Globalization and Governance: Bleak Prospects for Sustainability*

JAMES N. ROSENAU

At first glance, the prospects for effective global governance in the realm of environmental sustainability would appear to be considerable. Recent decades have witnessed a profound and discernible shift to a worldwide consciousness of the vast scope of environmental challenges. We have collectively moved from a fragmented NIMBY (not in my backyard) syndrome to a keen awareness of an integrated future symbolized by the picture of the earth from outer space.¹

But appearances can be deceiving. Or at least the ensuing pages argue that the prospects for effective governance leading to sustainability are, on balance, quite bleak. Our generation lacks the orientations necessary to sound assessments of how the authority of governance can be brought to bear on the challenges posed by the prevailing disarray. As will be seen, we have not adjusted our conceptual equipment to facilitate the analysis of how authority gets exercised in a decentralized world. We are still deeply ensconced in a paradigm that locates authority exclusively in states and environmental challenges exclusively in their shared problems – the so-called tragedy of the commons. In effect, we have elevated the NIMBY syndrome to the national level. Our preoccupation with global problems posed by recognizing the earth as a lonely spheroid in a vast universe has led us to minimize the extent to which environmental challenges at local levels are marked by variability. Today societies can have as much difficulty exercising authority within their own jurisdictions as they do with respect to the commons. The world, in other words, is both fragmenting

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and integrating. What is remote today is also in our backyards; what was
distant is now also proximate, and the prevalence of these distant prox-
imities underlies the messiness that sets our time apart from previous
generations.²

It was neither an accident nor pervasive malevolence that prevented the
commitments made at the 1992 Rio meeting from being implemented.
The pervasive inaction appears, rather, to be inherent in the structural
constraints and conceptual blocks that currently prevail in the global
system.

Some of us are inclined to stress the Montreal Protocol and numerous
other mechanisms through which the global community has successfully
addressed environmental challenges. They discern a long-term trend to-
ward state compliance with environmental treaties.³ Others contend that
»steps in the 1990s toward a more just and ecologically resilient world
were too small, too slow, or too poorly rooted .... Not surprisingly, then,
global governmental problems, from climate change to species extinc-
tions, deforestation, and water scarcity, have generally worsened since
delegates met in Rio«.⁴ Likewise, some regard the Global Compact
framed by Kofi Annan and the UN as a huge step forward,⁵ while still
others insist the Compact is »deeply flawed« and should be »scraped or
re-designed completely«.⁶ I myself am optimistic by nature, but the em-
piricist in me has a hard time ignoring the obstacles to progress toward
effective governance that will promote environmental sustainability.

². For an elaboration of this conception of present-day world affairs, see James N.
Rosenau, Distant Proximities: Dynamics Beyond Globalization (Princeton: Princeton
³. See, for example, Edith Brown Weiss and Harold K. Jacobson (eds.), Engaging
Countries: Strengthening Compliance with International Environmental Accords (Cam-
⁴. Gary Gardner, »The Challenge of Johannesburg: Creating a More Secure World«,
⁶. Kenny Bruno, The UN’s Global Compact, Corporate Accountability and the Johan-
nesburg Earth Summit (http://www.corpwatch.org/campaigns/PCD.jsp?articleid
Between Integration and Fragmentation

It is in the context of the complexities that have rendered our world messier than ever that I want to examine the links between governance, sustainability, and globalization. First, of course, some conceptual specifications are in order.

Governance

Elsewhere I have suggested that the core of governance involves rule systems in which steering mechanisms are employed to frame and implement goals that move communities in the directions they wish to go or that enable them to maintain the institutions and policies they wish to maintain.7 Governance is not the same as government in that the rule systems of the latter are rooted in formal and legal procedures, while those of the former are also marked by informal rule systems.8 It follows that the achievement of a modicum of governance that promotes environmental sustainability on a global scale requires the development of steering mechanisms that evoke compliant actions, not just words, on the part of the innumerable actors whose work impacts upon the myriad aspects of the natural environment that need to be sustained across generations.

