

FROM NATION-STATE TO CYBERSTATE:

INFORMATION TECHNOLOGY AND THE
TRIUMPH OF THE COMMERCIAL ETHIC

STEPHEN MOONEY



The thesis of this paper is that information technology, commonly defined as the fusion of computers and telecommunications, is dramatically accelerating man's ongoing technological evolution in such a way as to radically transform his social structures — particularly by undermining the power and authority of the nation-state.

The result will be a continuing fragmentation of the nation-state into smaller geo-political units as economic power is transferred from the nation-state to the 'cyberstate' — a constellation of commercial 'adhocracies' within an increasingly global 'object-oriented' economy.

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**Libertarian
Alliance**

FOR LIFE, LIBERTY AND PROPERTY

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INTRODUCTION

Not since the Industrial Revolution have we seen such dramatic advances in technology as we are witnessing today. The development of the personal computer and its marriage to an increasingly sophisticated global telecommunications infrastructure is changing the world around us so rapidly that we speak now of an Information Revolution. And, just as the Industrial Revolution redefined man's social structures — particularly his political and economic structures — by converting empire into nation-state and mercantilism into economic nationalism, so too will the Information Revolution convert the nation-state into the city-state and economic nationalism into global laissez-faire capitalism.

In this paper I shall present a theoretical model to justify my hypothesis. The model is a synthesis of the works of Jane Jacobs, Ayn Rand, and Douglass North. Within this model I introduce a framework for the analysis of institutions and organizations. But as this is a short paper, in fact a precis of a much larger work in progress, I necessarily focus more on the hypothesis than the model itself.

SYSTEMS OF SURVIVAL

Jane Jacobs, a Canadian economist with a specialization in the economy of cities, presents in *Systems of Survival* an investigation into the nature of man's ethics. She concludes that man has evolved two ethical systems that cut across all human histories and cultures. She terms these the 'guardian' syndrome and the 'commercial' syndrome and claims their evolution derives from man's two fundamental methods of survival: taking natural resources from a specific territory, and trading artifacts across different territories. She argues that each mode of survival, to function optimally, gives rise to its own ethical system. She defines the two ethical systems with fifteen pairs of mutually exclusive precepts. Generally though, the commercial ethic is built around communication and trade while the guardian syndrome is built around control and government. What is different about Jacobs' perspective on ethics is this notion of syndromes or systems of behaviour; in other words, institutions.

Jacobs then reflects on the symbiosis between the two syndromes and suggests it has taken two historical forms:

caste, and 'knowledgeable flexibility'. Plato, she argues, understood the principle of the syndromes and promoted the caste system as the appropriate method of demarcation. But while the *Republic* is top-heavy with guardians, there was certainly a recognition of the need for merchants. Other caste systems, that did not value commerce, could not prevent the evolution of a merchant class and its accompanying syndrome.

Neither the castes of India nor those of ancient Rome made allowances for merchants. That was typical of caste arrangements elsewhere, with merchants inventing themselves and their services down at the bottom of society. (Jacobs 1993, p. 192)

The alternative to the caste system is what Jacobs calls 'knowledgeable flexibility' — the ability of an entire society or its individual members to shift between the two syndromes. In this sense the two syndromes are parallel institutions. The problem with 'knowledgeable flexibility', argues Jacobs, is potential systemic corruption. She calls this The Law of Intractable Systemic Corruption, and defines it thus:

Any significant breach of a syndrome's integrity — usually by adopting an inappropriate function — causes some normal virtues to convert automatically to vices, and still others to bend and break for necessary expedience. (Jacobs, 1993, p. 132)

This occurs when a commercial enterprise adopts a warrior mentality and values prowess, hierarchy and loyalty (from the guardian syndrome) over good faith, contract, and competence (indigenous to the commercial syndrome), or when a 'political' institution, such as an army, police force or government adopts a business mentality and values initiative and enterprise, industriousness and efficiency (from the commercial syndrome) over obedience, discipline leisure, and honour (indigenous to the guardian syndrome). As she puts it so nicely: "When warriors pick up industriousness from the commercial syndrome, they plumb still-deeper circles of hell. ... You can't mix up such contradictory moral syndromes without opening up moral abysses and producing all kinds of functional messes." (Jacobs, 1993, pp. 80-81)

Jacobs offers no solution to the problem of symbiosis other than vigilance within the flexible model. In other

words, she plumps for a more educated, but otherwise familiar, liberal democracy. Ayn Rand, though, has a solution.

