

When the Internet Corporation for Assigned Names and Numbers (ICANN)—the product of the Clinton administration’s decision to entrust the regulation of the Internet domain name system (DNS) to the private sector in 1998—eliminated Internet user elections of its board members entirely last year, it signalled an important passage, both for the organization and for the regulation of the Internet itself as a communicative space. It is fitting therefore that a first round of book-length treatments of ICANN and domain name regulation have since emerged, ones bent on capturing the significance of the bitter struggle over the political, economic, and technological control of the network that has been unfolding since the early 1990s. Although a large number of academic articles dealing with the governance of the DNS have been published in the past several years (many of them contained in special issues of legal or telecommunications policy journals), the politics of cyberspace have progressed at such a rapid pace that any book ran the risk of instantly being overtaken by the continuation of the events they proposed to analyze.

Milton L. Mueller’s Ruling the Root: Internet Governance and the Taming of Cyberspace and Daniel Paré’s Internet Governance in Transition: Who Is the Master of This Domain? are two of the most comprehensive treatments thus far of the prehistory and first phase of ICANN’s wildly contested first five years making policy for the Internet. Though both went to press before the organization abruptly ended its flirtation with cyber-democracy, they capture well both the interplay of forces that went into the creation of ICANN and its behaviour since that point in the areas of creating a private resolution mechanism for domain name disputes and conjuring up seven new top-level domain cyber-neighbourhoods (by the name of .biz, .aero, .pro, et cetera). As such, scholars looking for more complex and comprehensive treatments of the vitally important issue of DNS governance, pregnant as it is with meaning for the future structure and function of cyberspace, will be relieved.

The first contribution these books make is to finally put to rest, should there still be any need for this, notions that the Internet is somehow immune by nature to power relations witnessed in our world of flesh and bone. As Mueller suggests, a precondition for understanding ICANN’s status as an organization is moving “beyond the idea that the Internet is intrinsically voluntary and cannot be institutionalized or controlled” (p. 217), a position Paré adopts as well. Beyond formal similarities to do with their subject matter and the temporal congruence of their release, however, the works by Paré and Mueller are significantly different in terms of their theoretical approach to DNS governance.

Paré, now an assistant professor at the University of Ottawa’s Department of Communication, used his time as a research fellow at the London School of Economics profitably, turning his dissertation into this book-length treatment of DNS regulation. He opts for an approach to the subject from a theoretical position (outlined most thoroughly in chapter 3, “Don’t Believe the Hype!”) that brings into relief the social and political aspects of what have been called the “DNS wars.” Eschewed are “prescriptive” approaches to Internet governance such as what he characterizes as the “commons school,” or “top-down” approaches (p. 45), and the “decentralized school,” or approaches that “preclude the need for any external regulation or coordination” (p. 47). In addition, “process-based” approaches, although given more consideration than the previous two, are ultimately sidelined in favour of what Paré refers to as the “power-oriented” approach (p. 64). The latter, he suggests, “does not fall prey to ideologically motivated positions with respect to the appropriate roles of the private sector or governments in the evolution of governance regimes for the
Such a perspective focuses on two posited tiers in which power relations unfold: “surface-level politics,” as the “issue-specific conflicts regarding the various aspects of establishing new addressing regimes,” and “deep-structure power,” which “is believed to be coded in the cultural values, beliefs, and practices of agents” (p. 61). Onto these tiers Paré grafts a third: the internetworking architecture itself. A focus on these three levels, he suggests, allows one to ask the following questions of Internet governance:

How are the power relations and politicking influencing the emergent governance trajectory of internetworking? How have the historically rooted path dependent norms, or institutions, associated with internetworking been altered? What factors underpin the organizational legitimacy attained by the administrative innovations emerging from processes of institutional reconfiguration within the cyber-realm? (p. 64)

