

Chapter 3 Political Science and the Other Social Sciences

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The discipline of political science is “ill-defined, amorphous and heterogeneous.” With this diagnosis, editors Fred I. Greenstein and Nelson W. Polsby open their preface to the first Handbook of Political Science (1975: 1). Twenty years later, the main features of political sciences are: specialization, fragmentation and hybridization. Its frontiers are open and moving and need not be defined. The process of specialization has generated an increasing fragmentation in subfields, which are not “amorphous” but rather well-organized and creative. The “heterogeneity” has been greatly nourished by exchanges with neighbouring disciplines through the building of bridges between specialized fields of the various social sciences. This process of cross-fertilization is achieved by hybridization.

The relations between political science and the other social sciences are in reality relations between sectors of different disciplines, not between whole disciplines. It is not an “interdisciplinary” endeavor. Since there is no progress without specialization, the creative interchanges occur between specialized subfields, most of the time at the margins of the formal disciplines. The current advancement of the social sciences can be explained in large part by the hybridization of segments of sciences. It would be impossible to conceive of a history of political science and of its current trends without reference to the other social sciences.

I Specialization, Fragmentation, Hybridization

A distinction has to be drawn between specialization within a formal discipline and specialization at the intersection of monodisciplinary subfields. The latter, hybridization, can occur only after the former has become fully developed. In the history of science a twofold process can be seen: on the one hand, a fragmentation of formal disciplines and, on the other, a recombination of the specialities resulting from fragmentation. The new hybrid field may become independent, like political economy; or it may continue to claim a dual allegiance, like political geography. In the latter case, we cannot be sure whether to place a work in the category of geography or of political science.

The criterion could be the predominance of one or the other component or the formal affiliation of the author. Political anthropology is a branch of anthropology but also a subfield of political science. Where does historical sociology end and social history begin? We may feel even more unsure when faced with a case of threefold recombination. As the relative proportions are not always obvious, it remains somewhat arbitrary where the essential affiliation may be said to lie, since the degree of kinship between specialities varies greatly.

A Interdisciplinary Research or Recombination of Fragments of Sciences?

Some scholars praise “interdisciplinarity.” Such a recommendation often comes from the most creative scientists because they are the first to see the problems caused by gaps between disciplines. But this recommendation is not realistic. Nowadays, it is no longer possible for anyone to have a thorough knowledge of more than one discipline. It is utopian to want to master two or more whole disciplines. Given that it implies the ability to be familiar with and combine entire disciplines, the idea of interdisciplinary research is illusory.

Because it is so difficult for a single scholar to be truly multidisciplinary, some methodologists are led to advocate teamwork. This is what is proposed by Pierre de Bie in the monumental work published by UNESCO (1970). Teamwork is productive in the big science laboratories, but where the social sciences are concerned it is difficult to achieve in practice. The only examples of successful teamwork concern data production or collection,

and very seldom interpretation or synthesis (archaeology being the exception, here).

The multidisciplinary approach is illusory because it advocates the slicing up of reality. Some researchers proceed piecemeal, with philological, anthropological, historical, ethnological, psychological and sociological approaches. This alternation of approaches, which almost never allows disciplines to meet, results at best in a useful parallelism—but not in a synthesis. In fact, research enlisting several disciplines involves a combination of segments of disciplines, of specialities and not whole disciplines. The fruitful point of contact is established between sectors, and not along disciplinary boundaries. Considering the current trends in the social sciences, the word “interdisciplinarity” appears inadequate. It carries a hint of superficiality and dilettantism, and consequently should be avoided and replaced by hybridization of fragments of sciences.

B Specialization and Fragmentation

In Cartesian thought, analysis means breaking things into parts. All sciences, from astronomy to zoology, have made progress from the 16th century on by internal differentiation and cross-stimulation among emergent specialities. Each speciality developed a patrimony of knowledge as its understanding of the world advanced. With the growth of these patrimonies, specialization became less a choice and more a necessity. Increasingly focused specialization has led to the creation of subdisciplines, many of which have gone on to become autonomous.

There are in the literature dozens of lamentations and jeremiads about the fragmentation of political science. I cite here just two recent complaints. “Today there is no longer a single, dominant point of view . . . the discipline is fragmented in its methodological conception . . . students are no longer certain what politics is all about” (Easton and Schelling 1991: 49). In the Nordic countries, “political science showed tendencies to disintegrate into subfields, but these were still subfields of political science. However, the disintegration has continued and has lately taken on different forms which renounce the identity of political science” (Anckar 1987: 72).

In reality, fragmentation results from specialization. The division of the discipline into subfields tends to be institutionalized, as can be seen in the organization of large departments of political science in many American and European universities.

A good indication of the fragmentation of the discipline is the increasing number of specialized journals. In the last twelve years one hundred

specialized journals in English relevant to political science have been launched. Most of these journals cross the borders of two or three disciplines, and many of them are located in Europe. Some other new hybrid journals have appeared in French and in German. European unification has had an impact on the development of cross-national journals focusing on special fields.

Increasing specialization may have consequences for the role of national professional associations and of the general journals.

As political scientists have become more specialized, some members [of the American Political Science Association, APSA] have concluded that their interests are better served by other organizations. A comparative government area specialist, for instance, may find that he/she has more in common with economists, sociologists and anthropologists working in the same area than with other political scientists. This may also decrease the value of the *American Political Science Review* . . . Specialization has devalued the reasons for joining APSA (Lynn 1983: 114–15).