OBJECTIVIST ETHICS

Ayn Rand, a highly influential American (originally Russian) writer who is generally ignored by academia, deserves, I believe, some serious attention. Her work not only provides a comprehensive synthesis of the vast and disparate domains of philosophy, psychology, politics, economics, and art, but she presents clear and rational arguments for the adoption of an ethical-political model which, she believed, would result in the optimization of man's wealth and happiness. I introduce her here not so much for the validity of her arguments, for she rejects the naturalistic fallacy (Hume's Law), but because her model, formulated before the Information Revolution, may be integrated into a larger model which circumvents the naturalistic fallacy and explains the transition from an industrial to an information economy.

Rand, like Jacobs, based her ethics on the nature of survival. But she approached the subject from the more traditional perspective of the individual and the collective. She derided the idea that ethics should be legitimate simply through evolution or tradition and set out instead to construct a rational framework within which they could be deduced. She argues strongly throughout her writings that man, who's survival depends on his *rational* assessment of his surrounding real and knowable world, must be granted the right — the moral right — to pursue his judgements and be responsible for them, without interference through physical force from his fellow man.

Since man's mind is his basic tool of survival, his means of gaining knowledge to guide his actions — the basic condition he requires is the freedom to think and to act according to his rational judgement. This does not mean that a man must live alone and that a desert island is the environment best suited to his needs. Men can derive enormous benefits from dealing with one another. A social environment is most conducive to their successful survival — *but only on certain conditions*.

The two great values to be gained from social existence are: knowledge and trade. Man is the only species that can transmit and expand his store of knowledge from generation to generation; the knowledge potentially available to man is greater than any one man could begin to acquire in his own lifespan; every man gains an incalculable benefit from the knowledge discovered by others. The second great benefit is the division of labor: it enables a man to devote his effort to a particular field of work and to trade with others who specialize in other fields. This form of cooperation allows all men who take part in it to achieve a greater knowledge, skill and productive return on their effort than they could achieve if each had to produce everything he needs, on a desert island or on a self-sustaining farm. ("The Nature of Government", Ayn Rand, 1963, in Rand, 1964, p. 107)

But Rand is, in fact, defending the commercial syndrome against the guardian, and without knowing it, she answers Jacobs' question about symbiosis between them. The fascinating point here is that Jacobs rescues Rand from the naturalistic fallacy. For ethics may be viewed as synthetic *a priori* propositions whereby survival itself prejudices the viability and therefore validity of the ethical sets. In other words, ethical sets that fail to promote survival, result in the decline and eventual destruction of their adherents. Thus the naturalistic fallacy can be avoided by recasting the problem within an evolutionary synthetic *a priori* framework. In this way Rand and Jacobs are agreed: two ethical sets dictated by two modes of survival.

INSTITUTIONAL CHANGE

Douglass North, an economic historian, won the Nobel Prize in Economics in 1993 for his investigation of economics history and how institutions shape economic activity. In his 1990 book *Institutions, Institutional Change and Economic Performance*, written before Jacobs' *Systems of Survival*, he proposed that institutions shape the economic environment in which organizations function. Thus prevailing ethics (social norms and conventions, popular beliefs and myths, codes of conduct, laws and regulations) establish strategic incentives for organizations. In pursuing their strategies, organizations, in turn, alter the institutions. A feedback process ensues which, through multiple iterations, sets up a kind of markov chain or 'path-dependence' that shapes the direction of an economy.