Mueller’s approach is significantly different. The director of the Graduate Program in Telecommunications and Network Management at Syracuse University, he has been one of the most vocal critics of the process leading up to the creation of ICANN as well as of the organization’s policy decisions thus far. Ruling the Root represents an integration into book format of the research he has carried out over the past seven or eight years. His chosen approach is that of institutional economics, which “looks at the interaction of law, economics, and politics; it examines how societies solve collective action problems by defining property rights and establishing governance arrangements” (p. 10). In this framework technology is of analytical value “insofar as it creates new resources that must be incorporated into legal and institutional regimes, or causes changes in the transaction costs or relative prices that lead to a breakdown in an existing order” (p. 10). Structurally, Mueller devotes chapter 2 (“The Basic Political Economy of Identifiers”), chapter 4 (“The Root and Institutional Change: Analytical Framework”), and chapter 12 (“Property Rights and Institutional Change: Some Musings on Theory”) to the task of progressively outlining his approach.

Regardless of the approach ultimately adopted, those familiar with the subject matter dealt with will agree that there are two main difficulties facing anybody hoping to give a useful account of ICANN and DNS regulation in general. The first is fashioning a comprehensible explanation for the reader of the technical background of the DNS, a necessary prerequisite to be able to grasp precisely on what ground the battles over domain name regulation played themselves out. As Mueller states toward the end of the book (by way of chastizing the legal community for its haphazard attempts to codify knowledge around domain names and property), without such an understanding of the technical system, “it is difficult to project alternative scenarios that might alter the way the principles are applied” (p. 261). The second difficulty lies in creating a cogent historical account of the bewildering number of organizations, political formations, and agreements that have played a part in the technical and political history of the DNS. Each of these has its own acronym, putting the author in the unenviable position of having to discuss exactly how the gTLD-MoU proposal was put forth by a coalition of organizations that composed the IAHC, including ISOC, IANA, the ITU, WIPO, MCI, and others.

The bulk of both books is dedicated to these tasks—Mueller dedicates chapter 3 to a technical introduction to the names and numbers system and chapters 5-9 to outlining their political history. Paré on the other hand devotes chapters 2 and 6 to a technical introduction and the treatment of ICANN, reserving chapter 4 (“Transformation of the .uk Domain Naming Regime”) and chapter 5 (“Internet Addressing: The UK Perspective”) for a discussion of the parallel process of restructuring the management of the British country-code top-level domain (ccTLD), .uk. Both books carry out these tasks in commendable fashion with respect to clarity, structure, and flow, although Mueller’s prose is the livelier of the two, offering something of a sugar coating to what is doubtless a difficult albeit rewarding trek through Internet history. In addition, the exposition of the technical basis of the DNS
The theoretical approaches adopted by Mueller and Paré produce two very different books in several respects.

Mueller's variant of Smithian political economy (although he does not call it by this name) brings him to tell the story of the struggles of DNS governance by focusing on the "root" server of the Internet, the essential resource for global internetworking. As he describes it:

[T]he root is the point of centralization in the Internet's otherwise thoroughly decentralized architecture. The root stands at the top of the hierarchical distribution of responsibility that makes the Internet work. It is the beginning in a long chain of contracts and cooperation governing how Internet service providers and end users acquire and utilize the addresses and names that make it possible for data packets to find their destinations. (p. 6)

The root server is, as Mueller points out, the star of his story. Indeed, that such a mobilization of state, corporate, NGO, and Internet end user groups could have occurred over a small file of data kept in Herndon, Virginia, by a company called Network Solutions Inc. might seem unbelievable to those unfamiliar with the issues at hand. In a similar vein, the fact that names were chosen as accompanying identifiers for the IP numbers that act as addresses for the Internet back in the first half of the 1980s certainly did not seem like a decision with great political ramifications at the time. Rather, as both Mueller and Paré demonstrate, this was seen as a convenient way of solving the series of technical problems that had been mounting with the addressing system then used by the ARPAnet, the predecessor of our Internet.

Indeed, the first part of the DNS story is, as Mueller suggests, that of a small networking community that "conceived of itself as self-governing and developed its own norms and procedures," in essence "a technical priesthood backed by federal largesse" (p. 73). However, as the history of the root server evolved, beginning with the gradual push on-line of the private sector in the 1990s, it became a deeply contested source of wealth (primarily through the sale of domain names that can be added to it) and was subject to multiple claims of authority, a couple of hijackings, and an exodus on the part of a small rebellious technical community that created an alternative Internet that still exists outside of ICANN's control.

