

In Search of Jefferson's Moose: Notes on the State of Cyberspace¹

Reviewed by Major Frank E. Kostik Jr.*

*Not long ago—fifteen years or so—a very large number of intelligent and well-informed people had never heard of the Internet, and many others regarded it as some kind of bastard offspring of CB radio, the pet rock, and Pong, an interesting but ultimately rather silly and ignorable fad that would have its day and fade ingloriously away.*²

I. Introduction

In a seemingly impossible manner, David Post uses Thomas Jefferson's analytical approach to writing *Notes on the State of Virginia* and Jeffersonian history as a backdrop to explain the Internet, cyberspace and governance.³ *Notes on the State of Virginia* contains detailed facts about eighteenth-century America and is the published expansion of a response drafted by Thomas Jefferson to Françoise Marbois.⁴ Marbois submitted twenty-two questions "to officials in the newly independent states."⁵ The questions ranged from inquiries concerning plants and animals to commercial productions and population in Virginia.⁶ A few months later, Jefferson responded with over 200 pages of detailed answers to Marbois's questions.⁷

David Post is a Professor of Law at Temple University School of Law and a long time scholar of the Internet and cyberspace.⁸ He draws on this experience to discuss the technical make-up of the Internet and the place it creates. In doing so, he identifies, rather than solves, the issues of governance created by the Internet and cyberspace.⁹ While

Post sticks to his thesis and uses a novel and entertaining way to address complex subjects, the overuse of in-depth historical forays is disorienting and disrupts the logical flow of information. The book is of little value to the average practicing judge advocates, but should not be dismissed, as Post presents unique governance questions, whose answers could impact states' sovereignty and national security policy.¹⁰

II. Just Because You Can Doesn't Mean You Should

At times, Post's approach to explaining the Internet with Jeffersonian history is masterful and on the mark. Two illustrations stand out as exceptional. The first is Jefferson's moose. Post uses the story of Jefferson's moose as a metaphor to explain the scale of the Internet and a need for a moose-like object to jump-start the Internet governance dialogue.¹¹ Between 1786 and 1787, Jefferson sent correspondence from France asking Governor John Sullivan of New Hampshire to send him a moose. In the spring of 1787, "the complete carcass and skeleton of an American moose, seven feet tall at the shoulders and with skin and antlers attached" arrived at Jefferson's residence in Paris, France, where he had it erected in his entrance hall.¹² This was done in part to prove a theoretical point during Jefferson's ongoing debate with eighteenth-century naturalist George Louis Leclerc Buffon: that animals in the New World were not smaller than those in Europe.¹³

For Post, the size or scale of the Internet is what makes the Transmission Communication Protocol/Internet Protocol (TCP/IP) network the one that became the Internet and is a major theme of his book.¹⁴ Interestingly, Jefferson's study of animal size, although not accurate, served up the right questions to explain the Internet's own scale problems.¹⁵ Using this backdrop and a few excellent diagrams,¹⁶ Post

* Judge Advocate, U.S. Army. Senior Defense Counsel, Trial Defense Service, Great Plains Region, Fort Leavenworth, Kansas.

¹ DAVID G. POST, *IN SEARCH OF JEFFERSON'S MOOSE: NOTES ON THE STATE OF CYBER SPACE* (2009).

² *Id.* at 127.

³ While Post explains the Internet and cyberspace over the course of his book, how he uses the terms at different times can be confusing to a non-tech savvy reader. *See, e.g., id.* at 24–25, 187 (First defining cyberspace as a network, then using cyberspace to describe a place). It is useful and consistent with Post's uses to consider the Supreme Court's definitions in *Reno v. American Civil Liberties Union*, "[t]he Internet is an international network of interconnected computers" and cyberspace is the "medium" created by the network and all of its tools such as "newsgroups," "chat rooms," and the "World Wide Web." 521 U.S. 844, 850–51 (1997). For purposes of this book review each concept will be discussed separately.

⁴ POST, *supra* note 1, at 9 (Françoise Marbois was the "First Secretary to the French legation to the United States," which is equivalent to the modern-day Assistant to the French Ambassador).

⁵ *Id.*

⁶ *Id.* at 9–10 n.3.

⁷ *Id.* at 9–11.

⁸ *See* Faculty, David Post, http://www.law.temple.edu/Pages/Faculty/N_Faculty_Post_Main.aspx (last visited June 2, 2013) (providing a detailed biographical and educational background of David Post).

