

December 22, 2009

OP-ED COLUMNIST

## The Protocol Society

By [DAVID BROOKS](#)

In the 19th and 20th centuries we made stuff: corn and steel and trucks. Now, we make protocols: sets of instructions. A software program is a protocol for organizing information. A new drug is a protocol for organizing chemicals. Wal-Mart produces protocols for moving and marketing consumer goods. Even when you are buying a car, you are mostly paying for the knowledge embedded in its design, not the metal and glass.

A protocol economy has very different properties than a physical stuff economy. For example, you and I can't use the same piece of metal at the same time. But you and I can use the same software program at the same time. Physical stuff is subject to the laws of scarcity: you can use up your timber. But it's hard to use up a good idea. Prices for material goods tend toward equilibrium, depending on supply and demand. Equilibrium doesn't really apply to the market for new ideas.

Over the past decades, many economists have sought to define the differences between the physical goods economy and the modern protocol economy. In 2000, Larry Summers, then the Treasury secretary, gave a speech called "The New Wealth of Nations," laying out some principles. Leading work has been done by Douglass North of Washington University, Robert Fogel of the University of Chicago, Joel Mokyr of Northwestern and Paul Romer of Stanford.

Their research is the subject of an important new book called "From Poverty to Prosperity," by Arnold Kling and Nick Schulz.

Kling and Schulz start off entertainingly by describing a food court. There are protocols everywhere, not only for how to make the food, but how to greet the customers, how to share common equipment like trays and tables, how to settle disputes between the stalls and enforce contracts with the management.

The success of an economy depends on its ability to invent and embrace new protocols. Kling and Schulz use North's phrase "adaptive efficiency," but they are really talking about how quickly a society can be infected by new ideas.

Protocols are intangible, so the traits needed to invent and absorb them are intangible, too. First, a nation has to have a good operating system: laws, regulations and property rights.

For example, if you are making steel, it costs a medium amount to make your first piece of steel and then a significant amount for each additional piece. If, on the other hand, you are making a new drug, it costs an incredible amount to invent your first pill. But then it's nearly free to copy it millions of times. You're only going to invest the money to make that first pill if you can have a temporary monopoly to sell the copies. So

a nation has to find a way to protect intellectual property while still encouraging the flow of ideas.

Second, a nation has to have a good economic culture. “From Poverty to Prosperity” includes interviews with major economists, and it is striking how they are moving away from mathematical modeling and toward fields like sociology and anthropology.

What really matters, Edmund S. Phelps of Columbia argues, is economic culture — attitudes toward uncertainty, the willingness to exert leadership, the willingness to follow orders. A strong economy needs daring consumers (Phelps says China lacks this) and young researchers with money to play with (Romer notes that N.I.H. grants used to go to 35-year-olds but now they go to 50-year-olds).

A protocol economy tends toward inequality because some societies and subcultures have norms, attitudes and customs that increase the velocity of new recipes while other subcultures retard it. Some nations are blessed with self-reliant families, social trust and fairly enforced regulations, while others are cursed by distrust, corruption and fatalistic attitudes about the future. It is very hard to transfer the protocols of one culture onto those of another.

It’s exciting to see so many Nobel laureates taking this consilient approach. North, the leader of the field, doesn’t even think his work is economics, just unified social science.

But they are still economists, with worldviews that are still excessively individualistic and rationalistic. Kling and Schulz do not do a good job of explaining how innovation emerges. They list some banal character traits — charisma, passion — that entrepreneurs supposedly possess. To get a complete view of where the debate is headed, I’d read “From Poverty to Prosperity,” and then I’d read Richard Ogle’s 2007 book, “Smart World,” one of the most underappreciated books of the decade. Ogle applies the theory of networks and the philosophy of the extended mind (you have to read it) to show how real world innovation emerges from social clusters.

Economic change is fomenting intellectual change. When the economy was about stuff, economics resembled physics. When it’s about ideas, economics comes to resemble psychology.

*Bob Herbert is off today.*

Copyright 2009 The New York Times Company

[Privacy Policy](#) | [Terms of Service](#) | [Search](#) | [Corrections](#) | [RSS](#) | [First Look](#) | [Help](#) | [Contact Us](#) | [Work for Us](#) | [Site Map](#)