlying assumptions of empirical bureaucratic control research, more control is not always desirable or pursued.

Gruber (1987) offers an explanation for variation in control expectations. She defines the “terrain” of accountability by focusing on the degree of constraint on organizational behavior in both procedural and substantive arenas. In this framework, organizational autonomy—from tight to loose constraint—is linked to underlying beliefs about the capability of the citizenry. An agency operating in a

complex, technical area should find itself in the loose constraint area because citizens' (or elected representatives') ability to make reasoned judgments is limited.

Although these analyses probe variations in controllability expectations, they do not include noncontrol visions of accountability. Rejection of control as the core concept of accountability is not always based on beliefs about technical complexity or citizen capability.

Responsibility

Bureaucrats accountable in the controllability sense are constrained by the orders of principals. Alternatively, bureaucrats and organizations can be constrained by laws, rules, and norms. This dimension of accountability is labeled *responsibility*. Of course, the broadness of the responsibility dimension provides for many alternative visions.

Fidelity to law is most straightforward, if somewhat out of fashion. Moe and Gilmour (1995) urge a return to public law principles in public administration. This requires emphasis on legal requirements regarding organizational behavior, incorporation of policy and program objectives into legislation, and elimination of plural executives (commissions, committees, etc.) that confuse lines of authority. By this account, adherence to the law is preferable as an ideal for bureaucracy than allegiance to a principal. Thus, proponents of the public law approach object to novel institutional arrangements that diminish this type of accountability (Leazes 1997; Moe 1994, 2000).

Responsibility can also take the form of formal and informal professional standards or behavioral norms. Such standards may encourage better behavior and set expectations against which bureaucrats can be evaluated (DiIulio 1994; Kearney and Sinha 1988; McKinney 1981). This idea of responsibility is a key element of the alternative notion of accountability articulated by Carl Friedrich (1940) in his debate with Finer. Accountable bureaucrats should not simply follow orders, Friedrich argues, but should use their expertise constrained by professional and moral standards. Not surprisingly, some have argued that professional standards can, in fact, hinder control by substituting professional interests for public concerns (Hummel 1987; Mladenka 1980; Piven and Cloward 1971; Tullock 1965).

Responsibility can pertain to internal standards of behavior and performance that are not set by legislators. For example, Bernard Rosen (1989) outlines responsibilities to "make laws work as intended," to "initiate changes in policies and programs," and to "enhance citizen confidence in the administrative institutions of government." Sometimes such obligations are explicit, as in the case of oaths. All federal employees pledge to "support and defend the Constitution of the United States." In other instances, obligations are moral or implicit. Thus, we would expect an individual not to steal even if ordered to do so. These gen-

eral responsibilities may differentiate the accountability of a public bureaucrat from the accountability of a private bureaucrat, but there are identifiable analogues. For example, corporate directors have a general fiduciary obligation to shareholders, and doctors are obliged to protect their patients' well-being.

All of these variations on responsibility boil down to a core question that is quite different from the one at the heart of controllability: Did the organization follow the rules?

Several scholars have pointed out that Congress can structure procedural features to produce desired outcomes (Bawn 1995; Epstein and O'Halloran 1994, 1996; McCubbins, Noll, and Weingast 1987). For example, requiring cost-benefit justifications for environmental regulations can effectively circumscribe potential regulations. In such instances, responsibility to the law collapses into control. Fidelity to such laws is not an alternative to control. Wood and Waterman (1994), however, make the interesting point that bureaucracies, by remaining true to laws enacted by the previous legislature until new law is passed, preserve formal expressions of policy, thus keeping policy making in the congressional realm.

Responsiveness

Another alternative to the hierarchical controllability approach to accountability is, in a sense, more horizontal. *Responsiveness* is used here to differentiate an organization's attention to direct expressions of the needs and desires of an organization's constituents (or clients) from the orders of elected officials. This element of accountability is emphasized in the customer-oriented approach suggested by reforms aimed at reinventing government (Osborne and Gaebler 1992; Sensenbrenner 1991). Note that "responsiveness" is often used to connote the sense of accountability described above as controllability (Romzek and Dubnick 1987; Rourke 1992). Responsiveness, as it is used in this typology, turns accountability outward rather than upward.

There are at least two interpretations of the responsiveness conception. One focuses on the *demands* of the people being served, the other on the *needs*. Consider demands first. An organization can be responsive to demands in different ways. An organization might poll its customers to determine their preferences, solicit input through focus groups, or establish advisory councils with representation of key constituent groups. Organized interest groups also serve the function of aggregating and articulating preferences of affected communities. Profit-seeking organizations must be accountable in this sense or they will perish. Companies carefully track consumer preferences through analysis of the market and allocate resources accordingly.

Needs-oriented responsiveness focuses on an organization's substantive goals. That is, an organization is account-

able if it accomplishes a substantive objective or obviates a particular need. Note the difference in emphasis: Under the control conception, if a bureaucratic agency receives a command, its accountability is judged on the basis of the extent to which it carried out that order. If bureaucrats are responding to popular preference (that is, demands) their accountability is a function of consumer satisfaction. An emphasis on substantive expectations (reducing poverty or increasing economic activity, for instance) shifts the standard of accountability to performance. Organizations are responsive (accountable) if they meet the needs of the population they are serving. This is sometimes described as a bottom-line vision of accountability.

The two different shades of responsiveness—one focused on demand, the other on need—share a common standard of evaluation: Did the organization fulfill its substantive expectation? The difference lies in the determination of that expectation. The demand approach looks at citizen or constituent preferences, while the need approach relies on an assessment of the public policy goals the organizations ought to be pursuing.

Responsiveness is more consistent with responsibility than with control. Indeed, the combination of formal and informal norms with performance-based evaluation presents an alternative vision of accountability to hierarchical control. Without the ability to make discretionary decisions, a bureaucrat may not be responsive or responsible because she is focused on satisfying the principal; a relaxation of demands for hierarchical control is required. Thus, O’Laughlin (1990) concludes, a responsive, responsible bureaucracy can only function when “spheres of discretion and non-discretion” are clearly differentiated.

