### The Wealth of Networks:

### How Social Production Transforms Markets and Freedom by Yochai Benkler, Yale University Press

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# Part II The Networked Information Economy

#### **Epigraph**

"Human nature is not a machine to be built after a model, and set to do exactly the work prescribed for it, but a tree, which requires to grow and develop itself on all sides, according to the tendency of the inward forces which make it a living thing."

"Such are the differences among human beings in their sources of pleasure, their susceptibilities of pain, and the operation on them of different physical and moral agencies, that unless there is a corresponding diversity in their modes of life, they neither obtain their fair share of happiness, nor grow up to the mental, moral, and aesthetic stature of which their nature is capable."

John Stuart Mill, On Liberty (1859)

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## Part II The Political Economy of Property and Commons

How a society produces its information environment goes to the very core of freedom. Who gets to say what, to whom? What is the state of the world? What counts as credible information? How will different forms of action affect the way the world can become? These questions go to the foundations of effective human action. They determine what individuals understand to be the range of options open to them, and the range of consequences to their actions. They determine what is understood to be open for debate in a society, and what is considered impossible as a collective goal or a collective path for action. They determine whose views count toward collective action, and whose views are lost and never introduced into the debate of what we should do as political entities or social communities. Freedom depends on the information environment that those individuals and societies occupy. Information underlies the very possibility of individual self-direction. Information and communication constitute the practices that enable a community to form a common range of understandings of what is at stake and what paths are open for the taking. They are constitutive components of both formal and informal mechanisms for deciding on collective action. Societies that embed the emerging networked information economy in an institutional ecology that accommodates nonmarket production, both individual and cooperative, will improve the freedom of their constituents along all these dimensions.

The networked information economy makes individuals better able to do things for and by themselves, and makes them less susceptible to manipulation by others than they were in the mass-media culture. In this sense, the emergence of this new set of technical, economic, social, and institutional relations can increase the relative role that each individual is able to play in authoring his or her own life. The networked information economy also promises to provide a much more robust platform for public debate. It enables citizens to participate in public conversation continuously and pervasively, not as passive recipients of "received wisdom" from professional talking heads, but as active participants in conversations carried out at many levels of political and social structure. Individuals can find out more about what goes on in the world, and share it more effectively with others. They can check the claims of others and produce their own, and they can be heard by others, both those who are like-minded and opponents. At a more foundational level of collective understanding, the shift from an industrial to a networked information economy increases the extent to which individuals can become active participants in producing their own cultural environment. It opens the possibility of a more critical and reflective culture.

Unlike the relationship of information production to freedom, the relationship between the organization of information production and distributive justice is not intrinsic. However, the importance of knowledge in contemporary economic production makes a change in the modality of information production important to justice as well. The networked information economy can provide opportunities for global development and for improvements in the justice of distribution of opportunities and capacities everywhere. Economic opportunity and welfare today - of an individual, a social group, or a nation - depend on the state of knowledge and access to opportunities to learn and apply practical knowledge. Transportation networks, global financial markets, and institutional trade arrangements have made material resources and outputs capable of flowing more efficiently from any one corner of the globe to another than they were at any previous period. Economic welfare and growth now depend more on knowledge and social organization than on natural sources. Knowledge transfer and social reform, probably more than any other set of changes, can affect the economic opportunities and material development of

different parts of the global economic system, within economies both advanced and less developed. The emergence of a substantial nonmarket sector in the networked information economy offers opportunities for providing better access to knowledge and information as input from, and better access for information outputs of, developing and less-developed economies and poorer geographic and social sectors in the advanced economies. Better access to knowledge and the emergence of less capital-dependent forms of productive social organization offer the possibility that the emergence of the networked information economy will open up opportunities for improvement in economic justice, on scales both global and local.

The basic intuition and popular belief that the Internet will bring greater freedom and global equity has been around since the early 1990s. It has been the technophile's basic belief, just as the horrors of cyberporn, cybercrime, or cyberterrorism have been the standard gut-wrenching fears of the technophobe. The technophilic response is reminiscent of claims made in the past for electricity, for radio, or for telegraph, expressing what James Carey described as "the mythos of the electrical sublime." The question this part of the book explores is whether this claim, given the experience of the past decade, can be sustained on careful analysis, or whether it is yet another instance of a long line of technological utopianism. The fact that earlier utopias were overly optimistic does not mean that these previous technologies did not in fact alter the conditions of life - material, social, and intellectual. They did, but they did so differently in different societies, and in ways that diverged from the social utopias attached to them. Different nations absorbed and used these technologies differently, diverging in social and cultural habits, but also in institutional strategies for adoption some more state-centric, others more market based; some more controlled, others less so. Utopian or at least best-case conceptions of the emerging condition are valuable if they help diagnose the socially and politically significant attributes of the emerging networked information economy correctly and allow us to form a normative conception of their significance. At a minimum, with these in hand, we can begin to design our institutional response to the present technological perturbation in order to improve the conditions of freedom and justice over the next few decades.

The chapters in this part focus on major liberal commitments or concerns. Chapter 5 addresses the question of individual autonomy. Chapters 6, 7, and 8 address democratic participation: first in the political public sphere and then, more broadly, in the construction of culture. Chapter 9 deals with justice and human development. Chapter 10 considers the effects of the networked information economy on community.

#### Chapter 5 Individual Freedom: Autonomy, Information, and Law

Freedom to Do More For Oneself, by Oneself, and With Others

Autonomy, Property, and Commons

Autonomy and the Information Environment

Autonomy, Mass Media, and Nonmarket Information Producers

#### Chapter 6 Political Freedom Part 1: The Trouble with Mass Media

Design Characteristics of a Communications Platform for a Liberal Public Platform or a Liberal Public Sphere

The Emergence of the Commercial Mass-Media Platform for the Public Sphere

**Basic Critiques of Mass Media** 

## Chapter 7 Political Freedom Part 2: Emergence of the Networked Public Sphere

**Basic Tools of Networked Communication** 

Networked Information Economy Meets the Public Sphere

Critiques of the Claims that the Internet has Democratizing Effects

Is the Internet Too Chaotic, Too Concentrated, or Neither?

On Power Law Distributions, Network Topology, and Being Heard

Who Will Play the Watchdog Function?

Using Networked Communication to Work Around Authoritarian Control

Toward a Networked Public Sphere

#### Chapter 8 Cultural Freedom: A Culture Both Plastic and Critical

Cultural Freedom in Liberal Political Theory

The Transparency of Internet Culture

The Plasticity of Internet Culture: The Future of High-Production-Value Folk Culture

A Participatory Culture: Toward Policy

#### Chapter 9 Justice and Development

Liberal Theories of Justice and the Networked Information Economy

Commons-Based Strategies for Human Welfare and Development

Information-Embedded Goods and Tools, Information, and Knowledge

Industrial Organization of HDI-Related Information Industries

Toward Adopting Commons-Based Strategies for Development

Commons-Based Research for Food and Medicines

Commons-Based Strategies for Development: Conclusion

Chapter 10 Social Ties: Networking Together

From "Virtual Communities" to Fear of Disintegration

A More Positive Picture Emerges Over Time

The Internet as a Platform for Human Connection

The Emergence of Social Software

The Internet and Human Community