The same phenomenon can be observed in Europe. The national professional associations are losing ground in favor of cross-national organizations that represent topical specializations across disciplines.

C Specialization into Hybridization

It is necessary to stress both parts of the process: fragmentation into special fields and specialization by hybridization. It is the interaction of these two processes, and not each one in isolation, that has led to the remarkable advance of the natural as well as the social sciences. The continuous restructuring of political science, like that of the other social sciences, has been the result of these two contending processes. However, both fragmentation and its correlate, hybridization, have developed much more recently in political science than elsewhere. In the distant past, hybrid fields were the result of gaps between full disciplines. Today the gaps appear between specialized subfields among neighbouring subdisciplines. As a result, the fragmentation of disciplines into specialized subfields in the last few decades has led to the development of hybrid specialities. The hybrid specialities do not necessarily stand midway between two sovereign disciplines. They may be enclaves of a section of political science into a sector of another discipline. They combine two delimited domains, not entire disciplines. These domains do not need to be adjacent.

Hybridization appears in the list of research committees sponsored by

the International Political Science Association. Among the forty recognized groups in 1995 a majority are related to specialities of other disciplines and are therefore hybrid: Political Sociology, Political Philosophy, Political Geography, Psycho-politics, Religion and Politics, Political and Social Elites, Armed Forces and Politics, Political Alienation, Politics and Ethnicity, Political Education, International Political Economy, International Economic Order, Comparative Judicial Studies, Biology and Politics, Business and Politics, Science and Politics, Socio-political Pluralism, Health Policy, Sex Roles and Politics, Global Environmental Change, Conceptual and Terminological Analysis, etc. Each of these groups is in contact with specialists belonging formally to other disciplines.

Sociometric studies show that many specialists are more in touch with colleagues who belong officially to other disciplines than with colleagues in their own discipline. The “invisible college” described by Robert Merton, Diana Crane and other sociologists of science is an eminently interdisciplinary institution because it ensures communication not only from one university to another and across all national borders, but also and above all between specialists attached administratively to different disciplines. The networks of cross-disciplinary influence are such that they are obliterating the old classification of the social sciences.⁶⁹

II Borrowing from Neighboring Disciplines

The process of hybridization consists first of all in borrowing and lending concepts, theories and methods. A review of the lending process would

⁶⁹ Indeed, we might construct a “Genealogical Tree of Political Science,” cross-nationally. “The content of Swedish political science research before 1945 was dominated by three main currents: each of these currents was oriented toward another academic discipline: constitutional law, history, philosophy” (Ruin 1982: 299). In India, “while in the past political science has been heavily irrigated by thought streams originating in disciplines like philosophy, law and history . . . no political science teacher in India today can afford to be out of touch with the latest advances in disciplines like sociology, social anthropology, economics, management and public administration” (Narain and Mathur 1982: 197). In the Netherlands “about half of the present full and associate professors of political science studied initially in a different field than political science, usually sociology or law” (Hoogerwerf 1982: 227). In Scandinavia, “the bulk of the efforts at theorizing remained heavily sociological in style and in orientation. Explicitly sociological frameworks for political analysis were developed by Erik Allardt in Finland, Ulf Himmelstrand in Sweden, Wilhelm Aubert, Johan Galtung, Stein Rokkan, Ulf Torgersen, Francesco Kjellberg and Øyvind Østerud in Norway. This work parallels other endeavors on the border between sociology and politics” (Kuhnle 1982: 259). In earlier times in the United States, political science “had no distinctive methodology. It had no clearly-defined subject matter that could not be encompassed within one or more of its sister disciplines. Its various parts could have survived simply as political history, political sociology, political geography, political philosophy, and political psychology—subfields in the other disciplines. Other parts could have remained constitutional law, public law and international law. Indeed, they have done so. Each of the other social science disciplines claims a piece of political science” (Andrews 1988: 2).

take us too far. I have to forgo to such a review here. In any case, political science has always borrowed much more than it has lent.

A The Diffusion of Concepts Across Disciplines

For a century and a half, from Sir George Cornwall Lewis' 1832 *The Use and Abuse of Some Political Terms* to Giovanni Sartori's edited collection on *Social Science Concepts* in 1984, numerous scholars have denounced the conceptual confusion and the polysemy of terms in various disciplines and particularly in political science. One of the reasons for this polysemy is indicated by Sartori (1984: 17): "We cannot form a sentence unless we already know the meanings of the words it contains . . . It is not that words acquire their meaning via the sentences in which they are placed, rather, the meaning of a word is specified by the sentence in which it is placed."

Another important reason for this semantic problem comes from the peregrination of concepts from one discipline to another. Borrowed concepts need some adaptation to the context of the new discipline, because a concept is not only a term, it is also a notion or an idea. A recent study of more than 400 concepts used in the social sciences has found few neologisms (de Grolier 1990: 271), and this can be explained by the fact that more concepts are borrowed than created. Some concepts are reanimated after a long oblivion. Max Weber resurrected the concept of charisma after centuries of neglect. David Apter made use of the concept of consociational organization, which was originally applied to Presbyterian institutions in Scotland. He used it to analyze political conflict in Uganda. Arendt Lijphart and many others have developed it further with respect to small European democracies, Canada and South Africa.