The Roots of Multiple Accountabilities Disorder

Distinguishing among the five dimensions of accountability is necessary to evaluate the accountability of any organization or individual. Determining whether an organization is accountable depends a great deal on which dimension of accountability one has in mind. Comparing the fundamental question at the heart of each conception of accountability makes this point quite clearly (table 1).

Unfortunately, these notions of accountability are rarely differentiated. Organizations are often expected to be accountable—explicitly or implicitly—in every sense. This is unlikely. It is challenging enough for an entity to be controllable when multiple entities are issuing directives. In some cases, an organization cannot concomitantly satisfy hierarchical superiors, behave consistently with all laws, norms, and obligations, and respond to the demands or needs of constituents. When an organization is ordered to do something that is at odds with professional expecta-

tations or contrary to the needs of its constituency, how can it be accountable in all five senses? When organizations attempt this bureaucratic version of Twister, they may suffer from a syndrome I call *multiple accountabilities disorder*.

A MAD Case Study: The Internet Corporation for Assigned Names and Numbers

This section introduces multiple accountabilities disorder with the case of the Internet Corporation for Assigned Names and Numbers (ICANN), a young organization exhibiting symptoms consistent with the disorder. This portrait illustrates the claim that conflicting accountability expectations contribute to organizational dysfunction. Rather than satisfying all conceptions of accountability, the MAD-afflicted organization often satisfies none.

Although unclear accountability expectations may lead to MAD, the syndrome is avoidable. Just as some individuals exposed to contagious pathogens emerge unharmed, some organizations face conditions that are conducive to MAD without exhibiting symptoms. In some cases, the disparate notions of accountability do not present conflicting imperatives (for instance, the principal’s demands are consistent with the organization’s responsibility). Even when there is conflict, organizations that remain focused on one dimension of accountability (such as responsibility) are likely to be MAD resistant. However, the pressure to meet multiple accountability expectations is intense and not easily resisted.

Diagnosing the MAD sufferer is difficult because the shortcomings attributable to the disorder can be explained by other factors that are unique to each patient. This is certainly the case with ICANN. Although this brief narrative falls short of a full case study due to space constraints, it offers preliminary support for the MAD hypothesis and diagnosis. The organization behaved inconsistently, frequently reversing course and undermining support while appealing to various notions of accountability. Nevertheless, the shortcomings of ICANN or any other organization are not due solely to MAD. ICANN faced a complex environment, an unprecedented assignment, and an ambiguous relationship with the U.S. government; all of these factors contributed to the difficulties experienced by the organization. This description of ICANN is not intended to be comprehensive. It highlights selected episodes and does not refute other accounts of ICANN’s trials.

Patient History

The Internet Corporation for Assigned Names and Numbers has been a controversial entity since its birth. ICANN is not a government agency; neither Congress,

the president, nor any federal official established it. Rather, ICANN's parents are a group of Internet pioneers who established the early working rules of the Internet under the banners of the Internet Engineering Task Force and Internet Assigned Numbers Authority.

The Internet Engineering Task Force set many of the early technical specifications of the Internet under a series of U.S. government contracts and grants. The Internet Assigned Numbers Authority was an unincorporated entity that was essentially an organizational name for Jon Postel, considered by many to be the godfather of the Internet. It focused on a specific aspect of the Internet, the manner in which names are assigned to the many computers linked by computer networks. This became known as the Domain Name System (Mueller 2002; Zittrain 1999). As the Internet became more widely used, there were an increasing number of conflicts related to the system, known as the DNS. For example, there was little consensus as to the proper means of selecting new top-level domain names (such as .com and .edu). Postel and his colleagues moved to formalize the Internet Assigned Numbers Authority as the legitimate authority for resolving such disputes. He organized the Internet Ad Hoc Committee, a group that brought together some—but not all—interested parties to hammer out a memorandum of understanding (Mueller 1999; Zittrain 1999).

Postel and his colleagues were rebuffed by the government contractor managing the root servers—the computers containing the directory of all Web site names and addresses—which refused to add the domains suggested by the committee. This impasse forced the U.S. government to resolve the dispute and inevitable future conflicts. By this time, the Internet-related contracts that had been managed by the National Science Foundation had been transferred to the National Telecommunications and Information Administration, a unit of the Commerce Department.

The President's Task Force on Internet issues, led by Ira Magaziner, oversaw deliberations regarding the future of the DNS. This produced a series of official papers calling for proposals from nongovernmental organizations to take over the U.S. government's DNS management responsibility. In response, ICANN was formed and selected from a small number of competitors. Agreements were negotiated among the National Telecommunications and Information Administration, Network Solutions (the primary contractor that had managed the DNS servers), and ICANN (Mueller 2002).

The transfer of responsibility was unprecedented. ICANN's creators and the government officials who supervised its creation shied away from referring to the new entity as a "government for the Internet," but it had a regulatory role that made it at least quasi-governmental. Although its immediate responsibilities were relatively nar-

row, the implications of ICANN's decisions would be far reaching not only as first impressions in the domain name field, but also as a precedent for future attempts to order the Internet. Thus, it is not surprising that a wide array of parties have a keen interest in the definition of ICANN's responsibilities, its procedures for electing officers and making policy, and its mechanisms for resolving disputes and enforcing decisions. These organizations and individuals follow developments closely, attend meetings all over the globe, and offer their unvarnished criticism freely in forums such as ICANNWatch.org, a Web site and organization devoted to ICANN and ICANN-related news. (A brief description of ICANN-related interest groups is provided in the appendix.)

ICANN Has Four Primary Responsibilities

Manage the DNS System: This involves supervising the operation of servers that function as the Internet's central routing center, providing computers all over the world with the requisite information to display Web pages and send e-mail. When Internet users enter a URL into their Web browser, the browser sends a message to the DNS server asking where to find, say, www.cnn.com.¹ With the numeric address (for instance, 64.132.530.217), the browser can then send a message to the appropriate server requesting the content of the Web page. Without a functional DNS, Web users would have to know the numeric address of every Web site they wanted to access.