⁹ POST, *supra* note 1, at 209.

¹⁰ *Id.* at 18.

¹¹ *Id.* at 68 (discussing scale); *id.* at 209–10 (discussing Wikipedia as an Internet moose).

¹² *Id.* at 16, 66.

¹³ *Id.* at 63–65, 67, 210.

¹⁴ *Id.* at 47–48.

¹⁵ *Id.* at 68 ("[A]nimals in the New World are neither systematically larger or smaller, more numerous or less, than those in the Old.").

expertly negotiates the interaction among the seemingly dry topics of “geometric growth,”¹⁷ the Internet, and the TCP/IP network’s “distributed routing”/ “end to end”¹⁸ solution.¹⁹

After completing the book, Post determined that he, too, needed a moose to make his theoretical point tangible and therefore reveals it in the epilogue.²⁰ Like Jefferson’s moose certainly illustrated to Buffon, the reader knows at once that the scale of the problem concerning Internet governance is immense. Post identifies Wikipedia as his “moose,” and in doing so, aptly complements this particular theme presented in the book.²¹ Post identifies Wikipedia as his moose because it is “the world’s single most consulted source of information, available in forty-odd languages, accessible (virtually instantaneously) to over a billion people, compiled by thousands of people working anonymously for no pay.”²² To Post, Wikipedia provides the same “wow” factor to those who question the importance and uniqueness of the Internet as the moose did for those who questioned the size of the animal in the New World.

The second masterful use of Jeffersonian history comes as the book shifts gears from the technical workings of the Internet to the more relevant and interesting issue of governing this scaling behemoth—allowing an entire world to communicate and share information with ease. To set up his discussion on governance, Post outlines the two political philosophies and the long-standing debate between Thomas Jefferson and Alexander Hamilton.²³ To establish the primary differences between the two, Post quotes Merrill Peterson:

One despised, the other idolized, rulership. One located the strength of the republic in the diffuse energies of a free society, the other in the consolidation of authority Hamilton feared most the ignorance and tumult of the people, Jefferson feared the irresponsibility of rulers independent of them. Hamilton labeled his rival a visionary

and a demagogue, while Jefferson named his a corrupter, a monarchist, and an Angloman.²⁴

Post uses this primary difference between Jefferson’s decentralized and Hamilton’s centralized governance models to weave his way through Jefferson’s plan to settle the American west: an area that Jefferson believed could be “held together by consensual bonds and adherence to republican principles, not coercive power, an ever-expanding union of self-governing commonwealths joined together as peers.”²⁵ Post asserts that this idea of governance “was so out-of-the-box that it is difficult even to see the outlines of the box anymore.”²⁶ This builds on an observation made by Post earlier in the book—that Jefferson was not afraid to create a system that ran contrary to the prevailing norms of the day such as Montesquieu’s “Law.”²⁷ Post then uses Jefferson’s trust in self-governance, his ability to think “out-of-the-box,” and willingness to challenge existing norms to nudge the reader to think differently about Internet governance.²⁸

As it turns out, Post takes his own advice and offers up a new vision of Internet governance that takes place wholly in cyberspace: a new place made up of avatars that has its own law to deal with the transactions that take place there.²⁹ While certainly this amounts to the type of “outside-the-box” thinking that allowed Jefferson to expand America’s West, it comes across as incomplete because it leaves unresolved the impact such a system would have on current institutions.

Unfortunately, not all of the historical examples made the author’s points clear. In this aspect, Post’s unique application of Jeffersonian history falters. He spends page after page discussing Jefferson’s understanding of rivers and population growth to explain relatively simple points about networks and “geometric growth.”³⁰ As an example, to explain that the Internet grew quickly to a large size, Post takes the reader on a fourteen-page journey into the population growth of Virginia.³¹ To make the text even more tedious, Post included a multi-page footnote explaining that

¹⁶ See, e.g., *id.* at 73–78, 89 (using diagrams to explain “distributed routing” and “end to end” networking).

¹⁷ *Id.* at 36–45 (explaining the concept of “geometric growth.”).

¹⁸ See *id.* at 72–79, 81–89 (explaining the concepts of “distributed routing” and “end to end” networking).

¹⁹ *Id.* at 89.

²⁰ *Id.* at 209; see also David Post, *Jefferson’s Moose*, YOUTUBE, <http://www.youtube.com/watch?v=FskCRZC6U8Y&feature=related> (last visited June 2, 2013) (Post discussing his book at the University of Virginia School of Law, 14 October 2009).