Two key challenges here are especially acute. One concerns the local variability that defies an overall global solution. The second involves the nature of compliance, of getting relevant actors to put aside habitual responses and, instead, to yield to authorities who act on behalf of environmental standards. The sum of the world’s formal and informal rule systems at all levels of community amount to what can properly be called global governance. It is a highly disaggregated and only a minimally coordinated system of governance.

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Environmental sustainability has both empirical and moral dimensions. On the one hand, it refers to those empirical processes whereby human-kind preserves or exploits the resources of nature in such a way that present and subsequent generations do or do not have available access to comparable standards of living. But efforts to promote a desirable future for both the unborn and the born is loaded with values and it is here where sustainability is pervaded with moral dimensions, with questions of right and wrong. Empirical data – the findings of science – on whether a particular practice promotes or deters sustainable development in the future can be interpreted in diverse ways, depending on the perspectives from which they are approached. Whatever the solidity of the empirical findings that may be uncovered about species survival, pollution, resource utilization, and all the other foci that comprise the environmental issue-area, inevitably policies designed to achieve sustainability will be deeply ensconced in unending controversies and conflicts that make widespread compliance with the policies improbable.

A major source of the controversies stems from governmental structures at local, national, and international levels in which responsibility for the ecological, social, and economic dimensions of sustainability is assigned to competitive agencies that must be coordinated for meaningful policies to be adopted. The chances of consensuses and new institutional steering mechanisms forming to overcome these bureaucratic obstacles and the environmental threats they sustain are likely to be dim and thus central to a bleak view of the prospects for the future.

Globalization

I have found it helpful to conceive of globalization as rooted in two basic and contrary processes. One involves all those forces that press for centralization, integration, and globalization, and the other consists of those forces that press for decentralization, fragmentation and localization. In turn, these polarities can be viewed as either philosophical premises or as empirical processes. As philosophical premises, they amount to forms of either localism or globalism, both of which consist of mind sets, of orientations, of worldviews, with localism pertaining to those mental sets that focus on and value the familiar and close-at hand arrangements located within conventional community and national boundaries, and with
globalism involving orientations toward the distant circumstances that lie beyond national boundaries. But localism and globalism can usefully be distinguished from localization and globalization, which I conceive to be empirical processes rather than mind sets, processes that are boundary-spanning in the case of globalization and that either contract within conventional boundaries or do not span them in the case of localization.

The coordination needed to implement the goals articulated in Johannesburg seems unlikely to surmount the disaggregated authority structures on which global governance rests.

I have coined the ungainly and contrived word »fragmegration« to capture the inextricable links between the individual and societal tendencies to integrate across boundaries that are the hallmark of globalization and the counter tendencies toward fragmentation that are fomented by localizing resistances to boundary-spanning activities. I dare to suggest that by viewing the world through fragmegrative lenses one can discern the underlying dynamics of our epoch with a clarity that is not otherwise available.9 It is not far-fetched to assert that virtually every increment of globalization gives rise to an increment of localization, and vice versa, so thoroughly are the two contrary orientations and processes interconnected.

While fragmegrative dynamics tend to be conflictual, it is useful to reiterate that many environmental issues originate in local communities and the resolution of more than a few of them involve a measure of decentralization founded on the perspectives of localism. In the energy field, for example, sustainable enterprises are estimated to be most efficient when they are decentralized in the private and nonprofit sector,10 an estimate that runs counter to practices in many countries but that is quite consistent with the underlying tendency whereby authority is undergoing a continual process of disaggregation as the fragmegrative epoch unfolds.