We can neglect the etymology of concepts in order to stress how borrowing fertilizes imagination. The word "role" comes from the theatre, but Max Weber gave it a sociological meaning. From sociology this concept spread everywhere. The word "revolution" was proposed by Copernicus, but it was first applied to politics by Louis XIV. Historians adopted it, sociologists articulated it, before offering it to political science.

The patrimony of political science is full of borrowed concepts, which are hybrid in the sense that they were concocted in other disciplines and replanted skilfully in the garden of political science. This discipline has nevertheless generated for its own use a long series of important concepts, the oldest being "power," formulated by Aristotle, and the youngest, "implosion," suggested by the fall of the Soviet Union.

Using the International Encyclopaedia of Social Sciences (Sills 1968) and the analytical indexes of some important books, I have compiled an inventory of more than two hundred concepts “imported” into political science. In the process of adoption and adaptation many of these concepts have changed their semantic meaning. Political science has borrowed the following important concepts (excluding “lay” terms):

- From sociology: accommodation, aggregate, assimilation, élite circulation, clique, cohesion, collective behavior, hierarchy, ideal-type, individualism, legitimacy, mass media, mass society, militarism, nationalism, pattern variables, Protestant ethic, secular, segregation, social class, social control, social integration, social structure, socialization, status inconsistency, working class, Gemeinschaft–Gesellschaft.
- From psychology: affect, alienation, ambivalence, aspiration, attitude, behavior, consciousness, dependency, empathy, personality, social movement, stereotype, Gestalt.
- From economics: allocation of resources, cartel, corporatism, diminishing returns, industrial revolution, industrialization, liberalism, mercantilism, gross national product, scarcity, undeveloped areas.
- From philosophy and the ancient Greeks: anarchism, aristocracy, consensus, democracy, faction, freedom, general will, idealism, monarchy, oligarchy, phratry, pluralism, tyranny, value, Weltanschauung.
- From anthropology: acculturation, affinity, caste, nepotism, patriarchy, plural society, rites de passage.
- From theology: anomie (disregard of divine law), charisma.
- From journalists and politicians: imperialism, internationalism, isolationism, Left and Right, lobbying, neutralism, nihilism, patronage, plebiscite, propaganda, socialism, syndicalism.

Many concepts have multiple origins. Authoritarianism has two roots, one psychological and one ideological. It is often inadvertently interchangeable with despotism, autocracy, absolutism, dictatorship, etc. Authority has been analyzed from different disciplinary perspectives by Malinowski, Weber, Parsons, Lasswell, Kaplan, B. de Jouvenel, and C. J. Friedrich, among others. The concept of culture (civic, political, national) has many variants: cultural convergence, cultural configuration, cultural evolution, cultural integration, cultural lag, cultural parallelism, cultural pluralism, cultural relativity, cultural system, post-materialist culture. In the last two decades political scientists have been very productive in this subfield.

Max Weber and Karl Marx, both hybrid scholars, were the most prolific generators of concepts. Only Aristotle is comparable to them. Almond and Parsons are also the fathers of an impressive number of concepts. Concepts are often germinal grains of theories: structure generates structuralism, system becomes systemism, capital engenders capitalism, and so on.

B Theories Across Disciplinary Borders

Paradigm is a word often used or abused in political science, as much as in sociology, instead of the words theory or grand theory. Thomas Kuhn, who concocted this word, has explicitly acknowledged that in the social sciences its use is not justified. He explains in his preface to *The Structure of Scientific Revolutions* (Kuhn 1957: viii) that it was during a stay at Palo Alto Center for Advanced Studies, in the company of social scientists, including political scientists, that he was led to formulate the concept of paradigm with the very aim of making clear the essential difference between natural sciences and the social sciences. The reason given by Kuhn was the absence of a theoretical consensus in any discipline of social sciences. Today, if someone “wants to legitimate his theory or model as a revolutionary achievement, there are always some who do not rally round the flag” (Weingart 1986: 270).

Are there in the social sciences instances of paradigmatic upheavals comparable to those created by Copernicus, Newton, Darwin or Einstein? Can the theories of Keynes, Chomsky or Parsons be described as paradigmatic? In the social sciences, does progress occur through paradigmatic revolutions or through cumulative processes? Are there really paradigms in the social sciences?

Within a formal discipline, several major theories may cohabit, but there is a paradigm only when one testable theory alone dominates all other theories and is accepted by the entire scientific community. When Pasteur discovered the microbe, the theory of spontaneous generation collapsed: contagion became the new paradigm. In the social sciences, however, we see at best a confrontation between several non-testable theories. Most of the time there is not even a confrontation but careful mutual avoidance, superb disregard on all sides; this is relatively easy owing to the size of scientific communities, and its division into schools. This is true for all countries, big or small.

This mutual disregard is an old practice in the social sciences. At the turn of the century, the great scholars did not communicate, or very little. In the writings of Weber there is no reference to his contemporary

Durkheim. Yet Weber was acquainted with Durkheim's journal, *L'Année sociologique*. For his part, Durkheim, who could read German, makes only one, fleeting reference to Weber. Yet they worked on a number of the same subjects, such as religion. Durkheim does no more than mention in passing Simmel and Tönnies. Harshly criticized by Pareto, Durkheim never alluded to Pareto's work. Pareto's judgment of Durkheim's book on suicide was unfavorable. "Unfortunately," he wrote, "its arguments lack rigour (quoted in Valade 1990: 207).

