


4-7-2001

Technology and Governance: The Cybersnake and the Digital Apple?

Bud Wonsiewicz

Follow this and additional works at: <http://scholar.law.colorado.edu/cartography-of-governance-environmental-ngos>

 Part of the [International Law Commons](#), [Law and Society Commons](#), [Partnerships Commons](#), and the [Science and Technology Commons](#)

Citation Information

Wonsiewicz, Bud, "Technology and Governance: The Cybersnake and the Digital Apple?" (2001). *A Cartography of Governance: Exploring the Province of Environmental NGOs (April 7-8)*.
<http://scholar.law.colorado.edu/cartography-of-governance-environmental-ngos/4>



William A. Wise Law Library
COLORADO **LAW**
UNIVERSITY OF COLORADO **BOULDER**



Getches-Wilkinson Center Collection

Bud Wonsiewicz, *Technology and Governance: The Cybersnake and the Digital Apple?*, in THE CARTOGRAPHY OF GOVERNANCE: EXPLORING THE ROLE OF ENVIRONMENTAL NGOs (Colo. J. Int'l Env'tl. L. & Pol'y, Univ. of Colo. Sch. of Law 2001).

Reproduced with permission of the Getches-Wilkinson Center for Natural Resources, Energy, and the Environment (formerly the Natural Resources Law Center) at the University of Colorado Law School.

Bud Wonsiewicz

Bud is a frequent speaker and consultant on Broadband Living on both the technical and personal level. He is the former senior vice president and chief technical officer for MediaOne Group, a \$50B international broadband communication company that merged with AT&T in June 2000. Bud also served as chief strategic officer and developed a comprehensive and highly regarded technical and business strategy for the global broadband business. In addition to MediaOne's domestic business, his purview included advanced communication projects in the UK, the Netherlands, Belgium, Poland, the Czech Republic, Hungary, Japan, Singapore, Malaysia, and Indonesia. Bud also held several senior management, technical positions at the predecessor companies of MediaOne, namely USWest and Bell Laboratories. He received his BS and PhD degrees at the Massachusetts Institute of Technology and was an assistant professor there. He holds several patents and has published numerous technical papers.

Bud is also the co-designer of TimeOut, an in-depth program for professionals wishing to renew and expand their personal and professional capacity. He is an avid skier, hiker and sailor with a passion for reading, writing and learning. Bud and his wife Marie have a son, two daughters, and three grandchildren. A self-described vagabond, he resides in Denver, Vail, and Eckville, PA when not on the road or the high seas.

Technology and Governance

The Cybersnake and the Digital Apple?

By
Bud Wonsiewicz
Broadband Living Unlimited
Denver, Colorado

In the past forty years, the world has experienced a technologically driven transformation so profound, extended and universal as to eclipse all previous disruptive events: the European voyages of conquest and discovery in the 15th century, the proliferation of printing in the 16th, the deployment of railroads, steamships and industry in the 19th, and the spread of electric power, telephony, and the automobile in the 20th.

At its core, the present transformation has been driven by the exponential growth in electronic components, digital storage, and digital transmission capacity. The quantity of electronics available at a given price has doubled every eighteen months, or increased tenfold every five years. Presently therefore, a given sum buys 100,000,000 times as much electronic power as it did in 1960. The trends in the digital storage and transmission of information are even more impressive. Advances in software, epitomized by the emergence of the World Wide Web, increase the usefulness of the computer power at our disposal. So does the development of global networks whose utility rises as the square of the number of connected users. No corner of the globe, no group of people are potentially isolated from what many view as a digital garden of Eden, that is, one in which the knowledge of the world is potentially at everyone's fingertips. Or so says the Cybersnake.

As in Eden, the knowledge is of good and for evil. As in Eden, there is no doubt that humans will reach for the digital apple and bite deeply. Consequences for better and for worse will flow and a great drama is sure to ensue, one with profound and puzzling consequences for the people of the earth, their governments, institutions, and culture. Harnessing the great winds that will blow as a result are the subject of this conference.

The aspects of the change can be glimpsed in artifacts visible today throughout the world:

- First, the spread of direct broadcast satellite TV and the efforts by nation states to control the entertainment and information made visible to its citizens.
- Second, the number and importance of cellular phones in the developing nations. What seems like a frivolous luxury in the developed world is the difference between economic viability and oblivion to a small business in Warsaw, Kuala Lumpur or Bangalore.
- Third, the spread of Internet cafes, rare in places like New York City, but growing increasingly common and valuable as the per capita income of the city decreases.
- Fourth, we see fax machines, email and satellite TV providing information instantly across the globe without regard to rank, boundary or politics. Think of Bush and Hussein watching CNN simultaneously in the first hours of the Gulf

war to find out what is happening or of the vain efforts to staunch the flow of information in or out of any of a dozen repressive governments.

- Finally, we see computing power diffusing rapidly. It is nearly as easy for a person in Manila or Jakarta, say, to join cyberspace as it is for a person of comparable means in Los Angeles. Consequently, digital services can be rendered instantly and economically from most parts of the globe.

The response of governments, NGOs and interest groups to the Cybersnake has been divided. On the one hand we see vigorous efforts to promote digital technology as a vital part of national infrastructure, critical to competitiveness and the communal quality of life. On the other, we see equally vigorous efforts to block satellite broadcasts, restrict the Internet, and maintain control over the information and financial channels. Seemingly if we want the benefits of free access to information, we must accept a destabilization of political institutions, access to forbidden material such as pornography, hate literature, and outright calls to revolution. If we want access to the world economy, we accept the anonymous and rapid transfer of funds into and out of our economy and businesses. If we want access to the news and entertainment of the world, we accept standards that markedly diverge from our own cultural norms. All of this challenges the very notions of nation, state, culture and religion. It poses challenges to governance unimaginable forty years ago, let alone when most of our institutions were defined.

Whatever we, our governments, or our organizations think of the blandishments of the Cybersnake, the digital apple is unlikely to vanish or to cease its exponential increase in attractiveness. The promise of knowledge and freedom inherent in digital technology will challenge our deepest resources and abilities. And the challenge is two fold: to nurture, expand and share the good as widely as possible while minimizing and mitigating the ill effects. To that end we will need a greatly improved and sophisticated understanding of the Cartography of Governance. The notions and structures evolved in the last few centuries are unlikely to serve. As Jean Kerr put it, "The snake has all the lines."