Sustainability as Fragmegrative Processes

Environmental issues and their potential for sustainability fall squarely between fragmentation and integration. They are profoundly and quintessentially fragmegrative dynamics. On the one hand, they are pervasively integrative in the sense that the value of preserving the environment and maintaining its viability is widely shared at every level of community. Rare are those who overtly argue on behalf of exploiting the resources of nature or who oppose the idea of trying to prevent their degradation. Indeed, it is precisely the integrative underpinnings of environmental issues that brought leaders of 160 national governments and representatives of thousands of nongovernmental organizations (NGOs) to Rio in 1992 and comparable numbers of both types of actors to Johannesburg in 2002. And it is precisely these issues that evoked verbal affirmations of and commitments to the agreements reached in Rio throughout the subsequent decade. On the other hand, the very same issues have led to pervasive and divisive fragmentation among and within groups, communities, countries, and international systems when actions designed to implement the proposed commitments proved to be highly controversial and, with some notable exceptions, largely ineffectual. It is no accident that the series of anti-globalization protests that began with the Battle of Seattle in 1999 have in large measure focused on questions of sustainability.

Indeed, the protests have reinforced a long-term process whereby the very idea of sustainability has undergone a significant change of meaning. Now it connotes »sustainable development«, with the emphasis on sustaining economies rather than nature, a semantic shift that has enabled a vast array of diverse actors to crowd under the umbrella of sustainability and to press their goals in the context of what they regard as unquestionable sets of values.11

Sources of Fragmegration

What is it about the present epoch that has so markedly accelerated local-global tensions and strikingly raised their salience on the global agenda? I find it useful to respond to this question by identifying eight major sources of fragmegration that shape attitudes and behavior at four levels

of aggregation – the micro level of individuals, the macro level of collectivities and states, the micro-macro level at which individuals and collectivities shape and interact with each other, and the macro-macro level wherein collectivities interact and influence each other. Both the eight sources and the four levels are set forth in Table 1, with the entries in the cells being crude hypotheses that suggest some of – though surely not all – the possible consequences that may flow at each level in response to each of the various sources. At the very least Table 1 highlights the extraordinary complexity that marks our time.

It should be stressed that fragmentative circumstances are not necessarily marked by tensions and conflict. Global orientations and actions can be supportive of local situations, and vice versa. For example, the U.N.’s Commission on Sustainable Development created at Rio in 1992 has assisted numerous cities around the world promote local arrangements designed to contain and reduce environmental degradation. This example is encouraging. It accords credence to the possibility of achieving harmony between local circumstances and global needs. However, here I want to focus on how the eight dynamics listed in Table 1 may serve to generate tension and conflict in the realm of environmental sustainability.

Microelectronic Technologies

Among the consequences that may flow from the Internet, mobile phones, and fax machines are an ever more effective capacity to mobilize like-minded people on behalf of shared goals. It is a capacity that serves those committed to localism as well as those inclined toward globalism. Equally important, such technologies level the playing field. Mobilization in local communities is facilitated by word of mouth as well as communication technologies, but the latter make it possible to reach and mobilize the like-minded across national boundaries and great distances. The Internet has been a major factor in the surging growth of the environmental movement noted below.

12. Both the contents of Table 1 and parts of the ensuing discussion of the eight sources of fragmentation are adapted from Rosenau, Distant Proximities, Chap. 3.
Table 1:
Some Sources of Fragmegration at Four Levels of Aggregation

