SECTION 5 Conclusion

5 Information Revolution: From a "Foreign" to "Domestic" Public Policy System

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The essays in the volume comprise an excellent effort on a complicated subject. The character of the essays is representative of the level of knowledge on the subject. By design descriptive, each chapter increases our cognitive map on the Information Revolution and provides rich insights into the policy trade-offs which the new information technology affords and/or demands. The essays also indicate the need for much more work to be done in this new area of knowledge.

One theme that emerges in much of the discussion is the view that the new information technologies are outstripping the capacities of existing international and domestic institutions to deal with them. The chapters discuss the impact of the Pacific Information Revolution on cultural autonomy, equity questions, socio-economic change and the nature of government itself. By inference, the authors point us towards the need to reconceptualize many concepts that have provided familiar if not accurate benchmarks for us throughout the Information Revolution. The three points of confusion are over the distinction between the international and domestic system — both within the Pacific Basin and globally — the relationship between politics and economics and the definition of the State itself. I reached these views based on the following examples.

The tragedy of the land and ocean commons is rapidly being repeated in space as the countries with the appropriate technology occupy the most suitable orbit slots leaving little or nothing by way of space for those who wish to follow. This is a quintessential politico-economic problem. The introduction of information technology appears to lead in changes in domestic socio-economic and cultural systems. However, this does not appear to be a function of the information itself (however this concept is defined), but rather it is the negative externalities attached to the production and consumption of information that appear to require re-design of our major institutions, including the State itself. Apparently, the sweep of social-economic and political change is breaking down the distinction between the international and domestic system. Finally, the State itself appears to be defined differently in newly industrializing countries (NICs) compared to post-industrial states. Colleagues from NICs fear the new technology; they tend to see it as additional support for authoritarian

rule. Harlan Cleveland's "Twilight of Hierarchies" is representative of views of colleagues from post-industrial societies.

The essays point out the problem of focus in the subject, in this case the relationship between the Information Revolution and the Pacific Basin. Therefore, what follows are some observations on the three subjects noted above.

I have argued (Benjamin 1982) that we are in a period of threshold change. We are moving into a phase of change in which international interdependence and the globalization of domestic economies are no longer mere catch words. Consider a few examples. Both in the real world of politics and economics and in the minds of the scholars who think about these subjects, one distinguishes between domestic and foreign public policy systems. We still speak about domestic economic policy initiatives as if inflation, low or high interest rates, and strong or weak currencies were not heavily influenced by the international economic policy system. American farmers complain about agricultural policy in Washington when prices for their crops are increasingly determined by what happens to crops in other countries. Even though sensitive observers of the problem faced by American and European heavy industries know better, the primary focus of attention is on re-industrialization of steel and auto industries without a substantial examination of the development of these same industries in the Pacific Basin countries. American and their Western European counterparts worry a good deal about immigration (legal and illegal) in the 1980s. Yet immigration, labour, and capital investment policies between the donor and recipient nations are clearly inextricably linked. Tariff barriers preventing capital investment in a nation poor in capital funds may well lead to increased emigration. The Information Revolution in the Pacific Basin accelerates this process. Finally, we still speak of national security at least in the two super powers, the Soviet Union and the United States; this, at a time when national security cannot be guaranteed for any nation (Krasner 1984).

The breakdown between the domestic and international systems is partly due to the reunion between politics and economics. Perhaps only in the United States did political scientists clearly distinguish the polity from the economy. The pluralist vision considers the economy operating separately from the State which acts as a neutral umpire by keeping the various interest groups playing by the rules of the game. Now, however, such a vision is really only of historical interest (assuming, that is, it once had merit). In a world of slow economic growth and increasing interdependence, economic choices are political choices as well.

The "threshold" change I speak of also involves the apparently new set of relationships between "modernizing" and industrializing countries and post-industrial societies. Post-industrial societies, with their emphasis on the Information Revolution, its production, sharing, storing and retrieving on the one hand and declining industrial bases, on the other, present a new set of opportunities and constraints in both "international" and "domestic" policy arenas. Let me attempt to justify these assertions.