Weber seems to have been unaware of Pareto's theory on the circulation of élites and Pareto in his turn says nothing about the Weberian theory of political leadership. Weber and Croce met only once, and that briefly. There was no exchange between Weber and Freud. Ernst Bloch and George Lukács met regularly with Weber in Heidelberg, but their work shows no sign of his influence. Nor was there any communication between Weber and Spengler. Of Weber's contemporaries the only one who referred to him was Karl Jaspers, but he was a philosopher (cf. Mommsen and Osterhammel 1987). As was noted by Raymond Aron, each of the three great scholars followed a "solitary path."

Many examples could be cited of scholars co-existing without influencing one another, such as Angus Campbell and Paul Lazarsfeld, who nevertheless devoted a large part of their lives to studying the same political behavior. The same remark can be made with reference to other topical fields. It is not a bad thing to pit theories one against the other. But there must be debate. There are no paradigms in the social sciences because each discipline is fragmented.

For there to be a paradigm, one other condition must be met: theories must refer to essential aspects of social reality. However, the more ambitious a theory is, the less it can be directly tested by the data available. In the social sciences there are no "fundamental discoveries," as there sometimes are in the natural sciences. Instead, unverifiable theories are constructed, partly because social reality itself changes. Also, and more importantly, the mistakes made by the giants of the natural sciences are most of the time methodological errors; in the social sciences they are basic mistakes.

Consider Malthusianism for instance. Is it a theory or a paradigm? Malthusianism is one of the major theories in the history of the social sciences. Malthus influenced many scientists, primarily Charles Darwin, who acknowledged it to be one of his main sources of inspiration. A host of sociologists, political scientists, demographers and economists took their cue from him, either to agree or to disagree with him. But when demographic conditions changed in the West, his projections were invalidated, and he

was condemned as a false prophet. However, if we consider today the gap between economic development and population growth in Africa, Asia or Latin America, he could be hailed as a great visionary. We need only agree to an asynchronous comparison between the England of his time and the Third World to admit the asynchronous validity of his theory. Should we go further and talk of a Malthusian paradigm?

Is there at least cumulative progress in political science? Clearly, there is such progress since the discipline has its heritage of concepts, methods, theories and praxis. It can soon be recognized whether someone is a professional or an amateur. There is cumulative progress even in the theoretical field. If a theory becomes outdated, or is invalidated, something nevertheless remains of it, which is incorporated into new theories, for a great deal is learned by making mistakes. We do not repeat a mistake that has been denounced. In recent times, progress in political science has been ensured through a long series of sectoral empirical discoveries. For example, the correlation established by D. Lerner (1958: 63) between degrees of urbanization, literacy and communication is a proven fact that remains valid. In these specialized sectors—whether hybrid or monodisciplinary—there is no need for ambitious theories, it is enough for them to be what Merton (1973) has called “middle-range theories.”

Let us take a concrete example of a cumulative process. One of the great findings in political science is the influence of electoral techniques on party systems. A bibliography, even a very selective one, on this theme could easily comprise two or three hundred titles in English, not to mention the many varied observations derived from the direct experience of politicians in numerous countries. From Condorcet, Bachofen, John Stuart Mill, Hare and Hondt to Hermens, Downs, Duverger, Sartori, Lijphart, the theory is based on the contributions and successive improvements made by a very large number of specialists. The consequences of proportional representation had already been described by Bachoven in 1850.

It is now recognized that “no paradigm seeks any more to order, and even less to unify, the field of the social sciences” (Annales 1989: 1322). The word paradigm should be excluded from the vocabulary of social sciences unless it is placed between quotation marks.

Having thus cleared up the apparent theoretical contradiction between hybridization of specialities and the disciplinary paradigm, let us now look to some hybrid theories. Examples of theoretical cross-fertilization abound. Interest group theory's most-cited work, David B. Truman's *The Governmental Process*, draws heavily on sociological theories of groups. Mancur Olson's attack on traditional interest group theory, *The Logic of Collective Action*, was based on economics. Meanwhile, sociologists and

economists have borrowed from interest group theories developed by political scientists.

The theories of sister disciplines have often confronted one another on the ground of political science, with results beneficial to all concerned. "Rational choice analysis" is a case in point. This approach has proved to be quite impervious to empirical criticism: an argument that a given politician was irrational, for instance, is not usually taken to present a threat to the theory. Instead, modifications to, or attacks on, rational choice have tended to come either from within or from theoreticians of other disciplines. The strongest criticisms have been the construction of theoretical alternatives. A theory is discredited only by replacing it, usually with the aid of theories from outside the discipline. Psychology has provided the foundation for several of these attacks. Herbert Simon's theory draws not only on economics but also on psychology and on the study of public administration within political science.

Theorists of political systems have often used extensive analogies with biological systems. Biology first developed the concept of "system" as a way to organize life and of organic systems as phenomena not reducible to their constituent chemistry. Some structural functionalists have argued that social systems are like biological systems in that they are self-regulating and homeostatic. These theorists also noted that certain functions have to be performed in any biological system and used the analogy to ask what functions were vital to social systems. "Functionalism was well established in biology in the 1920s and had been used independently in Freudian analysis of the personality and in the study of primitive societies. Thence it spread throughout the social sciences, and with it spread logical scepticism about the exact status of the word function" (Mackenzie 1967: 91). Systems theory, whether that of David Easton in comparative politics, or of Morton Kaplan, Richard Rosecrance, and Kenneth Waltz in international relations, drew primarily upon such sources for some sectors of sociology.