<table>
<thead>
<tr>
<th>Levels of Aggregation</th>
<th>MICRO</th>
<th>MACRO</th>
<th>MICRO – MACRO</th>
<th>MACRO – MACRO</th>
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<tbody>
<tr>
<td><strong>Microelectronic Technologies</strong></td>
<td>enable like-minded people to be in touch with each other anywhere in the world</td>
<td>render collectivities more open, connected, and vulnerable; empowers them to mobilize support</td>
<td>constrain governments by enabling opposition groups to mobilize more effectively</td>
<td>accelerate diplomatic processes; facilitate electronic surveillance and intelligence work</td>
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<tr>
<td><strong>Skill Revolution</strong></td>
<td>expands peoples’ horizons on a global scale; sensitizes them to the relevance of distant events; facilitates a reversion to local concerns</td>
<td>enlarges the capacity of governmental agencies to think »out of the box«, seize opportunities, and analyze challenges</td>
<td>constrains policy making through increased capacity of individuals to know when, where and how to engage in collective action</td>
<td>multiplies quantity and enhances quality of links among states; solidifies their alliances and enmities</td>
</tr>
<tr>
<td><strong>Organizational Explosion</strong></td>
<td>facilitates multiple identities, subgroupism, and affiliation with trans-national networks</td>
<td>increases capacity of opposition groups to form and press for altered policies; divides publics from their elites</td>
<td>contributes to the pluralism and dispersion of authority; heightens the probability of authority crises</td>
<td>renders the global stage ever more transnational and dense with non-governmental actors</td>
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<tr>
<td><strong>Bifurcation of Global Structures</strong></td>
<td>adds to role conflicts, divides loyalties, and foments tensions among individuals; orients people toward local spheres of authority</td>
<td>facilitates formation of new spheres of authority and consolidation of existing spheres in the multi-centric world</td>
<td>empowers transnational advocacy groups and special interests to pursue influence through diverse channels</td>
<td>generates institutional arrangements for cooperation on major global issues such as trade, human rights, the environment, etc.</td>
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<tr>
<td><strong>Mobility Upheaval</strong></td>
<td>stimulates imaginations and provides more extensive contacts with foreign cultures; heightens salience of the outsider</td>
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<tr>
<td><strong>Weakening of Territoriality, States, and Sovereignty</strong></td>
<td>undermines traditions and national loyalties; increases distrust of governments and other institutions</td>
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<tr>
<td><strong>Authority Crises</strong></td>
<td>redirect loyalties; encourage individuals to replace traditional criteria of legitimacy with performance criteria</td>
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<tr>
<td><strong>Globalization of National Economies</strong></td>
<td>swells ranks of consumers; promotes uniform tastes; heightens concerns for jobs; widens gap between winners and losers</td>
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</tbody>
</table>

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<tr>
<th><strong>Mobility Upheaval</strong></th>
<th>enlarges the size and relevance of subcultures, diasporas, and ethnic conflicts as people seek new opportunities abroad</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Weakening of Territoriality, States, and Sovereignty</strong></td>
<td>adds to the porosity of national boundaries and the difficulty of framing national policies</td>
</tr>
<tr>
<td><strong>Authority Crises</strong></td>
<td>weaken ability of both governments and other organizations to frame and implement policies</td>
</tr>
<tr>
<td><strong>Globalization of National Economies</strong></td>
<td>complicates tasks of state governments vis-à-vis markets; promotes business alliances</td>
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<thead>
<tr>
<th><strong>Mobility Upheaval</strong></th>
<th>increases movement across borders that lessens capacity of governments to control national boundaries</th>
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<tbody>
<tr>
<td><strong>Weakening of Territoriality, States, and Sovereignty</strong></td>
<td>lessens confidence in governments; renders nationwide consensuses difficult to achieve and maintain</td>
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<tr>
<td><strong>Authority Crises</strong></td>
<td>facilitate the capacity of publics to press and/or paralyze their governments, the WTO, and other organizations</td>
</tr>
<tr>
<td><strong>Globalization of National Economies</strong></td>
<td>increases efforts to protect local cultures and industries; facilitates vigor of protest movements; polarizes communities</td>
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<tr>
<th><strong>Mobility Upheaval</strong></th>
<th>heightens need for international cooperation to control the flow of drugs, money, immigrants, and terrorists</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Weakening of Territoriality, States, and Sovereignty</strong></td>
<td>increases need for interstate cooperation on global issues; lessens control over cascading events</td>
</tr>
<tr>
<td><strong>Authority Crises</strong></td>
<td>enlarge the competence of some IGOs and NGOs; encourage diplomatic wariness in negotiations</td>
</tr>
<tr>
<td><strong>Globalization of National Economies</strong></td>
<td>intensifies trade and investment conflicts; generates incentives for building global financial institutions</td>
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Skill Revolution