Post-Industrialization and the Rise of Collective Goods

Although one risks reification in applying new endpoints as labels in the process of socio-political change (Tipps 1973), it is clear that societies are moving beyond "development" as conventionally or historically measured into what I call the post-industrial phase of change. Among the main features of this transformation are the following. Foremost is the transformation in the economy from industry to service activities. Industry is no longer the main engine of the economy in post-industrial societies and this change itself will have a dramatic impact on the nature of the economy, for example, how we measure productivity, whether inflation can be controlled, and whether the large welfare states developed in the industrial phase of change can be maintained. Historically, for example, wages in the service, including the public, sector have been set as a function of productivity in the industrial sector. What happens if the public sector overshadows the private industrial sector? One ominous answer is that in the absence of a market mechanism there are very few ways to limit the claims of strong collective action units on the public treasury (Baumol 1967; Brittan 1975; Olson 1982). At the same time if the industrial base declines, apparently the tax base necessary to support the welfare state declines with it.

Why, however, is this transformation from industry to a service and public sector emphasis underway? Within post-industrial societies an evolutionary process has been underway for some time (Kumar 1978). Although I do not believe we have an explanation, it is possible to develop efficient descriptions of this process of change. Once an industrial infrastructure of a society is built — railroads, airlines and roads, communication networks, and the light and heavy industrial base itself — economic attention may turn, relatively, to the production and consumption of non-durable goods. This may to some extent be the case because once housing stocks are in place, once citizens have adequate amounts of the things of industrial civilization, a relative point of saturation may be reached and attention shifts to goods (wants) of a social, non-material nature. There are many reasons for this change. Increased educational standards of citizens alert them to the negative externalities they formerly internalized without complaint. It is no coincidence that environmental movements

emerge in societies that have reached mature industrial status. Once roads are constructed citizens subsequently worry about the noise and lead pollution — the destruction of neighbourhoods via the process of road construction. I have noted that interdependence is a central feature of post-industrial societies. However, interdependence also brings increased "crowding effects", negative externalities, that are a function of the enormous rise in complexity throughout society. No one minds consuming positive externalities such as concert music in a park, but individuals do resist being forced to consume noise pollution, changes in roads they do not like, the inflationary effects of bad governmental policies. Moreover, Olson (1982) has shown that once collective action groups reach an adequate standard of living by capturing an old or new market (usually but not always economic), they collude to keep or expand their gains. Fewer and fewer goods are seen as being wholly private — divisible and without externalities — or completely public, those goods citizens either can enjoy "free ride" benefits from or not be concerned about others gaining "free rider" benefits. It is rather the case that more and more goods are quasi-public, quasi-private — what I call collective goods, that is, goods that through either production or consumption produce negative externalities. Collective goods are goods about which there is confusion or disagreement over who is to receive what proportion of the benefits and who is to pay what proportion of the costs.

The impact of these changes is to redefine the limits of politics. One may, for example, speak of the decline of government and the rise of politics at the same time. While governmental stability and perhaps political parties decline, litigation, strikes, confrontations of various sorts between groups increase. All of the above leads to increased demands on government, already overburdened government beset by declining tax revenues.

On the production side, the major question concerns how institutional arrangements affect the performance level or efficiency of the institution. If a good being produced is capital-intensive, a large initial investment is spread over the quantity of output. It is in the production of such goods that familiar economies of scale accrue; that is, the greater the size of the organization, the greater the level of efficiency. However, there are a great many goods for which one encounters significant information distortion or bias and loss of control in larger compared to smaller production units. Goods that are information-sensitive (requiring many sender-receiver interactions), such as human services like health, welfare and education, are often better served by smaller rather than larger production units. Economic theorists of organizations are thus led to assume that the greater the number of vertical channels information must pass through, the greater the possibility for information distortion. For many goods, diseconomies

rather than economies of scale result from the centralization of tasks.

The fundamental point is straightforward. Surely we need to think more carefully about which goods should be delivered to which public by which size governmental organization. If one is thinking about the production of national defence, it may most efficiently be produced by a large, centralized production unit for an equally large consumption unit, the nation. However, for the same large, national consumption unit, smaller state governments might be more appropriate to produce the interstate highway network. Many collective goods are not well served by large, centralized institutions. If my arguments, presented below, that collective goods are coming to dominate the public agenda in post-industrial societies, has merit, the largely centralized institutions developed in earlier period of socio-economic change are becoming obsolete and must and will undergo substantial redesign.

Why is the number of publicly provided collective goods — about which conflict is inevitable — rising? There are at least four sets of reasons. First, as socio-economic development continues, citizens apparently become more aware of the negative externalities they are forced to consume. Previously, they were willing to internalize the externalities of cigarette smoke, noise, and air pollution from public as well as private economic sources. Now they are not. The list of goods considered collective grows. Second, citizens and public bureaucrats, in an unspoken conspiracy, demand that government itself provide more collective goods. For their part, citizens not only want the handicapped to be provided for, they want special transportation or educational provisions delivered. Having developed the basic social services, bureaucrats — for reasons of inter- and intra-organization competition for budgets — search for new areas of application in the public sector. Third, public provision of goods previously provided for in the private sector, and thought to be private goods, tends to drive out remaining private provision of the goods. For example, public provision of higher education leads to a decline in the public's willingness to support private institutions of higher learning. Fourth, the interdependence associated with post-industrial society increases the possibility of negative externalities attached to such interdependence.