Develop Dispute-Resolution System: As the Internet gained popularity, some clever individuals saw an opportunity to make money by snatching up domain names likely to be prized by existing companies. Pepsico, for example, would probably want the domain name www.pepsi.com, but the company has no more right to register it than Nerwin Q. Computeruser. Thus the Nerwins of the world gobbled up such domain names by registering them before the Internet had saturated the consciousness of corporate America and then offered to sell them to the Pepsicos of the world for not-so-insignificant sums of money. Needless to say, this line of business proved immensely irritating to the companies that felt they were being extorted or forced to buy what they already owned by virtue of their trademark (Angwin 1997).

Moreover, there were legitimate disputes among multiple trademark holders for the same domain name (for instance, both United Airlines and United Van Lines sought united.com), trademark holders suing parties who were not trying to extort payments,² and free speech issues related to domain names that clearly impugn a legitimate trademark holder but may serve political or expressive purposes (such as microsoftisevil.com).³

Aside from their novelty, these disputes are difficult to resolve because of uncertainty regarding jurisdiction. Con-

licts involve individuals and entities based in different states and countries, leading to arguments regarding venue, applicable law, and enforcement. One Virginia court asserted the vast majority of cases lie within its jurisdiction because it is home to the dominant registrar (Waldmeir 2000).

Expand Top-Level Domain Names: Internet addresses had been restricted to the relatively narrow range of alternatives familiar to most people (.com, .edu, .net). After the .com domain emerged as the expected domain for business, a frenzied land grab ensued, resulting in a scarcity of premium addresses (simple, short words and phrases that are easy to remember and logically linked to a product or service). Other top-level domain names were associated with particular countries (such as .uk) or other geographic units.

There has long been agitation to increase the number of generic top-level domain names to ease the crunch and the competition for “good” names. The reasons this had not yet been done when ICANN was created were many, including the cybersquatting disputes outlined previously. ICANN would determine how many new top-level domains would be created, what they would be, who would be responsible for running the registration process, and what rules would apply to the new domains.

Registrar Competition: The central role played by a single private company, VeriSign, is a curious feature of the domain name system. VeriSign purchased Network Solutions, Inc., in 2000 for \$19.6 billion, an impressive price for a government contractor with a single contract (Liedtke 2001). Network Solutions kept the Internet address book up to date, registering ownership of domain names and making sure the DNS servers accurately directed Web traffic to the Web sites operated by the legitimate owners of each address. Every domain name holder paid Network Solutions both an initial fee and a yearly fee for each domain name to maintain ownership of the name and an accurate DNS entry.

This business proved immensely lucrative as the demand for domain names went through the roof during the mid-1990s. Indeed, Network Solutions made hundreds of millions of dollars and soon drew critics who complained it had a government-granted monopoly. ICANN was charged with opening up the registration business to competition and facilitating the transition to a multiple-registrar system.

Manifestations of Multiple Accountabilities Disorder

The following section frames some controversies from ICANN’s early years as clashes of the accountability types defined in this article. Although substantive disagreement among the many interested parties was a challenge for ICANN, the MAD hypothesis is that conflicting accountability expectations were also debilitating. These conflicts

were not framed as disputes over notions of accountability, but that is, in essence, what was (and still is) being contested. Presented in the following section are problems caused by conflicting expectations derived from three substantive notions of accountability: controllability, responsiveness, and responsibility.

Responsiveness and Responsibility

A responsive organization is one that satisfies the demands and needs of its constituents. The leader(s) of an organization attempting to be accountable in this sense will pursue a course that is believed to be either the most popular or the most efficacious means of achieving the organizational objectives. This is only problematic when it conflicts with a course of action that is compelled by another dimension of accountability: a binding obligation (legal or moral) or an order from a hierarchical superior. For ICANN, the most common conflict has been between options that may be most efficient or technically appropriate and options that are required by previous commitment or contractual obligation, both forms of responsibility.

Two major controversies can be seen as expressions of this underlying conflict: First, the dispute over the election of directors, and second, the introduction of competition in the registrar business.

Elections. When ICANN was chosen by the National Telecommunications and Information Administration, it was stipulated that after an initial period, during which temporary directors would supervise the organization, ICANN would hold elections to replace these directors with individuals chosen by members of the “Internet community” (Clausing 2000b). ICANN set in place a plan that had voters selecting a council that would, in turn, choose new directors. The 1999 meeting of the organization in Cairo was brought to a standstill by objections to this indirect election (Clausing 2000b). Eventually, ICANN reversed course, abandoned the planned election, and declared that a direct election would be held after all.

The reversal was generally well received given the clamor for direct elections. Still, criticism was offered for ICANN’s failure to follow its own election procedures. One could characterize this as a failure of responsibility. Of course, by this very account we might conclude that ICANN was indeed quite accountable, just not in terms of responsibility. ICANN met the demands of its constituency (at the expense of its fidelity to rules), and thus it was responsive, if not responsible. Reaction to ICANN’s decisions was mixed, reflecting the differences in conceptions of accountability—as well as divergent views on the desirability of direct elections. Clearly, ICANN could not satisfy all expectations.

The direct election ultimately held in October 2000 was, predictably, not without its critics. Problems with the reg-

istration of voters and eyebrow-raising distributions of voters, though, were not enough to invalidate the results (McCullagh 2000). Interestingly, two of the elected directors were vociferous ICANN critics (McCullagh 2000), an outcome that may have restored ICANN's reputation for accountability (in the responsibility sense) by demonstrating a willingness to administer the process fairly and accept a less than desirable outcome.

More recent events, however, have eliminated any positive feelings generated by the election. ICANN declared the direct elections would be scrapped, followed by an announcement that the terms of appointed directors would be lengthened (despite assurances to the contrary). Karl Auerbach, one of the outspoken dissident directors, declared dramatically that "ICANN killed the concept of public participation ... and established in its stead a paternalistic oligarchy. The Internet will now be run by a body that adheres to principles that otherwise died with the era of Queen Victoria and King Leopold" (Auerbach and Rockman 2002). Ironically, the precedent for the organization's sudden abandonment of the direct election lay in the sudden adoption of the same approach. ICANN struggled from its inception with accountability in the responsibility sense, rewriting rules when it was deemed appropriate or necessary.

Competition. Less visible but more troubling to ICANN critics is the relationship between ICANN and VeriSign. VeriSign, as noted previously, purchased Network Solutions and still maintains the registries for the most popular domain names (.com, .net, and .org). VeriSign's monopolistic power was reduced, in part, by opening up the registration business to competition. One can now register a domain name with several companies, though all registrations still ultimately flow through VeriSign for entry into the DNS directory.