Dependency theory, which seduced so many Latin America specialists, originates in the work of a group of economists, sociologists and demographers, in co-operation with statisticians from the United Nations. Among them are: Fernando H. Cardoso and Enzo Faletto (authors of *Dependencia y Desarrollo en Latin America*), André Gunder Frank, Theotonio Dos Santos, Ruy Mauro Marini.

Theories decay. How old theories are superseded by new ones is a good question. But there is another, raised by Daniel Bell, the phenomenon of theories going wrong or turning into a blind alley: "Why does what was once regarded as an advance become a cul-de-sac?" (D. Bell, in Deutsch et al. 1986: 220). One could read today with great interest dozens of political

philosophers and grand theorists of the past and cite them with pleasure. But only a handful of theories formulated before World War II are still alive. Theories survive more easily in linguistics and economics. Castles built on sands by political scientists are ruined at the first rain. In 1912, Gustave Le Bon wrote in *La Psychologie Politique* that the rules formulated by Machiavelli in *The Prince* were not valid any more because the society observed by the great Florentine no longer existed.

But we are not going to make a pilgrimage to the cemetery of political theories. It is sufficient to note that in this necropolis there are fewer tombs in the alley of hybrid theories than in the alley of monodisciplinary theories.

Specialized domains need theoretical orientations, but the discipline of political science as a whole cannot have a universal and monopolistic theory. Methods have a much longer life expectancy and some are even perpetual acquisitions across the boundaries of formal disciplines.

C Borrowing Methods

Distinctions should be made between scientific reasoning—in the tradition of J. S. Mill, Durkheim, Claude Bernard or Hubert Blalock—strategy of investigation, method of research and technological ability. All four are cross-disciplinary. I shall concentrate on the borrowing of methods by political scientists, who rarely import directly from logic, mathematics or statistics. Usually they find an intermediary in certain sectors of psychology, economics or sociology, all of which have played a crucial role in the methodological enrichment of political science. Tabular demonstration, graphic presentation, summation, measures of variability, ratios, rates, sampling distribution, statistical inference, ecological fallacy, binomial distribution, multiple regression, linear correlation, contingency, factor analysis and so on—none of these methods has been imagined by political scientists. All have been imported, and some, after improvement, have been exported in refined forms.

The borrowing of methods has not diminished since Oliver Benson admitted, in 1963, that “most mathematical literature relevant to political science is by outsiders, by those who could not identify themselves as primarily students of political phenomena” (Benson 1963: 30). Borrowing methods is easy. Once the difficult process of invention and initial elaboration is completed, a method can be used by anyone, with or without imagination.

A substantial number of political scientists are familiar with scaling

methods elaborated by psychologists, path-analysis imported from biology via economics, the multivariate reasoning and measuring of the sociologist Paul Lazarsfeld, the linear structural relation forged by the statistician Jöreskog. With the rich methodology of the *American Soldier* edited by Samuel Stouffer many representatives of other disciplines have collaborated.

Up to a certain point, the introduction of mathematics into political science has been valuable not only for its own contributions, but as an entrée for additional borrowing. Adoption of these mathematical methods and models has paid several dividends: the rigor necessary for modelling, for example, has also been invaluable in developing compelling and logical arguments, even for work which forgoes mathematical presentation.

Because there is no need to obtain a license in order to adopt a method or a research technique, the importation has sometimes been indiscriminate. What is needed is good sense in applying the method to a new field. Too many political scientists are still confusing scientific reasoning, research strategy and technological tools. Today the main source of disputes among political scientists is not, as many people believe, ideology, but methodology, most of it exogenous to political science. Debates between ideologues are possible, even if often sterile; but between methodological schools, they are inconclusive.

The borrowing of statistical methods and techniques is not always beneficial. Many political scientists who use quantitative methods extend the borders of political knowledge. However, others are motivated mainly by an interest in technique, rather than substance. They routinely build unverifiable models, over-quantify, and over-model. They often choose to discuss minor issues, spending much talent and energy to improve a correlation coefficient, to split a hair into four by factor analysis. They are productive scholars—any input into the computer will result in an output, mechanically. Few of their papers see the light of day in major mainstream journals, because most are characterized by a painful contrast between highly sophisticated analytical techniques and poor imagination in research design, or data too weak to support the powerful techniques utilized (Dogan 1994).

Interdisciplinary free trade methodology needs to be guided by scientific strategy and not by mechanical facilities, particularly in some great universities where many graduate students in political science complain that they are “oppressed” by a heavy program of imported statistical techniques, to the detriment of scientific reasoning.

III Hybrid Domains

If each of the twelve principal social sciences were crossed with all the others, we would in theory obtain a grid with 144 squares. Some squares would remain empty, but more than three-quarters of them would be filled by hybridized specialities enjoying some autonomy (Dogan and Pahre 1990). These hybrid specialities branch out in turn, and give rise, at the second generation, to an even larger number of hybrids. A full inventory of all the existing combinations cannot be obtained by crossing the disciplines two by two at the level of the second generation, since some hybrid fields among the most dynamic ones are of multiple origin. In addition, hybrid fields such as prehistory which are partly rooted in the natural sciences would not appear in the 144-square grid, confined as it is to recombinations of segments of the social sciences. The configuration of hybrid fields is changing constantly. Political psychology, political sociology and political economy have long been recognized, whereas political anthropology is not yet autonomous.