²¹ POST, *supra* note 1, 108–10.

²² *Id.* at 209–10.

²³ *Id.* at 108–10.

²⁴ *Id.* at 107–08 (quoting MERRILL PETERSON, *ELECTION OF 1800: CONTEXT AND IMPLICATIONS* (1998)).

²⁵ *Id.* at 177.

²⁶ *Id.* at 172.

²⁷ *Id.* at 112, 114. Montesquieu’s Law stands for the proposition “that republican government could *only* survive in small communities.” *Id.* at 111.

²⁸ See *id.* at 116–17, 172, 177–78.

²⁹ *Id.* at 179–86.

³⁰ *Id.* at 29–44 (addressing population growth in Virginia); *id.* at 49–59 (addressing the river structure of the United States).

³¹ *Id.* at 31–44.

Benjamin Franklin essentially guessed the growth of America in 1751 and was proven accurate in the 1890 census.³²

When advancing his points, Post does not seem to know when to turn off history and continue developing his points. Another example occurs in Chapter 6 of the book, a largely unnecessary chapter about “power law” that not only exceeds the scope of the author’s thesis but also assumes too much knowledge on behalf of the average reader.³³ Here, Post included a footnote that spans two pages identifying things that Jefferson admits not understanding: specifically, finding seashells in the mountains.³⁴ Post makes a weak attempt to tie this in to the subject matter of the chapter in order to illustrate shock at a particular mathematical result, but simply fails.³⁵ In the end, the reader is left guessing whether “power law”³⁶ is so important that it requires a whole chapter, or if Post just wanted to tell a story about Jefferson’s seashells. Because of these examples, the reader quickly questions whether the book is about the Internet and cyberspace or Jefferson. The long-winded example obscures the illustrative Jeffersonian approach used by the author to explain Internet and cyberspace challenges.³⁷

III. So What is the Problem with the Internet?

Stylistic criticisms aside, Post does have solid organization and takes the reader from how the technology works to how that technology should be governed.³⁸ Concerning governance, he provides a clear discussion establishing two areas requiring law on the Internet.³⁹ The first is the law dealing with the nuts and bolts of how the Internet operates and the second is the law about how the space or the content on the Internet (cyberspace) should be governed. Post posits that the legal system to govern the nuts and bolts of the Internet is “nothing short of astonishing. . .” and works, but that the current governance of what happens in cyberspace needs serious work.⁴⁰

³² *Id.* at 38 n.5.

³³ *Id.* at 90–91.

³⁴ *Id.* at 90 n.1.

³⁵ *Id.* at 93.

³⁶ “Power Law,” simply stated, is a way the TCP/IP network deals with information allowing this particular network to move information quickly and therefore grow. *Id.* at 97–98.

³⁷ *Id.* at 17–18. Post makes this very point himself in the Epilogue. *Id.* at 209.

³⁸ *But see* Review of *In Search of Jefferson’s Moose: Notes on the State of Cyberspace*, <http://www.taugh.com/moose.pdf> (last visited June 2, 2013) (arguing that factual errors concerning Post’s explanation of technology, such as using imprecise examples, affect the book’s credibility).

³⁹ POST, *supra* note 1, at 142–62, 163–86.

Post moves through the governing of the nuts and bolts of the Internet in a somewhat adroit fashion, presumably because it is a system of Internet code-making left to the people to control and apparently consistent with his preferred Jeffersonian vision.⁴¹ Post admits that the power to make code or “set the TCP/IP rules, at the very bottom of the stack is immense,” yet he fails to meaningfully address the fact that power to do so is held by a relatively small number of people in this hyper-technical area. This concentration of power seems to be an obvious shortcoming, particularly if applying Jeffersonian philosophy.⁴²

Conversely, in the area of cyberspace governance, Post presents the most interesting and useful information to the average reader.⁴³ Unfortunately, the section is only a mere forty-four pages long. Here Post deftly explains two primary competing camps of Internet governance, using “The Yahoo! Problem”⁴⁴ as the backdrop. He labels the two camps the “Unexceptionalist,” and the “Exceptionalist.”⁴⁵ The “Unexceptionalist” view is that current law in each country accounts for the harms created by the Internet.⁴⁶ Post argues that this approach amounts to a game of “jurisdictional Whack-a-Mole,” subjecting a people to jurisdiction wherever their cyberspace content may be displayed and resulting in a chaotic *ex post facto* application of the law.⁴⁷

The second approach is the “Exceptionalist” view. The “Exceptionalist” believes that “applying jurisdictional principles that were developed to deal with real space border-crossing transactions to network transactions leads to a troubling and perhaps even absurd result.”⁴⁸ As an “Exceptionalist,” Post uses futuristic examples in which governance is triggered by the area in cyberspace where a

⁴⁰ *Id.* at 141 (approving of “the idea that [code-making] can be exercised only when there is a broad global consensus . . .”); *id.* at 169 (explaining the “Unexceptionalist” law cannot “guide the behavior of those subject to it in any meaningful way”).