Under a 1999 agreement with ICANN, VeriSign committed to either leaving the registration business or severing the management of the registry from its registrar company (Taggart 2001). Competing registrars were said to be at an inherent disadvantage if VeriSign did both. In March 2001, however, ICANN announced a new deal granting VeriSign responsibility for the .com domain through 2007, with the company relinquishing control of the .org and .net domains, neither of which is nearly as lucrative (Stellin 2001).

The deal constituted a significant departure from an established agreement with almost no public discussion of the matter (Stellin 2001; Taggart 2001b). Under the terms of ICANN's agreement with the Commerce Department (under the National Telecommunications and Information Administration), the Commerce Department retains the right to veto the deal, but it opted not to do so. The change upset ICANN watchers on substantive and procedural grounds. They believed that registrar and management func-

tions should be separated and that ICANN had committed to that policy. One official representative of the registrars observed, "There is something much more serious than the content ..., this relates to the overall ICANN process" (Taggart 2001).

From this perspective, the deviation from established procedures, like the elections episode, constituted a massive failure of accountability along the responsibility dimension. Unlike the elections reversal, this was not a response to popular outcry. In this instance, ICANN defended the deal on substantive grounds. The objective of the original agreement—to introduce competition into the registrar market—was accomplished. Forcing VeriSign out of the management role for the .com domain would simply disrupt the effective management of the root. ICANN was again appealing to a responsiveness notion of accountability. This time, however, it was responsiveness to *need* rather than to demand. One need had been met (in the form of registrar competition), and thus another need, efficient operation of the Internet, becomes most pressing and should guide policy. Fidelity to the original agreement (responsibility-style accountability) was subordinate to responsiveness. The comments of one ICANN director make this point clearly: "This decision," said Jonathan Cohen, "should be only about whether the amended agreement offers sufficient improvement or benefit that we should substitute for the existing agreement" (Taggart 2001). This statement is only true, of course, if one applies the responsiveness notion of accountability. In terms of responsibility, it is utterly wrong.

Controllability and Responsibility

Accountability in the controllability sense is particularly difficult for ICANN (and other independent organizations). Who or what ought to be in control? Without agreement on the answer, it is nearly impossible for the organization to be considered accountable along the controllability dimension.

When DNS responsibilities were delegated to ICANN, the organization's creators and U.S. government officials articulated the vision that the organization would serve a community of Internet users and reach decisions by consensus. Not only was this notion vague, it was contradicted by the ongoing role retained by the U.S. government, namely authority over the physical infrastructure of the DNS. Without clarification of ICANN's independence and better definition of the Internet community, controllability will remain murky.

In the current configuration, the U.S. government wields authority over ICANN through a series of memoranda of understanding that loosely define the relationship between ICANN, the operators of the DNS servers, and the Department of Commerce. There is ample reason for ICANN's

officials to sense the expectation of their accountability (that is, controllability) to the U.S. government. Representatives of the U.S. government (especially members of Congress) have made explicit their belief that ICANN should be controlled by the U.S. government. Thus, when ICANN does something that is not in line with U.S. government expectations, ICANN is said by these individuals to be unaccountable. For example, several members of Congress favored the creation of a .kids top-level domain as a child-friendly zone on the Internet and were irritated that ICANN did not agree (Murphy 2001; Soat 2001). Rep. John Dingell commented that “ICANN appears to be accountable to no one except perhaps God Almighty” (Dawson 2001).⁴

In contrast, many of the concerned interest groups support the sentiment that ICANN ought to be controlled by the vaguely defined “Internet community” or, at the very least, not entirely dominated by the U.S. government. As the other dissident ICANN director, Andy Mueller-Maughn, said in reference to ICANN’s rules on trademark disputes, “This is more or less putting American commercial rules over a global space” (Rubin 2000). From this perspective, the question of controllability is essentially one of organizational legitimacy. ICANN’s board of directors ought to be representative of the Internet community. Setting aside the delicate question of how such a board is selected, the organization would thus be “controllable” if management satisfied the preferences of the board.

This notion of internalized controllability—as opposed to the more familiar principal–agent dynamic—is still particularly challenging for ICANN because of its additional burden of finding consensus. The need for consensus is made explicit in the terms of the agreement under which the U.S. government transferred responsibility to ICANN (Kaplan 1999).

All of this confusion regarding the meaning of controllability for ICANN makes conflicts all the more likely. So many parties claim rights as ICANN’s controller that other types of accountability take on additional weight in relative terms. A seemingly prosaic example illustrates the clash, for example, between controllability and responsibility. Following the terrorist attacks on the World Trade Center and Pentagon, attention was turned to the security of vital infrastructure, including the Internet.

ICANN has tried to assure the public and the U.S. government that the 13 root servers—particularly root server A—are secure. Citing their accountability (along the responsibility dimension), ICANN officials point to their technical knowledge and dedication to high-quality technical performance as the barriers against catastrophic attacks. From their perspective, the failure of a denial of service attack on the servers in 2002 supported this conclusion (Bray 2002).

But members of Congress and the executive branch have argued that the critical importance of the root servers makes U.S. government control a necessity for national security. Even ICANN chief executive officer Mike Roberts acknowledged the change in the security climate could lead the U.S. government to reassert control (Washington Internet Daily 2001). It is unclear that the substitution of controllability for responsibility would result in better security. Indeed, variation in the management of individual root servers is cited as a strength that could be lost with emphasis on centralized control.

Reducing the likelihood of conflicts between responsibility and controllability could be accomplished partly by clarifying expectations for ICANN. One of two things must happen; Either the controlling authority of the U.S. government must be acknowledged, or ICANN’s independence must be affirmed through a new, formal agreement between ICANN and the United States. Neither is likely.

In the absence of clarification, ICANN will continue to defend its accountability by invoking an alternative dimension of accountability such as responsibility. That is, ICANN will argue it is doing what is required according to its articles of incorporation, its agreement with the U.S. government and contracts with supporting organizations, or professional and technical judgments.