Institutions, together with the standard constraints of economic theory, determine the opportunities in a society. Organizations are created to take advantage of those opportunities, and, as the organizations evolve, they alter the institutions. The resultant path of institutional change is shaped by (1) the lock-in [irreversibilities that prevent the reconsideration of paths-not-taken] that comes from the symbiotic relationship between institutions and the organizations that have evolved as a consequence of the incentive structure provided by those institutions and (2) the feedback process by which human beings perceive and react to changes in the opportunity set. (North, 1990, p. 7)

THE JACOBS-RAND-NORTH MODEL

In brief, then, by combining Jacobs and North, we have a model whereby societies have two modes of survival, each with its complementary ethical system. These ethical systems, informal institutions, determine the basic nature and strategy of organizations. Organizations, by definition, have a formal structure and purpose. Organizations, therefore, need formal institutions (laws/regulations) in order to delimit the boundaries of the organization and enforce its operational parameters. Simply put, formal institutions are concerned with definition and enforcement. In this way, organizations are the creatures of the parent ethics. And once organizations, as corporeal bodies with formal enforcement power, come

into existence, they can apply that power to modifying the parent ethics. This is as far as North goes.

The next step in the Jacobs-Rand-North model is to suggest that, as there are only two ethical systems, there are only two basic types of organization: again, ‘guardian’ and ‘commercial’. Examples of guardian organizations include government, the military and the police, while commercial organizations include the corporation, partnerships, and sole proprietorships. But, in general, I believe that man’s primary organizations are the state and the firm. The state makes ‘laws’ that are enforced by the police, and the firm defines ‘terms’ of contract that are enforced, in the absence of the state, through ostracism.

The analysis of institutions and organizations must therefore be undertaken within the following framework: (1) the adherence of an organization to its parent ethic, (2) the competition between organizations to promote its parent ethic as the dominant ethic, (3) the result of that competition on the integrity and relative strengths of the parent ethics, and (4) the feedback effect on organizations. North’s work, within this framework, would pertain to the second and fourth points.

While it is not the purpose of this paper to develop this framework, let me briefly suggest that the history of the world has witnessed an increase in the strength of the commercial syndrome at the expense of the guardian, and a deterioration of the integrity of both syndromes. Both of these trends were accelerated by the Industrial Revolution; the twentieth century has witnessed the devastating consequences of their intersection.

POLITICS

A fundamental proposition of this paper is the separation of the control and communication function with respect to organizations. This is critical. According to Roger Scruton:

A fundamental divide separates those who adhere to the rights theory of politics, from those who adhere to the power theory, and this is often reflected in definitions of ‘the state’. As an example of the first, consider Hegel: ‘the state is the actuality of the ethical idea’; as an example of the second, Weber: the state is the organization which ‘monopolizes legitimate violence over a given territory’. (Scruton, 1982, p. 446)

For Ayn Rand, both of these definitions are true and compatible. She would differ with Hegel over the nature of ethics, and she would no doubt dislike being associated with Weber, but her definition of government, I believe, marries the Hegelian and Weberian concepts.

A government is an institution that holds the exclusive power to *enforce* certain rules of social conduct in a given geographical area. (“The Nature of Government”, Ayn Rand, 1963, in Rand, 1964, p. 107)

Let me explore this in more detail. Man controls his physical environment through physical force. By this I mean that man directs energy at objects in order to change their form or behaviour. He does not try to rea-

son with a large tree blocking the road, he does not attempt to convince certain metals to combine into a specific alloy, nor does he discuss politics with his dog. Rather he applies physical force to the physical world to modify it according to his will. This is the basis of wealth.

But men relate to each other, as opposed to trees and metals, in *two* ways — through control and communication. Whereas man can only *control* his physical environment, he can *control* his fellow men or *communicate* with them. And here is the critical point: communication is a transfer of knowledge while control is a transfer of energy. In practical matters of politics there is a *vast and profound* difference between one man telling another that the apple he is about to eat is poisoned, and physically preventing him from eating it. *This point is the linchpin of the political universe.*

COMMERCE

The Industrial Revolution gave us the large firm; the Information Revolution will take it away. There is an increasing body of literature to support the thesis that as advances in IT reduce information costs, and therefore transaction costs, the size of the firm will decrease.