A Political Psychology

Between psychology and political science there is a hybrid domain flying its own flag: political psychology. This is a third generation hybrid, because psychology itself was born as a hybrid discipline, rooted partly in the natural sciences and partly in the social sciences. Political psychology has two sisters: an older one, social psychology, formally recognized in all major universities of the world; and a younger one, cognitive science, today the best endowed of the young sciences on both sides of the Atlantic. Political psychology rarely meets cognitive science, but is in permanent contact with social psychology.

In a recent survey D. O. Sears and C. L. Funk (1991: 346) write that political psychology, being “an interdisciplinary endeavor, runs the danger of falling between the cracks in academic institutions” because of pressures for “disciplinary orthodoxy induced by bureaucratic inertia.” But the inventory they make by showing how political psychology penetrated into political science departments does not justify this fear. The journal *Political Psychology* is a good window onto this hybrid field.

In its territory we find the provinces of political socialization, role theory, alienation, psycho-biography, personality analysis, political attitudes and beliefs, small groups, typological analysis of political leaders, national

character, mass participation, generations, political dissatisfaction, and a rich methodological area (attitude measurement, sociometric measurement, content analysis, clinical method, quasi-experimental approach, and particularly, survey research).

Very few hybrid domains celebrate a founding father. But American political psychology has one: Harold Lasswell. His progeny include Fred I. Greenstein, Robert Lane, Herbert Hyman, Erik Erikson, Sidney Verba and James C. Davies, among many others.

In Western Europe the hybrid field of political psychology is institutionalized in few universities, but the literature related to the field is rich and of great variety as is illustrated in France for instance by the work of Philippe Braud, and in Germany by the contributions of Erwin K. Scheuch to the methodology of sample surveys and the problems of comparability in politics and social psychology. Scheuch has the merit of having discovered the “individualistic fallacy” (Scheuch 1966; 1969). Among the books belonging to the field of political psychology, *Political Action*, edited by Samuel Barnes and Max Kaase, should be singled out. Their typology of protesters, activists, reformists, conformists and inactives is pertinent for many countries.

B Political Geography

Geography—a master discipline in the past—today has no core. It is divided into many subfields: biogeography, social geography, urban, historical, economic, political geography. There are multiple encounters between political science and geography: geopolitics, electoral geography, urban politics, territorial bases of federalism, spatial organization of society, core–periphery, city–hinterland, environmental problems, urban–rural differences, territorial aspects of social mobilization, etc. Demography is an intervening dimension in political geography.

From the “Geographical Pivot of History” by H. J. Mackinder in 1904 to Stein Rokkan's “conceptual map of Europe” (see the special issue dedicated to his conceptions by *Revue Internationale de Politique Comparée* in 1994), many essays have been published in the field of political geography, and not only in Europe. F. J. Turner's *The Significance of the Frontier in American History* is dealing with geography as much as with history.

In Kasperson and Minghi's collection, *The Structure of Political Geography* (1969), many chapters are of interest even for political scientists who are not oriented toward geography (Ratzel's laws of the spatial growth of states, geopolitical regions, transaction-flow analysis, heartland and

rimland, the impact of negro migration, and so on). The concept of center–periphery obviously has a geographical dimension (Rokkan, Urwin et al. 1987)

Political science and geography also meet in the domain of electoral geography, particularly for the analysis of aggregate data in countries characterized by a great territorial diversity, and for which information is available at the level of small administrative units. The privileged countries from this point of view are, or were until recently: France, Italy, Spain, Portugal, Belgium, Norway, Finland, Austria, Canada. André Siegfried (1913) did research on the North-West of France, V. O. Key on Southern Politics (1949), Rudolf Herberle (1963) on Schleswig-Holstein during the Weimar Republic, Erik Allardt (1964) on Finland, Mattei Dogan (1968) on Italy, Stein Rokkan and H. Valen (1964) on regional contrasts in Norwegian politics, Juan Linz and Amando de Miguel (1966) on the “Eight Spains,” R. E. De Smet and R. Evalenko (1956) and Frogner et al. (1974) on Belgium. This geographical approach has, however, been challenged in an analysis by deciles, where the territory disappears in favor of a sociological reordering of the territorial units and of the variables (Dogan and Derivry 1988). This hybrid field has a series of specialized journals which are interdisciplinary bridges: *Economic Geography*, *Urban Geography*, *International Journal of Urban and Regional Research* and, particularly, *Political Geography*.

Political scientists are still adopting the nation-state as a unit of analysis at a time when there are in the world more giant cities with over four million inhabitants than independent states which reach this level. The world is increasingly dominated by giant cities (Dogan and Kasarda 1988). Geographers and urbanists are in this domain at the front rank, proposing theoretical frameworks, concepts and methods of measurement. Urban studies are expanding; they may soon become an independent discipline. Today in almost all countries, advanced and developing, the number of specialists in “urbanology” is higher than the number of political scientists. “Urban politics” is a growing field.