Unfortunately, ICANN’s propensity to shift gears (usually on the basis of appeals to responsiveness of one sort or another) undermines such arguments. A more concrete “constitution,” one that could not easily be altered and would bind ICANN to definitive courses of actions, might go a long way toward establishing meaningful responsibility as an alternative to controllability (NGO and Academic ICANN Study 2001). Of course, it could also rob ICANN of the flexibility needed to operate at “Internet speed” and be accountable in the responsiveness sense.

Responsiveness and Controllability

Based on its leaders’ statements, ICANN is eager to see its accountability judged in the responsiveness vein. That is consistent with current trends in public administration (performance measures are promoted as the appropriate metric for evaluating public agencies) and the engineering background of ICANN’s founders. Esther Dyson, ICANN’s first chairman, revealed this orientation in her response to one of ICANN’s critics: “With all due respect, we are less interested in complaints about the process [and more interested in] doing real work and moving forward” (Clausing 2000a). ICANN emphasizes its efforts to make the domain name system operate efficiently. Any reforms it makes (such as approval of new registrars) should not prove disruptive to the operation of the Internet. Notably, these arguments regarding performance tend to emphasize need responsiveness rather than demand responsiveness.

ICANN's leaders have operated more with the mind set of engineers than politicians.

New Domains. The approval of new domain names was the most eagerly anticipated of ICANN's mandated tasks. Progress toward approval of new top-level domain names was slowed by the election controversy. To approve new domains before the installation of any elected directors would have been a rather stark message regarding the influence of the Internet community on ICANN's decision making (that is, rather limited controllability).

There were 44 applications for a wide range of new domains, including .biz as an alternative to .com, the aforementioned .kids domain intended exclusively for children's sites, and .xxx as a pornography-only domain. Each application was accompanied by a nonrefundable fee of \$50,000 and documentation regarding the operational capacity of the company proposing to manage the domain, the policies under which the domain would be managed, the potential demand for the new domain name, etc. There was no predetermined number of domains that would be approved by the board, nor were the criteria by which the applications would be judged clearly articulated.

The ICANN board ended up approving only seven new top-level domain names. It argued the need for some new domains was being met in a timely fashion with minimal risk of disruption. The decision pleased some parties (that is, those whose applications were approved) but left others thoroughly dissatisfied. First, many potential new domain registrars were outraged at the seemingly random selection, lack of explicit selection criteria, and previously undisclosed, self-imposed limit on the number of applications that could be approved. Second, ICANN watchers felt the organization's actions were haphazard, secretive, unbound by any principles, and in violation of the original agreement with the U.S. government calling for the creation of many new domains. Third, some argued that the limited selection of new domains compounded the wrong of granting exclusive rights to .com to VeriSign because it limited the number of viable alternatives (McCullagh 2000b). The only new general-use commercial domain approved was .biz.

Finally, critics charged ICANN with disobeying what constituted a direct order: the terms of the memorandum of understanding with the Department of Commerce that laid out ICANN's objectives. Failure to expand the number of generic top-level domains by a significant number constituted a massive failure not only of responsibility (implicit in many of the charges outlined in the previous paragraph), but also of controllability.

ICANN defended this approach on practical and operational grounds: Introducing a large number of new domains would be technically challenging, and the logistical demands of negotiating agreements with a large number of

domain managers would be overwhelming. Experimentation with a small number of new domains was a better way to work out the kinks. Even if this approach did not afford the same level of consistency (responsibility) or transparency, it was necessary if ICANN was to be accountable (in the responsiveness sense).

The criticisms underscore the problematic nature of organizational appeals to accountability along the responsiveness dimension. No organization can be consistently responsive to a diverse set of interests. There is generally no agreed-upon hierarchy of the needs of any given community. Thus, the responsiveness of the organization is almost hopelessly subjective.

Conclusion

This brief description of ICANN's turbulent history makes clear that explanations of the organizations' difficulties are not in short supply. Substantive disagreement on its policies, ambiguities regarding its legitimacy and role, and a deeply divided constituency have all contributed to ICANN's tribulations. The inveterate critic of ICANN would argue this agency was simply captured by trademark interests (for instance, moneyed business) and the defenses based on responsiveness or responsibility arguments were convenient excuses. Of course, that is plausible. The individuals running ICANN have demonstrated poor judgment at times. Still, there is no obvious reason to dismiss the sincerity of their efforts to make ICANN an effective, universally respected organization.

Even without the conflicts between the different accountability expectations, ICANN would have been challenged by the demands of each individual type of accountability. Along each dimension identified in the previous section, ICANN faced complications:

- *Controllability* is vexing because it has never been clear who or what ought to control ICANN. It is an entity that is deeply embedded in a network of organizations, each of which has a legitimate claim on some share of control.
- *Responsibility* is made difficult by the striking ambiguities within the documents upon which ICANN is based. Moreover, the malleability of ICANN's rules and regulations compounds the lack of any precedent to guide behavior.
- ICANN may never be clearly *responsive* because its constituency is deeply divided and the boundaries of its responsibilities are ambiguous.
- Even *liability* and *transparency* are challenging. It is unclear whether ICANN should be judged by standards applicable to public or private organizations.

Nothing in this article is intended to rebut alternative explanations of ICANN's difficulties because these accounts do not undermine the MAD explanation. Identifi-

cation of the conflicts among accountability conceptions—and dubbing the resulting problems MAD—highlights the relationship between uncertain expectations and poor organizational performance. ICANN certainly appears to suffer from multiple accountabilities disorder, even if it is not the only source of uncertainty for the organization. In its behavior, ICANN has swung from responsiveness to responsibility to controllability as its operating principle. It has left constituents, partners, observers, and even its own leaders perplexed.

The ICANN case may, in fact, present an extreme example of an organization beset by MAD because of its unusual structure and ambiguous status. Nevertheless, the story of this novel organization underscores the value of the proposed typology and the MAD idea. By specifying the various elements comprising most understandings of accountability, it is possible to provide a more precise diagnosis of a phenomenon that is endemic to administration. ICANN disappoints those who judge the organization with controllability and responsibility as their implicit conceptions of accountability. As long as the organization continues to view responsiveness as an equally important objective, this will continue to be the case.