Sparing the reader a detailed investigation of transaction cost theory, I will just suggest a paper by Brynjolfsson, Malone, Gurbaxani, and Kambil (1989) that demonstrates a correlation between IT and firm size. In general though, I argue that Adam Smith’s division of labour is being extended to production itself: that reduced transaction costs are enabling the subcontracting of components of the production process to small specialized firms, and that these firms — ‘ad hocra-cies’ — are forming a global production network. For those familiar with computer terminology, this global production network of ad hocra-cies will function much like object-oriented code.

Go into any airport today and you will observe a plethora of books on globalization: *Global Dreams*, *Global Reach*, *Global Embrace*, *Global Shift*, *Global Shakeout*, and *Global Paradox*. It almost sounds like a trip to Las Vegas. But this is just the beginning. Today’s authors are identifying the role of information technology in promoting global business much like the authors of the 1920s identified the role of the automobile in promoting domestic harmony.

Michael Porter, of the Harvard Business School, is almost alone in predicting a continuing relationship between the nation-state and its ‘indigenous’ industries. His arguments suggest that countries are the home base of certain industries that, because of national characteristics, tend to achieve a competitive advantage, two examples being the Italian clothing/fashion industry and the British insurance industry. But Kenichi Ohmae, an international business consultant, points out that it is becoming increasingly difficult to determine the national identity of transnational corporations.

Is IBM Japan an American or a Japanese company? Its work force of 20,000 is Japanese, but its equity holders are American. Even so, over the past decade

IBM Japan has provided, on average, three times more tax revenue to the Japanese government than has Fujitsu. What is its nationality? Or what about Honda's operation in Ohio? Or Texas Instruments' memory-chip activities in Japan? Are they 'American' products? If so, what about the cellular phones sold in Tokyo that contain components made in the United States by American workers who are employed by the U.S. division of a Japanese company? (Ohmae 1991, p. 12)

Ohmae's arguments are supported by Stephen Bradley, Jerry Hausman and Richard Nolan, of the Harvard Business School and MIT. Their research focuses primarily on the effect of information technology on transnational business structures.

Products such as automobiles and airplanes, are designed by globally networked groups that collaborate daily, passing 'blueprints' back and forth around the world and talking about them over the telephone or via video conferencing or electronic blackboards. ... Already it is possible to schedule, monitor, and coordinate the production of multiple factories in a number of countries from a single location. The same should be possible for retail outlets, training facilities, and most other operations. (Bradley, 1993, pp. 11-12)

Robert Reich, of the John F. Kennedy School of Government and now President Clinton's Labor Secretary, was one of the first to apprehend the political implications of the globalization of business. In his now famous *Work of Nations* he wrote:

We are living through a transformation that will rearrange the politics and economics of the coming century. There will be no *national* products or technologies, no national corporations, no national industries. There will no longer be national economies, at least as we have come to understand that concept. All that will remain rooted within national borders are the people who comprise a nation. (Reich, 1993, p. 3)

More recently, Richard Barnet and John Cavanagh, both writers on international business, are concerned with the nation-state and the authority of government.

Leaders of nation-states are losing much of the control over their own territory they once had. ... Business enterprises that routinely operate across borders are linking far-flung pieces of territory into a new world economy that bypasses all sorts of political arrangements and conventions. Tax laws intended for another age, traditional ways to control capital flows and interest rates, full-employment policies, and old approaches to resource development and environmental protection are becoming obsolete, unenforceable, or irrelevant. (Barnet/Cavanagh, 1994, p. 19)

Robert Heilbroner, Norman Thomas Professor of Economics at the New School for Social Research, says much the same thing:

What emerges in this increasingly globalized pattern of production is a challenge to the traditional relationship between the economy and the state. The globalized market system stretches beyond the political authority of any single government. Faced with a network of connections that escape their powers of surveillance or regulation, national governments become increasingly unable to cope with the problems that arise from the intrusion of the global economy into their territories, most egregiously in moving jobs to low-wage countries. (Heilbroner, 1992, p. 60)

John Naisbitt, author of *Global Paradox*, puts it bluntly:

The decline of the nation-state is becoming a universal phenomena. At once, we are witnessing the receding of the importance of the nation-state, and, paradoxically, the creation of many more countries. (Naisbitt, 1994, p. 30).

But I think I would like to give the last word to my colleagues Louis Turner and Michael Hodges at the London School of Economics.