Mueller's approach allows for a detailed outline of the composition of the various forces that have attempted to control the root and the power and profit it affords, a task he undertakes admirably. Motivated as it is by an undaunted faith in market forces, in his documentation of the backroom bargaining and the relations of force that perverted the invisible hand he achieves an undoubtedly lucid exposition of what he suggests has been the process characterizing the Internet between 1996 and 2001: institutionalization. In the process he argues persuasively that the convergence between trademark interests and a technical community bent on maintaining some power over the Internet has resulted in the formation of an "international regime" that is unresponsive to end user interests and "borders on central planning in its approach to name and number resources" (p. 260).

What stands out in Paré's effort is the rendition of the parallel history of the transformation of the addressing regime in Britain, a story that offers a counterpoint to the cloak-and-dagger politics that have surrounded ICANN and the Internet root server. Flowing from his strategic decision to focus on "what social actors actually do" rather than engage in "prescriptive and/or ideologically laden speculation about what should be done" (p. 163), the history that Paré offers is a rich one, complemented as it is by the analysis of a questionnaire distributed to British providers of Internet services. In it, the author was attempting to identify how these service providers were "responding to outcomes about the
technical management and administration of the Internet” (p. 102) during a critical period (November 1998) immediately following the incorporation of ICANN. What emerges is an interesting picture of those who were somewhat removed from the fray of the DNS wars taking place primarily in the United States.

In a comparison between the relatively painless British restructuring and the former, Paré suggests that the ICANN process did not manage to achieve the same amount of stakeholder “trust” from the very beginning, since the latter “felt the entire formation process had been usurped by those with vested interests” (p. 168). Indeed, according to Paré,

the bulk of the criticism ICANN must contend with is rooted in the fact that it is a private organization which is exerting global public authority over a key information and communication resource in a manner that appears to be inconsistent with the way in which decisions have traditionally been made in the public domain and the traditional norms and values associated with internetworking. (p. 169)

Stylistically, Paré’s exposition of argument is at times frustratingly timid, peppered as it is with phrases such as “the data suggests” or “it appears as if.” The book contains some thorough research, making one wish that the author was more certain of the indications to be drawn from it. Ultimately the issue of whether or not analyses intended to be prescriptive in nature are capable of providing useful analyses of social processes is an epistemological one that can hardly be answered here. Nonetheless, one wonders whether Paré’s rigid avoidance of anything approaching prescriptive overtones bears much fruit in the end, beyond documenting the obviously problematic manner in which the most powerful interests won out in the DNS wars.

As far as the Mueller book is concerned, outside of what he sees as merely an inefficient “property regime,” institutional economics does not allow him to connect ICANN to broader processes that have swirled around the DNS since the beginning of the 1990s. This approach blinds Mueller to the potential richness of an analysis that might seek to situate ICANN within the flurry of grandiose and utopian rhetoric making up the discourse of the New Economy. The thoughts of Clinton’s Internet guru Ira Magaziner in the second half of the 1990s on the regulatory models possible for the Internet are representative of this, betraying a deep sense that capitalism had reached some kind of evolutionary peak, a plateau where the only conflict would be the scientifically regulated competition amongst businesses. At that moment, his comment on the role of government being “simply to set a predictable legal environment for commerce” seemed to make a lot more sense, ignorant as he was of the fact that the future would bring an anarchist hacker from Germany as one of ICANN’s democratically elected board members. While institutional economics allows Mueller to conclude without hesitation that “ICANN’s domain name policies are driven by power politics and economic conflicts of interest, not consensus” (p. 216), history occurs outside of the property regime bubble, concerned as he is with profit-seeking “stakeholders,” “parties,” “rights conflicts,” “common pool resources,” and “interest groups.”

Both books may ultimately be considered useful but certainly not definitive contributions to what is a burgeoning and important area of inquiry. ICANN’s first phase may be over, but the “ICANN 2.0” that is unfolding is subject to new strategic pressures in a world profoundly marked by the War on Terror. We look forward to these two authors’ and others’ accounts of this new configuration as well as ICANN’s changing role within it.

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