When I started to examine the impact of information technology on international relations a few years ago, I was initially attracted to the topic because there was not a lot of conventional wisdom on it. Compared to NATO enlargement, peacekeeping or ethnic conflict, this was a very new topic.

It turned out that the ability of a post-industrial society to generate conventional wisdom, however, is great. Despite the fact that it is a new topic, there actually is quite a lot of conventional wisdom. In fact, there is probably a corollary to Moore's Law on the growth of processing power, that is, the stock of conventional wisdom about information technology doubles roughly every 18 months or so. Even so, a lot of the conventional wisdom is self-contradictory, inconsistent or rapidly changing.

When the World Wide Web was first introduced, everybody thought that it was really terrific because it allowed everyone to be a publisher. Now, the general consensus is that there is too much junk on the Web, and that what we need are a lot of filters, gatekeepers and push technology to make sure that we only see information that is really important to us.

Now, this situation does not mean that the conventional wisdom is wrong. However, I think that when we approach this subject, it is much more
interesting to look at the ways in which one might be skeptical of the conventional wisdom rather than simply repeating it.

Briefly, let me point to five issues where there has been a lot of agreement about the impact of the information revolution on world politics.

First, as discussed extensively by Jean-Marie Guéhenno, it is leading to the erosion of national sovereignty. Walter Wriston in *The Twilight of Sovereignty* also wrote extensively about the way capital markets have been eroding the power of nation-states. The "CNN effect" is one manifestation of this in the political realm.

The second element of existing wisdom is that the information revolution has been good for democracy. Many people will assert that the spread of electronic media in the former Soviet Union hastened its decline. There has been use of e-mail and faxes during the Tiananmen Square demonstrations and events in the Philippines in the 1980s, for example.

The argument is that this form of technology is inherently democratizing. It pushes power down to lower levels of society. It weakens hierarchies that formerly acquired their power by maintaining chokeholds on information, and it strengthens a kind of global civil society.

The third element is that information technology is good for economic development. It allows developing nations to leapfrog entire stages of industrial development. It is relatively clean. It requires a skilled work force, a high degree of human capital, but not a lot of the old kind of infrastructure that characterized development in earlier periods.

The fourth element is that information technology will transform the nature of warfare. We are familiar with the term "the revolution in military affairs," which, actually, was originally a Soviet term. It is impossible now to attend a Pentagon briefing without hearing all sorts of buzzwords such as "information dominance" or "transparent battle space." There is also a general belief that military technology is in the throes of an absolutely fundamental transformation.

Finally, the fifth element is that information technology will transform organizations. Just as the authoritarian nation-state is threatened by this democratizing technology, so will large hierarchical organizations, the old IBMs and AT&Ts of the past, be undermined.

The conclusion that many people come to is that basically the information revolution is a terrific boon from the standpoint of American interests. It is good for our political interests because it promotes democracy. It is good for our economic interests because it promotes economic development.
Moreover, American corporations dominate the information technology business, and socially, the information revolution is very much in accord with American individualism and its liberal traditions.

I would suggest a few points of skepticism on every one of those elements of conventional wisdom, not, again, to say that they are not true, but as a starting point for discussion. It is, as I said, interesting to see why the conventional wisdom is not the case.

Let us begin with sovereignty. It is clear that taxation authority and other aspects of sovereignty have declined. However, there are many key functions of nation-states that are absolutely indispensable, such as, for example, the protection of rights, especially property rights.

When Microsoft or Time-Warner runs into trouble with Chinese companies pirating its intellectual property, where does it turn to first? It turns to the State Department, which then calls upon the usual assets of a nation-state and the usual tools of diplomacy in order to get the Chinese government to make its companies behave.

On the question of democracy, it is very possible that there may be "too much" civil society. In fact, a lot of the discussion about the dysfunction of American democracy has been related to the fact that there are too many interest groups and that they are too deadlocked, too able to respond at a moment's notice on a variety of issues. While the individual quality of the conversations being carried out may be high, in a way it meant that Americans living in a broad democracy had less in common with one another, and that that was something perhaps to worry about. Several years ago, Ithiel de Sola Pool wrote about a general worry that as broadcast mass media dissolved into modern electronic media, there would be a privatization of what had formerly been a public space dominated by the networks and by large media organizations.

In terms of the military, it seems entirely possible that we are headed towards another Vietnam kind of debacle. If you look at the kind of confidence that is being placed in the technology to transform warfare, it makes one a little bit nervous. I do not know of a computer chip that will allow one to distinguish between, for example, a foot soldier on the ground and a 17 year-old in civilian clothes. Is he a guerrilla or is he an innocent civilian?

What that computer chip will guarantee you, though, is that if you make a mistake in judgment and you shoot the innocent civilian, the incident will be on CNN that evening, and your government will have to pay a severe price for that.

In terms of economic development, there is a certain amount of evidence that
information technology has been contributing to the maldistribution of incomes around the world. Basically, computers are pretty good at helping smart, well educated people improve their lead over people that are less smart and less well educated. The evidence shows up as growing income dispersion in the United States, and as high permanent rates of unemployment in the larger welfare states of Europe.

And finally, in terms of organizations, the transition from larger, hierarchical to flatter network organizations is an important transformation that we are undergoing. However, people overlook an important fact, which is that informal networks really depend on a thing called social capital to make them effective.

The transition from formal modes of command and control to more informal, norm-based organization presupposes high amounts of such norms. Without them, the new form of organization simply is not going to work.