This experience is hardly unique to ICANN. Universal approval of good performance depends on agreement on the ends being pursued. This lesson, offered by Woodrow Wilson some time ago (1887), suggests that governmental organizations (and pseudo-governmental organizations such as ICANN) cannot expect to win applause from those who are disappointed in its failings along the controllability and responsibility dimensions of accountability. Deftly executing policies that many revile or feel are at odds with the organization's mission is likely to aggravate discontent. Such organizations are unlikely to be considered accountable (even in terms of responsiveness) on the basis of such achievements. Moreover, those who are pleased with an organization's responsiveness will quickly grow unhappy if the organization shifts to accommodate other interests.

At a time when new hybrid organizations are frequently proposed and performance-based management is eagerly adopted in the public sector, this is a critical point. Just how should public and quasi-public organizations be judged? The multiplicity of accountability definitions reflects uncertainty regarding the answer to this question. In contemporary policy-making circles, the rhetorical emphasis tends to favor the responsiveness vein of accountability. That is until things go wrong, and then controllability and responsibility ideas seem to get more airtime.

The current practice of agreeing to disagree about the meaning of the accountability is dissatisfying and undermines good administration. In the absence of clearly articulated expectations, organizations are left to manage the

many meanings of accountability. They cast about and sometimes take advantage of the uncertainty to justify questionable behavior. As a result, unhappiness with the institutions of public administration grows. Ultimately, this is the most severe consequence of MAD.

Notes

1. There are myriad servers around the globe that contain copies of the directories—or sections thereof—and thus not every query actually goes to one of the 13 root servers.
2. One memorable case features the owners of Gumby and Gumby-related characters pursuing a complaint against a 12-year-old boy who registered his nickname, Pokey (Grossman and Hift 2000).
3. For example, the Secaucus Group, a company that runs discussion boards for people who are less than enthusiastic about a company, individual, or even country, holds hundreds of domain names that impugn entities using their trademarked names. While trademark holders cry foul, the Secaucus Group (and owners of similar domain names) claim free speech rights (Standen 2001).
4. An ironic element of congressional criticism of ICANN is the charge that the organization is unaccountable, and its lack of binding procedures is generally cited. Yet, the organization's required fealty to Congress almost certainly contributes to this problem.

References

- Aberbach, Joel D., and Bert A. Rockman. 1988. Mandates or Mandarins? Control and Discretion in the Modern Administrative State. *Public Administration Review* 48(2): 606–12.
- Angwin, Julia. 1997. Net Addresses Sold Like Real Estate. *San Francisco Chronicle*, May 6, A1.
- Barnard, Chester I. 1938. *The Functions of the Executive*. Cambridge, MA: Harvard University Press.
- Bawn, Kathleen. 1995. Political Control versus Expertise: Congressional Choices about Administrative Procedures. *American Political Science Review* 89(1): 62–73.
- Beck, Nathaniel. 1982. Presidential Influence on the Federal Reserve in the 1970s. *American Journal of Political Science* 26(3): 415–43.
- Behn, Robert D. 2001. *Rethinking Democratic Accountability*. Washington, DC: Brookings Institution.
- Bray, Hiawatha. 2002. Net Attack Dismissed; Security Experts: Assault on Root Servers Easily Defeated. *Boston Globe*, October 24, C1.
- Chandler, Ralph C., and Jack C. Plano. 1988. *The Public Administration Dictionary*. Santa Barbara, CA: ABC-CLIO.
- Clausing, Jeri. 2000a. A Leader in Cyberspace, It Seems, Is No Politician. *New York Times*, April 10, C1.
- . 2000b. What's in a Name? *New York Times*, March 13, C9.
- Dawson, Keith. 2001. Congress Tweaks ICANN. *The Industry Standard.com*. <http://web.lexis-nexis.com/universe> (password required).
- DiIulio, John D., Jr. 1994. Principled Agents: The Cultural Bases of Behavior in a Federal Government Bureaucracy. *Journal of Public Administration Research and Theory* 4(3): 277–318.
- Eisner, Marc Allen, and Kenneth J. Meier. 1990. Presidential Control versus Bureaucratic Power: Explaining the Reagan Revolution in Anti-Trust. *American Journal of Political Science* 34(1): 269–87.
- Epstein, David, and Sharyn O'Halloran. 1994. Administrative Procedures, Information and Agency Discretion. *American Journal of Political Science* 38(3): 697–722.
- . 1996. Divided Government and the Design of Administrative Procedures: A Formal Model and Empirical Test. *Journal of Politics* 58(2): 373–77.
- Ferejohn, John, and Charles Shipan. 1990. Congressional Influence on Bureaucracy. *Journal of Law, Economics and Organization* 6(Special Issue): 1–20.
- Finer, Herman. 1941. Administrative Responsibility in Democratic Government. *Public Administration Review* 1(4): 335–50.
- Friedrich, Carl J. 1940. Public Policy and the Nature of Administrative Responsibility. In *Public Policy*, edited by Carl J. Friedrich, 3–24. Cambridge, MA: Harvard University Press.
- Golden, Marissa Martino. 1992. Exit, Voice, Loyalty, and Neglect: Bureaucratic Responses to Presidential Control during the Reagan Administration. *Journal of Public Administration Research and Theory* 2(1): 29–62.
- Goodin, Robert E. 2000. Accountability—Elections as One Form. In *The International Encyclopedia of Elections*, edited by Richard Rose, 2–4. Washington, DC: Congressional Quarterly Press.
- Goodnow, Frank J. 1900. *Politics and Administration: A Study in Government*. New York: Macmillan.
- Grossman, Mark, and Allison K. Hift. 2000. Is the Cybersquatting Cure Worse than the Disease? *Legal Times*, January 24, 24.
- Gruber, Judith E. 1987. *Controlling Bureaucracies*. Berkeley: University of California Press.
- Hammond, Thomas H., and Jack H. Knott. 1996. Who Controls the Bureaucracy? Presidential Power, Congressional Dominance, Legal Constraints, and Bureaucratic Autonomy in a Model of Multi-Institutional Policy-Making. *Journal of Law, Economics and Organization* 12(1): 119–65.
- Healy, Melissa. 1999. State Posts Drops in Births to Single Women; Welfare: California Leads the U.S. in Reducing Unwed Motherhood, Which Is Linked to Dependence on Aid. *Los Angeles Times*, September 14, A3.
- Heclo, Hugh. 1978. Issue Networks and the Executive Establishment. In *The New American Political System*, edited by Anthony King, 87–124. Washington, DC: American Enterprise Institute.
- Hill, Jeffrey S., and James E. Brazier. 1991. Constraining Administrative Decisions: A Critical Examination of the Structure and Process Hypothesis. *Journal of Law, Economics and Organization* 7(2): 373–400.
- Horn, Murray J., and Kenneth A. Shepsle. 1989. Symposium on the Law and Economics of Bargaining: Commentary on “Administrative Arrangements and the Political Control of Agencies: Administrative Process and Organizational Form as Legislative Responses to Agency Costs.” *Virginia Law Review* 75: 499–508.
- Hummel, Ralph P. 1987. *The Bureaucratic Experience*. 3rd ed. New York: St. Martin's Press.
- Kaplan, Karen. 1999. Domain Name Truce May Still Stall Suffixes. *Los Angeles Times*, October 4, C4.
- Kearney, Richard C., and Chandan Sinha. 1988. Professionalism and Bureaucratic Responsiveness: Conflict or Compatibility. *Public Administration Review* 48(1): 571–79.
- Krause, George A. 1994. Federal Reserve Policy Decision Making: Political and Bureaucratic Influences. *American Journal of Political Science* 38(1): 124–44.
- Labaton, Stephen. 1993. Failing Grades on the First Waco Attack. *New York Times*, October 3, 42.
- Leazes, Francis J., Jr. 1997. Public Accountability. *Administration and Society* 29(4): 395–412.
- Liedtke, Michael. 2001. Web Domain Registrar Sets Sights on Empire. *Toronto Star*, January 2, B1.
- Mashaw, Jerry L. 1994. Improving the Environment of Agency Rulemaking: An Essay on Management, Games, and Accountability. *Law and Contemporary Problems* 57(2): 185–257.