C Political Sociology

Political science and sociology have a condominium: political sociology. This is an old hybrid, recognized as early as the 1950s, as was testified by Neil Smelser:

In the newer branches of political science that have grouped loosely under the heading of behavioral approach, the methods of research are, except for

relative emphasis, almost indistinguishable from the methods of sociology . . . political scientists have employed a vast array of methods of data gathering, statistical manipulation and comparative methods that are also commonly used in sociology (Smelser 1967: 27).

The overlap is obvious.

Giovanni Sartori makes a distinction between political sociology and the sociology of politics. For him, the latter is a branch of sociology, like the sociology of religion. A dividing line could be traced by considering the emphasis on the dependent or on the independent variables. “The independent variables—causes, determinants or factors—of the sociologist are, basically, social structures, while the independent variables of the political scientist are, basically political structures” (Sartori 1969: 67). He concludes that “political sociology is an interdisciplinary hybrid attempting to combine social and political explanatory variables, i.e. the inputs suggested by the sociologist with inputs suggested by the political scientist” (Sartori 1969: 69).

Many of the best-known scholars in political science are leading sociologists. Quite a number of scholars have or have had a dual appointment in political science and in sociology, among them R. Aron, S. M. Lipset, R. Bendix, J. Linz, G. Sartori, M. Kaase, J. D. Stephens, Mildred A. Schwartz, Ch. Ragin, and M. Dogan. Today political economy tends to weaken the privileged relations between sociology and political science.

D How Political Science Conquered the Territories of Economics

Some economists advocate an “imperialistic expansion of economics into the traditional domains of sociology, political science, anthropology, law and social biology” (Hirschleifer 1985: 53). Several of these imperialists are famous scholars, including a few Nobel laureates. A kind of manifesto has been published in the *American Economic Review*, which is worth quoting:

It is ultimately impossible to carve off a distinct territory for economics, bordering upon but separated from other social disciplines. Economics interpenetrates them all, and is reciprocally penetrated by them. There is only one social science. What gives economics its imperialist invasive power is that our analytical categories—scarcity, cost, preferences, opportunities, etc.—are truly universal in applicability . . . Thus economics really does constitute the universal grammar of social science. But there is a flip side to this. While scientific work in anthropology and sociology and political science and the like will become increasingly indistinguishable from economics, economists will reciprocally have to become aware of how constraining

has been their function. Ultimately, good economics will also have to be good anthropology and sociology and political science and psychology (Hirschleifer 1985: 53).

This view is anachronistic, and contrasts with the perception of economics as a shrinking discipline: “Economics as a formal discipline is suffering because its main achievements—conceptualization, theory, modelling and mathematization—have been accompanied by an excessive isolation from the other social sciences” (Beaud 1991: 157).

In reality, the recent history of the social sciences shows that enormous areas of scientific knowledge have been abandoned by the science of economics. These areas have been taken over by neighboring disciplines. At one particular moment, economics reached a fork in the path: it could have chosen intellectual expansion, the penetration of other disciplines, at the cost of diversification, and at the risk of dispersal (a risk taken by political science); instead it chose to remain unflinchingly pure, true to itself, thereby forfeiting vast territories. Yet many economists consider that the choice of purity, methodological rigor and hermetic terminology was the right choice.

It is thus clear that self-sufficiency, to use a word familiar to economists, leads sooner or later to a shrinking of borders. But this does not imply general impoverishment, since the lands abandoned by the economists were soon cultivated by others. Those abandoned lands now have their own flags: management, political economy, development science, the comparative study of Third World countries, economic and social history. The position of economics in the constellation of the social sciences might have been more enviable today had it not withdrawn into itself.

This situation is particularly surprising, in that few classical scholars—from Marx and Weber to Schumpeter, Polanyi, Parsons and Smelser (Martinelli and Smelser, 1990), not forgetting Pareto—have failed to assign a central place in their theories to the relationship between economy, society and politics. A whole army of famous American economists have given priority to the study of political phenomena, even if they have kept one foot in economics. Among them are Kenneth Arrow, Anthony Downs, Kenneth Boulding, Charles Lindblom, James Buchanan, Gordon Tullock, Albert Hirschman, John Harsanyi, Herbert Simon, Duncan Black, Jerome Rothenberg, Thomas Schelling, Richard Musgrave, Mancur Olson and others.

Some eclectic economists denounce the reductionism advocated by others, particularly with reference to research on development: development is reduced to economic development; this is reduced to growth; which in turn is reduced to investment, in other words to accumulation. It has taken

several decades to dethrone per capita GDP as a composite indicator of development. Gunnar Myrdal railed against economists who were in favor of unidisciplinary models.

In many countries large numbers of economists have locked themselves up in an ivory tower, and as a result whole areas have escaped their scrutiny. Their contribution to the problem of the development of the Third World, for instance, is rather modest when compared with the work of political scientists and sociologists. This is particularly true in the United States, Latin America and India.

If a discipline has a tendency to turn in upon itself, if it does not open up enough, if its specialities do not hybridize, the neighboring territories do not remain barren. Many economists have had a somewhat condescending attitude towards political science. This has resulted in the development, alongside and in competition with economics, of a new corporate body, with an extremely active and large membership in the United States, the UK and Scandinavia: political economy was protected by only one of its parents and renamed through the revival of an old name from the French nomenclature of the sciences. Political economy is currently one of the main provinces of American political science—with a large output and renowned journals. It is one of the most popular sectors among Ph.D. students in political science. Political science is the greatest beneficiary of the monodisciplinary self-confinement of economics.