Elsewhere I have argued at length that people everywhere have expanded their skills at dealing with the challenges and crises that mark our accelerated epoch.\(^{15}\) It is no longer plausible to take publics for granted, to assume they can be led by their officials to support any course of action. Rather, equipped with a deeper understanding and more clear-cut values than, say, their great grandparents, today they are more ready to take action in response to circumstances they find wanting. This greater readiness is perhaps especially evident with respect to environmental issues, sensitivities to which have greatly increased in recent decades. Stated in the words of one analyst, »The local efforts of citizens have always been crucial to the environmental movement. Grassroots activism is the seedbed of more organized and enduring efforts and institutions«.\(^{16}\) Furthermore, the skill revolution along with the new technologies has heightened peoples’ sense of identity and their capacity to shoulder multiple identities.

Organizational Explosion

A central pattern of this accelerated epoch is the proliferation of organizations at every level of community, local, national, and transnational. Equally important, due largely to the Internet and the fax machine, many of them are horizontally as well as vertically structured. Networks have supplemented hierarchies as an organizational form, and many of the new organizations are conspicuously lacking in hierarchy. Combined with the processes of localization, the organizational explosion is thus enabling people to find common cause with others in their community and to come together when the need to do so arises.

But it is important to note that the environmental movement is far from unified. Rather, it can be viewed as numerous environmental movements that are »very diverse and complex, their organizational forms ranging from the highly organized and formally institutionalized to the


radically informed, the spatial scope of their activities ranging from the local to the almost global, the nature of their concerns ranging from single issues to the full panoply of global environmental concerns.\textsuperscript{17} Taken as a whole, the movement is thus »defined by many different voices« which are often in conflict. »Each cause has its own chorus of supporters and detractors«, so much so that »when advancing their own particular interests for their own political ends, environmentalists may seem less in the business of galvanizing public commitment than dispersing it«.\textsuperscript{18} Since some of these tensions unfold across transnational, national, and local groups, it can readily be observed that the environmental movement is itself subject to fragmentative dynamics.

**Bifurcation of Global Structures**

Beginning sometime after World War II the overall structure of world politics began to undergo change, to bifurcate, with the flourishing of innumerable actors other than states clambering up on to the world stage and undertaking actions with consequence for the course of events. As a result, what I call a »multi-centric« world evolved that consists of a great variety of collectivities and that has come to rival the long-standing, anarchical state-centric system. One can reasonably assert that overall global structures are today marked by two worlds of world politics, two worlds that sometimes cooperate, oft-times conflict, and endlessly interact. The bifurcated evolution of the global system serves to intensify fragmentative dynamics in the sense that it contributes to a long-term process whereby authority is undergoing disaggregation. Consequently, the multi-centric world now provides avenues for local groups to articulate their needs and goals as they join with each other in persuading governments in the state-centric world to heed – or at least to hear – their claims.\textsuperscript{19}

The environmental movement has been and continues to be both a contributor to and a beneficiary of the bifurcation of global structures. It has contributed through the explosion of environmental organizations at


\textsuperscript{19} A conceptualization of the bifurcated two worlds of world politics is elaborated at some length in Rosenau, *Turbulence in World Politics*, Chap. 10.
all levels of community throughout the world. In so doing the movement has helped to institutionalize and legitimate the processes of bifurcation. At the same time it has benefited from the institutionalization of the bifurcated structures in the sense that the movement’s diverse voices now have a permanent platform from which they can express and move toward their goals. It is hard to imagine any future gathering of leaders of the state-centric world that is not accompanied by a simultaneous and adjacent gathering of organizations and individuals from the multi-centric world, a reality that is profoundly and thoroughly expressive of the dynamics of fragmegration.20