Technological change (and in particular the shrinking of the globe through the increased speed and diminishing cost of international transportation, telecommunications and data processing) has created world markets that override national frontiers with increasing ease. Faced with demands from their populations for sustained economic growth and access to a wider choice of the latest goods and services, national governments have sought to tap into the networks of international business, even if this reduces their control over their national economies. (Turner/Hodges, 1992, p. 1)

THE SUPREMACY OF THE COMMERCIAL ETHIC

We all remember our first lectures in economics. The fundamental questions of economics are: What shall be produced? How will it be produced? And for whom? Our second lecture contrasted the ways in which free market theory and command market theory answers these questions. The former argues that the agents themselves, through communication and voluntary interaction, determine the answers through 'price'. The latter proposes methods of centralized control. The critical advantage of the communication (free market) method over the control (command) method is adaptability to changes in technology, methods of production and consumer demand. The life blood of the free market, therefore, is information; that of the command system is force. Kenichi Ohmae writes:

On a political map, the boundaries between countries are as clear as ever. But on a competitive map, a map showing the real flows of financial and industrial activity, those boundaries have largely disappeared. Of all the forces eating them away, perhaps the most persistent is the flow of information — information that governments previously monopolized, cooking it up as they saw fit and redistributing it in

forms of their own devising. Their monopoly of knowledge about things happening around the world enabled them to fool, mislead, or control the people, because only the government possessed real facts in anything like real time. (Ohmae, 1991, p. 23)

The Information Revolution, then, is not only invigorating the functioning of the free market and promoting commerce, but also undermining the ability of governments to exercise control over their agents of production. It appears that commerce itself, inventing itself down at the bottom of society, is pulling itself up by its bootstraps. This was identified fifty years ago by Friedrich Hayek:

The gradual transformation of a rigidly organized hierarchic system into one where men could at least attempt to shape their own life, where man gained the opportunity of knowing and choosing between different forms of life, is closely associated with the growth of commerce. From the commercial cities of northern Italy the new view of life spread with commerce to the west and north, through France and the southwest of Germany to the Low Countries and the British Isles, taking firm root wherever there was no despotic political power to stifle it. (Hayek, 1972, pp. 14-15)

But the concept goes further back to Tocqueville who, in 1840, wrote:

I do not know if any single trading or manufacturing people can be cited, from the Tyrians down to the Florentines and the English, who were not a free people also. There is therefore a close bond and necessary relation between these two elements, freedom and productive industry. (de Tocqueville, 1990, p. 140)

At the same time, the guardian ethic is in decline. The following two articles represent the tip of what Gibson and Sterling, in their cyberpunk fiction, refer to as “the hidden bulk of an iceberg of social change [that] now glides with sinister majesty across the surface of the late twentieth century.” (Preface, Bruce Sterling, 1986, in Gibson, 1986, p. 11). The first was written by Martin Jacques and published in the *Sunday Times*.

In the postwar decades, society was characterised by hierarchy and deference. People knew their place. At the top were institutions such as the state, the university and the royal family. Society consisted of large homogeneous blocks, with class the foundation stone. Change was marked by certainty and predictability for individuals and institutions alike. But the world has given way to something very different... For politics, the most dramatic single aspect of the new culture is the decline of the state. In the post-war period, the state stood at the apogee of society, a source of respect and authority. ... Now the state has turned full circle and come to symbolise precisely the opposite: the past, inefficiency and special interest. ... But power has not only drained away from the state into, quite literally, thousands of groups within civil society, it has also seeped through the boun-

daries of the nation-state into the international ether. (Jacques 1993)

This article was then commented upon in the *Wall Street Journal*.

Meet, for example, Mr. Martin Jacques, the former editor of *Marxism Today*, who is now politically unclassifiable. ... Mr. Jacques’s old home is on the left, but he echoes many of the ideas that have been popping up on this page. ...