- McCubbins, Matthew, Roger Noll, and Barry Weingast. 1987. *Administrative Procedures as Instruments of Political Control*. St. Louis, MO: Washington University, Center for the Study of American Business.
- McCullagh, Declan. 2000. ICANN Elects Iconoclasts. *Wired News*. <http://www.wired.com/news/print/0,1294,39385,00>.
- McKinney, Jerome B. 1981. Process Accountability and the Creative Use of Intergovernmental Resources. *Public Administration Review* 41(Special Issue): 144–49.
- Melnick, R. Shep. 1983. *Regulation and the Courts: The Case of the Clean Air Act*. Washington, DC: Brookings Institution.
- Mladenka, Kenneth R. 1980. The Urban Bureaucracy and the Chicago Political Machine: Who Gets What and the Limits to Political Control. *American Political Science Review* 74(4): 991–98.
- Moe, Ronald C. 1994. The “Reinventing Government” Exercise: Misinterpreting the Problem, Misjudging the Consequences. *Public Administration Review* 54(2): 111–22.
- . 2000. Government Reinvention Revisited. *The Public Manager* 29(3): 37–42.
- Moe, Ronald C., and Robert S. Gilmour. 1995. Rediscovering Principles of Public Administration: The Neglected Foundation of Public Law. *Public Administration Review* 55(2): 135–46.
- Moe, Terry M. 1982. Regulatory Performance and Presidential Administration. *American Journal of Political Science* 26(2): 197–224.
- Mueller, Milton. 1999. ICANN and Internet Governance. *Journal of Policy, Regulation and Strategy for Telecommunications Information and Media* 1(6): 497–520.
- . 2002. *Ruling the Root: Internet Governance and the Taming of Cyberspace*. Cambridge, MA: MIT Press.
- Murphy, Kevin. 2001. U.S. Government Should Retain Control of DNS, Say Congressmen. *Computerwire*, accessed on Lexis-Nexis, April 5, 2003 (password required).
- NYC Department of Education. 2002. Chancellor Klein Announces First Performance Based Bonus Program for Community and High School Superintendents. http://www.nycenet.edu/press/02-03/n29_03.htm.
- O’Laughlin, William G. 1990. What Is Bureaucratic Accountability and How Can We Measure It? *Administration and Society* 22(3): 275–302.
- O’Neill, Juliet. 2001. Civilization Is under Attack: Bush: President Says Bin Laden Seeks “Evil Weapons;” Tells Allies They Must Join War. *Ottawa Citizen*, November 7, A6.
- Osborne, David, and Ted Gaebler. 1992. *Reinventing Government: How the Entrepreneurial Spirit Is Transforming the Public Sector*. Reading, MA: Addison-Wesley.
- Pennock, J. Roland. 1952. Responsiveness, Responsibility, and Majority Rule. *American Political Science Review* 46(3): 790–807.
- Piven, Frances Fox, and Richard A. Cloward. 1971. *Regulating the Poor: The Functions of Public Welfare*. New York: Pantheon Books.
- Radin, Beryl A., and Barbara S. Romzek. 1996. Accountability Expectations in an Intergovernmental Arena: The National Rural Development Partnership. *Publius* 26(2): 59–81.
- Robinson, Glen O. 1989. Symposium on the Law and Economics of Bargaining: Commentary on “Administrative Arrangements and the Political Control of Agencies”: Administrative Process and Organizational Form as Legislative Responses to Agency Costs. *Virginia Law Review* 75: 483–98.
- Romzek, Barbara S. 1996. Enhancing Accountability. In *Handbook of Public Administration*, edited by James L. Perry, 97–114. San Francisco: Jossey-Bass.
- Romzek, Barbara S., and Melvin J. Dubnick. 1987. Accountability in the Public Sector: Lessons from the Challenger Tragedy. *Public Administration Review* 47(3): 227–38.
- Romzek, Barbara S., and Patricia Wallace Ingraham. 2000. Cross Pressures of Accountability: Initiative, Command, and Failure in the Ron Brown Plane Crash. *Public Administration Review* 60(3): 240–53.
- Rosen, Bernard. 1989. *Holding Government Bureaucracies Accountable*. 2nd ed. New York: Praeger.
- Rourke, Francis E. 1992. Responsiveness and Neutral Competence in American Bureaucracy. *Public Administration Review* 52(6): 539–46.
- Rubin, Daniel. 2000. European Director of Internet Group Hopes to End U.S. Domination of Web. *Knight Ridder/Tribune Business News*, October 28.
- Sanger, David E. 2002. Bush, at School, Promotes Education Bill. *New York Times*, May 7, A26.
- Scales, Ann. 1999. Bush Raps Rivals, Own Party on Education; Urges Accountability for Schools; Rues Democrats’ Despair. *Boston Globe*, October 6, A29.
- Selznick, Philip. 1957. *Leadership in Administration*. New York: Harper and Row.
- Sensenbrenner, Joseph. 1991. Quality Comes to City Hall. *Harvard Business Review* 69(2): 64–70.
- Soat, John. 2001. IT Confidential. *InformationWeek*, February 12, 154. Accessed on Lexis-Nexis.
- Standen, Amy. 2001. The Saga of Sucks.Com. *Ottawa Citizen*, July 9, B7.
- Stellin, Susan. 2001. New Contract Covering Internet Domain Name Registry Raises Questions about Whether the Address System Is Competitive. *New York Times*, May 21, C4.
- Taggart, Stewart. 2001a. ICANN-VeriSign Brouhaha. *Wired News*. <http://www.wired.com/news/print/0,1294,42367,00.html>.
- Taggart, Stewart. 2001b. Furor Over ICANN-VeriSign Deal. *Wired News*. <http://www.wired.com/news/print/0,1294,42392,00.html>.
- Tullock, Gordon. 1965. *The Politics of Bureaucracy*. Washington, DC: Public Affairs Press.
- Waldmeir, Patti. 2000. Court Ruling Poses Domain Name Threat. *Financial Times* (London, England), March 17, 6.
- Washington Internet Daily. 2001. Question Is Whether Attacks Will Strengthen or Hobble ICANN. <http://web.lexis-nexis.com/universe> (password required).
- Weingast, Barry, and Mark J. Moran. 1983. Bureaucratic Discretion or Congressional Control? Regulatory Policymaking by the Federal Trade Commission. *Journal of Political Economy* 91(5): 765–800.