Mobility Upheaval

The accelerated epoch has witnessed a vast movement of people – everyone from the tourist to the terrorist, from the business executive to the immigrant, from illegal aliens seeking work to those fleeing persecution, from students studying abroad to artists and other professionals advancing their careers, from environmentalists attending conferences in Rio and Johannesburg to protesters converging on Seattle and Washington. To cite one quantitative example, there were 635 million international tourist arrivals in 1998, whereas the figure for 1950 was 25 million.21 In many ways this mobility upheaval, as I call it, has contributed to the integrative dimension of fragmegration, but in one important way it has served to intensify fragmentation. In many countries the migrant, legal as well as illegal, has fostered strong negative reactions in the host society. Australia’s handling of this problem, its refusal to let boatload of migrants disembark on its shores, is a classic instance of this fragmegrative dynamic.

Weakening of Territoriality, States, and Sovereignty

As technologies shrink the world, as people become increasingly skillful, as organizations proliferate, as the multi-centric world expands, and as the mobility upheaval sustains vast movements of people, the meaning of

20. To be sure, the G-8 have convened in remote locales that are inaccessible to protesters or groups who wish to submit policy recommendations, but such a practice cannot long withstand the bifurcated structures that facilitate demands for transparency.

territory becomes less compelling and states and their sovereignty become weaker. This is not to forecast the end of the state as a central political structure. Rather it is to stress that states have increasing difficulty controlling the flow of ideas, money, goods, drugs, crime, pollution, and people across their borders, thus contributing substantially to the processes whereby authority is undergoing disaggregation on a worldwide scale. The fragmentive consequences of these processes are considerable. Most notably perhaps, local communities and groups are acquiring greater autonomy and a heightened readiness to contest the integrative forces of globalization. The recent history of the environmental movement offers numerous examples of clashes that pit local and global forces against each other.22

Authority Crises

The dynamics whereby authority structures are undergoing disaggregation have contributed to a proliferation of authority crises on the part of governments, local as well as national. Such crises are most conspicuous when protesters crowd the streets and make strident demands, but an even more common form of authority crisis involves the inability of governments to frame goals and move toward them. Stalemate and paralysis, in other words, amount to authority crises, and they are pervasive. Japan’s inability to confront and surmount the long-term decline of its economy and the persistence of widespread corruption and unemployment in China are illustrative of authority crises that derive their strength from stalemated political systems. NGOs, churches, unions, and a variety of other institutions are also going one or another form of paralysis and upheaval. Even the Mafia has experienced an authority crisis deriving from its young members defying the dictates of its seniors. Needless to say, pervasive authority crises have important consequences for the world’s capacity to maximize the governance of sustainability.

Globalization of National Economies

The turn toward free enterprise economic systems and a lessening of trade barriers has had a number of fragmentive consequences. On the

integrative side the emergence of a global economy has led to a greater variety of goods and services being available to more and more people, processes that have also contributed to an ever-greater interdependence among groups and societies. On the fragmenting side, the globalization of national economies has also served to widen the gap between rich and poor both within and between countries. More relevant to present concerns, the prevalence of neoliberal economic perspectives underlies the aforementioned semantic shift of the concept of sustainability from an emphasis on sustaining economies rather than nature. These perspectives have also served to move the role of transnational corporations toward the top of the global agenda, thereby generating conditions for a wide variety of fragmentative situations, from protests against the world’s economic institutions to boycotts of the goods of corporations that are considered to undermine environmental sustainability.

The Governance of Environmental Fragmentation

The discourse that probes the problem of achieving sustainability through global governance largely bemoans the lack of progress since the 1992 convergence of the two worlds of world politics in Rio. However, when it turns to investigating how more effective global governance might be accomplished, the discourse encounters conceptual difficulties that tend to block a full appreciation of the task. Three problems are especially noteworthy. One involves the confusion noted above in which the priorities attached to sustainable and economic development get confounded. The second consists of a tendency to ignore the high degree to which authority has undergone disaggregation in recent decades and instead to focus on top-down solutions to the governance challenge. And the third amounts to a disinclination to account for local variations and, consequently, an underplaying of fragmentative tensions and an undue stress upon the universality of scientific findings.