⁴¹ *See generally id.* at 127–41 (outlining the Internet code-making process by the Internet Engineering Task Force and Post argument that they have no real authority, but satisfactorily creates internet operating standards by “consensus”).

⁴² *See id.* at 171–77 (outlining Jefferson’s rules for governance of the West).

⁴³ *See supra* p. 39.

⁴⁴ “The Yahoo! Problem” is a case in which Yahoo!, a California corporation, hosted an auction website that sold items world-wide. On a particular day it was selling “Nazi-related memorabilia.” Yet, “French law prohibits the display or sale of Nazi-related memorabilia.” “A group of French Plaintiffs . . . brought an action in the civil court in Paris, seeking an injunction against Yahoo!’s continuing display of these items to French users.” The French applied French law, and Yahoo! lost the suit. POST, *supra* note 1, at 164–65, 167 n.1.

⁴⁵ *Id.* at 166–67.

⁴⁶ *Id.* at 166.

⁴⁷ *Id.* at 168–69, 186.

⁴⁸ *Id.* at 167.

transaction takes place rather than by the physical boundaries of the sovereign states.⁴⁹ Even if only presented as an example of Jeffersonian “outside-the box thinking,” Post fails to take the reader to the next level with his example. Although he addresses some law that might be needed in this community such as freedom of speech and intellectual property rights, he does not consider how this type of thinking might affect current institutions.⁵⁰

A more complete analysis would include a chapter explaining how his example might impact state sovereignty.⁵¹ Even though Post’s example posits an entire legal structure within a cyber community to deal with issues where the transaction takes place, the fact still remains that people in countries with values and laws make these transactions. The author’s example leaves lingering questions: If a cyber community is its own place, who controls what happens there? If users control what happens, what jurisdictional law should govern them? Can individuals operating an avatar in cyberspace violate the law of the country the individual is in because the transaction happens in cyberspace? How does this impact national security if a user is simply moving secret documents in cyberspace? Who is the violator: the person, the avatar, or both? These are just a few of the questions that come to mind, which Post could have more fully developed with an additional chapter.⁵²

IV. Lesson for Judge Advocates and Conclusion

While Post offers little in the way of guidance for the average practicing judge advocate, those with an interest in international law, conflicts of law, and cyber law will likely find his work thought-provoking. The book will be most useful as a springboard for further research by academics in the field, rather than answer any pressing questions about how to govern. Strangely, this Internet book may also appeal to Jefferson scholars. The book talks about current and relevant areas of Internet technology and cyberspace governance. Unlike the once popular CB Radio, the Internet continues to grow and hold the world’s attention. In this regard, Post is on target, and hopefully his moose analogy illustrates to the average person that the Internet is here to stay. Overall, Post succeeds in presenting all the right theoretical questions about the Internet, but leaves the reader with no real answers.

⁴⁹ *Id.* at 185; *see also id.* at 186 (stating “I just wish the Unexceptionalist would stop telling us that we don’t [have the right to make decisions for themselves]”) (emphasis added).

⁵⁰ *Id.* at 187; *see id.* at 185–86 (only addressing the right to make law and not the impact of law).

⁵¹ *See, e.g.,* Henry H.Perritt Jr., *The Internet as a Threat to Sovereignty?: Thought’s on the Internet’s Role in Strengthening National and Global Governance*, 5 *IND. J. GLOBAL LEGAL STUD.* 423 (1998) (arguing the internet strengthens sovereignty).

⁵² *See, e.g.,* Paul Schiff Berman, *The Globalization of Jurisdiction*, 151 *U. PA. L. REV.* 311 (2002) (For a more complete argument concerning internet governance and sovereignty, including a more in depth look at David Post’s views on the issues of internet governance.). Post states that these omissions are intentional as discussion of these types of topics were outside the scope of the book; however, such omissions leave the reader feeling like the work is incomplete. *See POST, supra* 1, at 209.