Another set of reasons promotes industrial decline in post-industrial countries, the rise of newly industrializing countries, particularly in the Pacific Basin. Changing comparative advantage, sometimes referred to as the process of rolling adjustment or the product cycle, is sweeping aside many traditional industries in Western Europe, Canada and the United States. Manufacturing industries in Pacific Basin countries such as the Republic of Korea, Taiwan, the Philippines, Malaysia, and, of course, Japan outstrip their counterparts in post-industrial societies. Because of

the concept of comparative advantage, it will not be easy, assuming for argument that it is wise, for Pittsburgh and Detroit to return to a position of dominance.

I will only note the striking new possibilities and problems created by the telecommunications revolution as it is shaped and spreads from, for example, the United States to Pacific Basin countries. The real point of this sketch is to end with some conjectures and questions. It appears that we shall see new relationships between post-industrial societies and both modernizing and newly industrialized countries in the region. If postindustrial societies control information, the newly industrialized countries may dominate industry. If this is the case, what are the trade-offs? A point neglected is the political effects of changing comparative advantage. In post-industrial societies not only are many industrial jobs lost because of structural changes within the economy, but because of the increased competitiveness abroad. It is unlikely that industries, such as auto and steel industries, that employ millions of workers will return to their former positions of pre-eminence in Western Europe and the United States. If these main industries do not return to health, the negative impact on the American Midwest, for example, will be substantial. So far, there is little more than token recognition that Detroit and Tokyo auto workers and management share a "common fate". By this I mean they are really part of the same public policy system. Each group enjoys either economic and/or political advantages and disadvantages. Each group is beginning to recognize that it should consider the impact of its actions on the groups in the "foreign" nation, full recognition of the fact that Tokyo and Detroit are part of the same policy system.

The NICs have employed export-led economic development programmes to successfully industrialize. The intent of South Korea, Taiwan, Brazil, Mexico and China is to continue their export-led policies. However, the American-guaranteed international monetary system is over (Krasner 1978). The American and Western European economies can no longer so easily absorb the shocks of rapidly rising imports; there may well be politically driven retaliation in the near future. Also, there are potential "crowding effects" as many would-be NICs attempt to follow the successful part of South Korea and Taiwan by producing the same goods (see Benjamin and Kudrle 1984). What is needed is, again, a recognition by all parties that they share a common fate.

The Political Economy of the State

If the concept post-industrialization has merit, it is time to closely examine the role of the State, a central concept in the history of political theory.

For a substantial period political theory, including the theory of the State, appeared to be relegated to the study of the history of ideas. In the context of the changed environment noted above, there is renewed interest in examining assumptions, concepts, and theories of the State in its political economy context. What, for example, are the implications of different ways in which we view state/economy relationships? (See Lindblom 1979.) How should we understand competing interpretations of the relative autonomy of the State; may one speak of the State as representing its own interests? What do we mean by concepts like public and private, for example, where does the private sector leave off and the public sector begin? What about the concept, the State, itself? If several Western European and North American countries are moving into a post-industrial phase, what does this mean for relationships between participation and authority, liberty and equality, the individual?

If the role of state and the nature of sovereignty are again in vogue it is important to clarify what we mean by the concept, the State. It is not coincidence that representatives from NICs and developing countries compared to representatives from post-industrial countries worry about whether the Information Revolution will be benign or benevolent in its effect of internal political freedom.

I have argued (Benjamin and Duvall 1985) that the nature of the State differs fundamentally in post-industrial versus NIC or developing society context. This conclusion stems from thinking about the State in terms of different models, ranging from the State, the individual players, the leaders to the State as administrative order — the chief institutional arrangements used to govern society, and on the State as legal order. Legal order refers not only to established legal codes and property but written and unwritten rules — many of which are custom — that derive from the cultural order. Table 1 illustrates the different characteristics of the State in NIC/developing versus post-industrial environment. Information is more ubiquitous in post-industrial societies where the legal order is used by well-educated citizens to challenge the existing mainly centralized administrative order. Thus in the United States one can speak of the decline of government and the rise of politics through increases in single-issue interest groups, strikes, and the growing use of litigation as a policy instrument. For the NIC states in the region it is a different story where administrative élites are, in fact, attempting to transform the legal order. In NICs and developing societies the new information technology is more likely to be used for control purposes.