Conceptual Blocks: What Should be Developed?

Intense debate surrounds the question of whether the environment or economies should be developed. It pits environmentalists against developers, which readily becomes a debate between developed and developing countries. While some appreciate that the debate can be misleading,
that the goals of each group can be compatible and need not be mutually exclusive,\(^{23}\) that the environment can be sustained even as economies flourish, the central tendency is for the economy and the developers to prevail over the environment and environmentalists. George W. Bush’s repeated contention that the Kyoto Protocol on Climate Change would be bad for the American economy is a quintessential instance of this outcome as well as a succinct expression of how this conceptual block can prevent both/and formulations from replacing either/or approaches.

Conceptual Blocks: Authority

Notwithstanding the many ways in which the eight dynamics listed in Table 1—and especially the organizational explosion, the skill revolution, the weakening of states, and pervasive authority crises—have cumulatively fostered a global stage that is crowded with diverse actors at every level of community who take positions and pursue policies relevant to sustainability, most assessments of what has to be done start at the level of reforming international institutions and then note how the reforms have to be implemented by national and local governments. Whether the solutions are top-down or bottom-up, they posit vertical flows of authority.

In effect, therefore, the solutions are cast in the context of the aforementioned weakness wherein analysts still cling to traditional approaches to the nature of authority. They ignore the ways in which collectivities in both the public and private sectors sustain authority flows horizontally through networks as well as vertically through hierarchical structures. They continue to posit the state as the prime, if not the only, wielder of effective authority. Thus, still rooted in the notion that compliance involves those at the top persuading, instructing, or ordering those down the chain of command to conduct themselves in specified ways, no allowance is made for requests and suggestions that evoke compliance through nonhierarchical structures. In the words of one observer, “So dominant in contemporary consciousness is the assumption that authority must be centralized that scholars are just beginning to grapple with how decentralized authority might be understood …. [T]he question of how to think about a world that is becoming ‘domesticated’ but not centralized,

\(^{23}\) See, for example, John Gerard Ruggie, Taking Embedded Liberalism Global: the Corporate Connection (Toronto: Canadian Congress of the Social Sciences and Humanities, May 29, 2002).
about a world after ›anarchy‹, is one of the most important questions today facing not only students of international relations but of political theory as well«.24

For the agreements reached in Johannesburg to be translated into effective authority that inches the world toward sustainability, a wide variety of numerous actors, both individuals and collectivities, have to be coordinated and their differences at least minimally subordinated to the interests of their great grandchildren.

Authority flows emanate from a vast array of actors whose rule systems I call »spheres of authority« (SOAs) and who evoke compliance through a variety of means.25 Global governance thus involves crazy-quilt arrangements wherein the exercise of authority is exercised partly by hierarchical structures, partly by horizontal networks, and partly by oblique links among overlapping vertical and horizontal SOAs. Taken in its entirety, the system of global governance is comparable to a mobius strip or web. It is a system marked by patterns that unfold when the impetus to steer a course of events derives from networked and hierarchical interactions across levels of aggregation among transnational corporations, international nongovernmental organizations, NGOs, intergovernmental organizations, states, elites, and mass publics, interactions that are elaborate and diverse enough to constitute a hybrid structure in which the dynamics of governance are so overlapping among the several levels as to form a singular, web-like process that, like a mobius strip, neither begins nor culminates at any level or at any point in time.26 A mobius web is top-down, bottom-up and side-by-side governance all at once. It is thus far more complex than the governance that flows from the principal of subsidiarity developed in the European Union.