Wilson, James Q. 1989. *Bureaucracy: What Government Agencies Do and Why They Do It*. New York: Basic Books.

Wilson, Woodrow. 1887. The Study of Administration. *Political Science Quarterly* 2(2): 197–222.

Wood, B. Dan, and Richard Waterman. 1994. *Bureaucratic Dynamics: The Role of Bureaucracy in a Democracy*. Boulder, CO: Westview Press.

Zittrain, Jonathan. 1999. ICANN: Between the Public and the Private. Comments before Congress Subcommittee on Investigations and Oversight of the House Commerce Committee Hearing Entitled “Is ICANN out of Control?” Washington, DC.

Appendix Groups with an Interest in ICANN

There is, of course, more diversity of opinion within the groups described below than is here implied, an unfortunate result of space constraint. The identification of some groups is borrowed from Mueller (2002), who describes these parties as “distinct stakeholder groups” (69, 166).

Technical community	These engineers and computer experts who created the Internet often display a sense of entitlement owing to their technical expertise. They want ICANN to keep the DNS functioning and object to any outcome that results in suboptimal operating specifications.
VeriSign (Network Solutions)	The company is interested in protecting the valuable position it has as the dominant registrar of domain names.
U.S. government	Government officials recognized the pitfalls of Uncle Sam overseeing an international network that spanned borders and raised countless new issues for decision makers. Delegation of ICANN’s responsibilities to the International Telecommunications Union was rejected because this Geneva-based entity was viewed as a ponderous bureaucracy that would be difficult to control (Interview, September 25, 2001). Delegation to a new, U.S.-based organization was more in line with American objectives. Foremost is the smooth operation of the Internet as it is now a critical part of the nation’s economic infrastructure. Varied concerns rise and fall with current events such as the regulation of child pornography on the Internet, network security and privacy.
Governments of the world	By the mid-to-late 1990s, governments of the world were taking notice of the Internet and domain name disputes that drew their companies into U.S. courts. National governments in countries with robust Internet usage (such as Western Europe and Japan) increasingly sought formal means of policy input.
Trademark and Internet protocol interests	Many companies had possession of the domain names that included their trademark—having either registered it or purchased it from a cybersquatter—but others were involved in protracted disputes. Trademark holders wanted better protection of their trademarks and, as importantly, an established process for timely dispute settlement. Trademark holders fear the proliferation of Web sites that utilize their trademarked words and phrases with the addition of new domains. Pursuing judgments against domain holders in new top-level domain names could prove costly and time consuming thus they want trademarks protected across all top-level domain names. (For a fascinating story of a protracted domain name dispute of this variety, see www.Taubmansucks.com .)
Internet entrepreneurs (including active and prospective registries and registrars)	Some entrepreneurs worried that intellectual property rights could receive too much protection if ICANN were “captured” by established business interests seeking to close off avenues for small entrepreneurs. Thus they opposed broad trademark protection measures. One group of new businesses had a different concern: competition with VeriSign for domain name registry business. These companies wanted the .com domain name registration opened to competition. Registration of names within new domains was also of concern.
Civil society and civil liberties organizations	A large population prizes the Web for its non-economic value. It is difficult to label this diverse collection of individuals that includes traditional civil rights activists, hackers who hold beliefs regarding the importance of free information exchange, and others who are focused on particular issues like privacy or equal access. These people share an outright disdain for commercial considerations as the foundation of Internet policy. The prism through which these parties view ICANN could not be more different than the trademark holders. One specific fear is the stifling of the Internet’s culture by the emergence of limitations on free speech.
Internet users	A vocal community of Internet users—many of whom began using the Internet before it had any commercial activity whatsoever—often reject the suggestion that the Internet is in need of governance. Others argue that governance is a practical impossibility. As such, some users reject ICANN on its face, deeming it an illegitimate force. A much larger number of users are blissfully ignorant of ICANN. These people do not participate in heated exchanges on slashdot.org , a bulletin board that hosts spirited anti-ICANN exchanges, but are affected by ICANN’s activities. Some of the interested parties described above have attempted to mobilize this latent interest group—particularly at the time of the ICANN board elections.