It is commonly said that the end of the Cold War is bringing about these striking changes, but that is to mistake a symptom for the cause. In fact, it is the declining importance of class, and the basic egalitarian nature of an information-age economy that contributed to the collapse of communism, as well as to changes in the West. The age of mass movements and of deference toward government authority is over. (WSJE, 1993)

The guardians are being driven out of commerce. Politicians, and the governments they manage, are becoming decreasingly relevant to the states that they control. A parallel world is evolving — cyberspace — that is siphoning off the commercial infrastructure from the terrestrial domain, and corporations are undergoing a ‘mathematical transformation’ from one plane to another — from the political map to the economic map, from a network contoured by country to a network contoured by industry. While today Porter is correct to identify an Italian clothing/fashion industry, tomorrow the dotted line that defines Italy will become meaningless. If that particular clothing/fashion industry retains its competitive advantage, it will be because it remains a node of talent in the global economic cyberspace map, not because it is governed by the nation-state of Italy.

But there is another factor undermining the cohesion and authority of countries. Central governments will become less able to relate to the increasing diversity of the nodes themselves. In other words, since, as Porter demonstrates, industries are local, and, as Bradley points out, technology and globalization are radically transforming the nature of industries, soon no broad based government will be able to support, or more likely hinder, them under one policy umbrella.

THE CYBERSTATE

The cyberstate is the new world order; it is the supremacy of the commercial syndrome over the guardian; it is the reorganization of human society into a commercial rather than political modality. It is the constellation of commercial ‘ad hococracies’ within a global ‘object-oriented’ economy. It is what comes after the end of the nation-state.

What then is the role of the state? Porter and Ohmae argue that it is to manage the local ecology and provide a physical and educational infrastructure. But I would go further and suggest that, while new city-states themselves will retain the control function within their territorial jurisdiction, they will operate more along the lines of a glorified property management company — roads, power,

water, and the local environment — or a rather large theme park. I am not being facetious.

Theme parks attract a huge clientele because they combine the thrill of new experience with the convenience of a shopping mall. The climate is controlled. The nearby city may be polluted, but there are no noxious odors here. The security team within the gates inspires more confidence than one has on the streets outside. (Barnet/Cavanagh, 1994, p. 32)

As the world economy becomes increasingly complex and sophisticated, the nation-states of the West, like those of Soviet Europe before them, are becoming increasingly unable to regulate the behaviour — limit the choice — of their citizens. Meanwhile the politicians who govern them doggedly cling to principles of noblesse oblige. This, I believe, is the basis for today's world-wide disaffection with politicians, and the reason why incumbents were slaughtered in the 1994 American congressional elections. Michael Rothschild, author of *Bionomics* (1990), writing on the collapse of the proposed American health reform legislation, puts his finger precisely on the problem.

Oozing elitism, Beltway cognoscenti would have us believe that the American people were confused by campaign-style rhetoric and never understood the Clinton plan. But as the town meetings, newspaper analysis, talk shows and congressional debates wore on, the American people figured out this much: Though Mr. Clinton promised a 'simple' plan that would guarantee choice along with security, he delivered a numbingly complicated 1,342-page plan that put another 14% of the economy under the control of federal bureaucrats.

This approach to social reform — widely accepted 25 years ago — no longer makes sense to an American public whose daily lives have been radically transformed by the first decades of the Information Age. Top down social engineering by Washington's central planners is now intuitively rejected as an anachronism, a hopelessly inefficient throwback to the bygone era of the Machine Age. (Rothschild, 1994)

The trend, then, is not away from community per se, it is away from large paternalistic bureaucratic communities as embodied by today's nation-states. Seen in this way, it becomes less surprising that a disillusioned citizenry might welcome a community-based city-state theme park in which to live.

The future, then, will see commerce separate itself from the political constraints of the nation-state. The agents and promoters of technological innovation will, through the use of information technology, become an international free-floating pool of talent and generate unprecedented wealth across all levels of society. On the ground, people will organize themselves into small regional states and control their own local affairs. But more importantly, the Information Revolution will bring about, for the first time in human history, the inversion of the guardian/commercial axes. We are at the cross-point where geo-economics will replace geo-politics as man's

primary modality — where instead of firms existing within states, states will exist within the global network of firms. To some this may appear frightening. But so too would the Industrial Revolution have appeared to those gathered at the Congress of Vienna in 1815.

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