25. For a discussion of the social contracts on which SOAs are founded, see Rosenau, Distant Proximities, Chap. 13.
Conceptual Blocks: Universal Science and Indigenous Knowledge

Despite widespread appreciation that many environmental problems originate in local communities, each of which has special circumstances that require responses tailored to their needs, all too many officials and their expert advisers tend to assess the local variations under the rubric of science. The impulse to posit scientific findings as having universal relevance and application has thus become so ingrained in the expertise of many environmental specialists and economists that they tend to give little credence to the idea that there are occasions when indigenous knowledge is more accurate and relevant than the knowledge generated through scientific methods. After all, experts tend to assert, the local insights are idiosyncratic and may even prove false when subjected to the rigors of scientific testing. More than that, they invite their superiors and local counterparts to consider global warming, a widening ozone layer, species diminution, polluted air carried by high winds, and other worldwide environmental problems as indicative of the limits of indigenous knowledge, stressing that it overlooks the big picture and is therefore less compelling than universal verities uncovered through science.

This is, of course, an oversimplified characterization. There are local experts whose knowledge is respected precisely because it stems from a familiarity with circumstances on the ground. What they offer, however, may not be scientific findings, but rather the insights of experience with local conditions. Still, for many experts the habit of positing scientific findings as more reliable than any other form of knowledge is a habitual perspective not easily abandoned. For many experts forsaking the habit is viewed as a capitulation to local pressures. Expertise, in short, can be a basis for perpetuating rather than ameliorating fragmentative tensions.

Conclusions

It is the crazy-quilt nature of global governance, along with the failure to conceptually allow for it, that underlies my bleak assessment of the prospects for achieving worldwide sustainability. For the agreements reached in Johannesburg to be translated into effective authority that inches the world toward sustainability, a wide variety of numerous actors, both individuals and collectivities, have to be coordinated and their differences at least minimally subordinated to the interests of their great grand-
children. More than that, given the boundary-spanning nature of environmental dynamics, all concerned have to recognize that people everywhere have an interest in your grandchildren as well as their own.

We have not adjusted our conceptual equipment to facilitate the analysis of how authority gets exercised in a decentralized world. We are still deeply ensconced in a paradigm that locates authority exclusively in states and environmental challenges exclusively in their shared problems.

The chances of such mobius webs being fashioned as effective rule systems seem very slim indeed. Too many actors can intrude ruptures in the webs. Whether they are corporate executives who sacrifice the well being of future generations for the sake of immediate profits, states that pursue economic goals at the expense of sustainable development, sovereignty-protective officials who are oblivious to the great grandchildren of publics other than their own, NGOs that put their narrow interests ahead of collective ecological policies, the United States that withdraws from treaties, individuals whose corrupt practices undermine efforts to preserve endangered species, or bureaucrats and analysts mired in conceptual confusion who do not fully appreciate the numerous local foundations of global structures – to mention only a few of the ways in which the diverse actors on the global stage can divert movement toward a sustainable world – the coordination needed to implement the goals articulated in Johannesburg seems unlikely to surmount the disaggregated authority structures on which global governance rests. Stated less pessimistically, «reversing ecological decline in the early decades of the new century will require innovative partnerships between many different actors, including NGOs, businesses, governments, and international organizations«.27

This is not to suggest that no progress toward meaningful sustainability lies ahead. Already there has been a proliferation of environmental regimes: «fourteen different global environmental agreements [were] concluded in the rather short period between 1985 and 1997«28 (though, to be sure, the record of compliance with these treaties has been, at best,

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spotty). Equally relevant, there is no lack of good, knowledgeable leaders and activists who expend a lot of energy on behalf of decent goals. Nor is there a shortage of research centers and other organizations of civil society that can make constructive inputs into governance processes. Pockets of progress will thus doubtless occur as some countries, corporations, and NGOs sign on to constructive rule systems designed to advance sustainability as the skill and organizational revolutions lead to public pressures on recalcitrant collectivities.

My own view is that, on balance, the dynamics that underlie the disaggregated character of global governance seem likely to thwart movement toward a viable and worldwide sustainability. It was neither an accident nor pervasive malevolence that prevented the earlier alarms from being heeded and the commitments made at the 1992 Rio meeting from being implemented. The pervasive inaction appears, rather, to be inherent in the structural constraints and conceptual blocks that currently prevail in the global system.

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