Because the Pacific regional international system is becoming domestic like as a public policy system, sovereignty itself will be redefined —

extended well beyond the present nation state in the Pacific context and beyond.

Table 1 Fundamental Contextual Differences in Post-Industrial States and NICs.

Distinguishing Dimension	Post-Industrial States	NICs	
Structural Complexity	Sectors of economy are interdependent and homogeneous with high differentiation functionally within sectors.	Sectors of economy are disarticulated and heterogeneous, with low differentiation functionally within sectors.	
	Class structure is ambiguous; the class of many groups is uncertain.	Class structure is un- ambiguous; conventional capitalist and pre- capitalist classes are socially pervasive.	
Expression of Interests	Revolves around social relations of consumption, with emphasis on "quality of life" issues more than objective class interests.	Revolves around social relations of production, with emphasis on organization of production and realization of the value of production along objective class interests.	
	Rooted in process of consumption saturation.	Rooted in process of capital accumulation.	
Transformation Dynamic	Production and reproduction of "means of consumption".	Production and reproduction of "means of production".	
	Diminished potential for growth.	Significant potential for growth.	
	Expansion is dependent on maintenance of centrality of R&D sector and extraction from periphery.	Expansion is dependent on the form of incorporation into the world system.	

The conclusion I reach is that we should take the term "foreign" out of foreign public policy analysis. If the limits of politics are being redefined, so too will the foreign public policy arena be redefined. In terms of complexity of choice, interdependence among variables, and constraints on

choice, the foreign public policy arena is essentially becoming analogous to the domestic public policy system. The fundamental point about a "domestic" public policy system is the high level of interdependence among the actors in the policy system. The amount and degree of spillover effects (externalities) is very high. In, for example, areas such as environmental policy environmentalists really must, in the end, take into account the effect of their demands on the economic health of the businesses they wish to regulate. The same is true of transportation, health, education and other policy areas. In fact, in post-industrial societies public policy adjustment takes place increasingly through litigation in and out of the courts. Here I will take up some examples that follow from the above points to defend my conclusion. I shall also make some inferences about the implications of this transformation of the "foreign" public policy process.

The Rise of Collective Goods in the International System

I have argued in this essay that we must look at eliminating joint relationships between politics and economics across what we have traditionally defined as the domestic and international systems.

The international-domestic system is increasingly dominated by what I call collective goods. It is the nature of collective goods that presents new limits to economics and politics. Thus, to the extent that collective goods cut across the domestic-international systems, we can expect to find a redrawing of the nature and limits of the foreign policy process. If "foreign" public policy is really domestic, an extension of the system (or vice versa) a number of reconceptualization points arise.

1. A characteristic of "domestic" as compared to "foreign" public policy systems is the perception of all players that they have a shared fate. In a domestic policy system one must, by definition, take into account the interests of the other. In domestic policy systems institutional arrangements in the form of decision-making units, shared communication and information systems designed to promote understanding of the other all provide incentives for the individual participant to compromise. In the "foreign" policy arena the shared fate syndrome exists, for example, the internationalization of production and global village concept (the Detroit auto worker noted above), but not the perception of shared fate. The institutional arrangements necessary to handle collective good issues in the "foreign" policy sphere are conspicuous by their paucity as compared to the domestic arena. Let me give one example. In post-industrial countries litigation becomes a major public policy instrument as citizens find conventional governmental machinery such as the public bureaucracy and the political party system un-

responsive. The international legal system is not yet developed enough to play a role equivalent to domestic policy systems. A similar point could be made about the international monetary system.

- 2. If this essay has merit, the "foreign" policy concept must be replaced by the concept of functional policy areas, again in a manner analogous to what one sees in domestic public policy studies. "Foreign" economic policy should be really scrapped in favour of conceptual efforts that more properly define political economic dimensions that so clearly interrelate (Schuh 1982; Kurth 1979). We must more clearly and automatically partition "foreign" policy issues.
- 3. Because I argue that the concept of the "State" is undergoing revision, the national state should no longer always be the unit of analysis, the unit held accountable. It has not been my purpose to argue that "comparative" or "foreign" policy studies are no longer important but it may be more useful to focus on public policy problems such as industry links, systems and cycles across "national" boundaries. The information technologies discussed with their attendant socio-economic and political implications will accelerate this process.

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