Thirty years ago F. A. Hayek wrote that “nobody can be a great economist who is only an economist—and I am even tempted to add that the economist who is only an economist is likely to become a nuisance if not a positive danger” (Hayek 1956: 463). It may now be too late for economics to reconquer the territories conquered by political science, sociology, economic history and particularly by political economy. Some economists are still hoping: “It is necessary to reduce the use of the clause *ceteris paribus*, to adopt an interdisciplinary approach, that is to say to open economics to multidimensionality” (Bartoli 1991: 490). Abandonment of reasoning by assumptions and by theorems would not be enough, because the reality has changed: “economic issues become politicized and political systems become increasingly preoccupied with economic affairs” (Frieden and Lake 1991: 5).

E From Political Anthropology to Hybrid Area Studies

In a few years towards the end of the 1950s and the beginning of the 1960s, about fifty colonies achieved national independence. At that time some

three thousand American social scientists, among them many political scientists, were sent—with the financial help of American foundations—to Asia, Africa and Latin America in order to study the newly independent nation-states. They covered the planet with hundreds of books and articles. They have become area specialists. They have replaced the European scholars who returned home after the withdrawal of Britain, France, Belgium, the Netherlands and Portugal from their colonies.

This spontaneous generation of area specialists was born hybrid. The topics of their research blurred the disciplinary boundaries. They and their successors were confined to non-Western underdeveloped countries, to stateless societies, to what Joel S. Migdal calls “weak states and strong societies”—which is to say, to the privileged territory of an old discipline, anthropology, which had flourished in Western Europe around the turn of the century. The European anthropologists had discovered these “primitive” societies long before the American area specialists had done so.

There is a basic difference between the two. The European anthropologists were monodisciplinary scholars with a clear identity, vocabulary and theoretical framework. They were exporters of knowledge to the entire spectrum of social sciences. Some of them had imperialistic ambitions, proclaiming that anthropology was the master science. All other disciplines, including political science and sociology, were considered by these academic imperialists as provinces of anthropology.

But when the European empires which covered half of the planet started to disintegrate, these anthropologists lost their research fields. Anthropology shrank. The abandoned territories were delivered to specialists in area studies. In contrast to their predecessors, the new invaders did not come under a disciplinary flag. Few of them were trained in anthropology, and most of them were neither theoreticians nor methodologists. The most famous exceptions are David Apter, Leonard Binder, James Coleman, Lucian Pye, Fred Riggs, Dankwart Rustow, Richard Sklar and Myron Wiener.

David Easton was then eager to establish a new subfield: political anthropology. He published an essay under this title in 1959. Retrospectively it can be said that this was a sickly child, born at a moment when the new hegemonic power needed non-disciplinary specialists of these new countries—not experts in anthropology, a discipline which began to be colonized by other disciplines. It is significant that at the same moment Margaret Mead (1961: 475) was frightened of seeing her discipline “swallowed” and “isolated from the community of scientists and scholars.” Good old anthropology fell from imperialism to being an “unsuitable scientific repository” (Mead 1961: 476).

Political anthropology does not flourish today, because it is too anthropological and insufficiently political, at a time when the poor countries are developing, except in Africa, and are experiencing an increasing internal diversification in facing the global economic world. The seminal essay by Lucian Pye in 1958 "The Non-Western Political Process" needs a serious updating by reducing the scale of dichotomies. The field of political anthropology seems to be the only hybrid field in decline.

Meanwhile, a French demographer-economist-sociologist Alfred Sauvy (1952; 1956) suggested calling these underprivileged new countries "the Third World," by analogy with the Third Estate before the French Revolution. This label has survived even though the "second world" imploded in 1989. It is probable that sooner or later this label will be abandoned, because it includes an enormous variety of countries: old civilizations like China and artificial states in Africa; rich countries like Saudi Arabia and extremely poor ones. Which discipline will propose the new labels?

Area studies in the Third World give priority to topics which seem important to understanding a particular country. "They do not respect disciplinary boundaries" (Lambert 1991: 190). In the area studies, humanities are well represented. "Area specialists who are in the social sciences are likely to have a great deal more contact and shared intellectual activity with human sciences than do most of their non-area-oriented disciplinary colleagues"; it is at the conjunction of anthropology, history, literature and political science that "much of the genuinely interdisciplinary work in area studies occurs" (Lambert 1991: 192).

Describing the struggle between the conventional disciplines and area studies, which has affected the self-identity of scholars, Lucian W. Pye (1975: 3) writes: "The emergence of area specialization has changed perspectives and raised questions which go to the foundations of the social sciences." These foundations have been altered much more by the hybrid fields at the interstices of disciplines than by the transversal hybrid area studies.

F Political Development Across Natural and Social Sciences

The geographical distribution of various types of political regime is a striking phenomenon. But it has been absent from the literature during the last few decades, as a reaction against the exaggerations of the sociologist Ellsworth Huntington, who was severely and rightly criticized by the sociologist Pitirim Sorokin in 1928. This criticism dissuaded an entire

generation of American sociologists and political scientists from taking into consideration environmental and climatic factors.

But many prominent economists did not remain silent. In 1955, W. Arthur Lewis noted in his *Theory of Economic Growth*: “It is important to identify the reasons why tropical countries have lagged during the last two hundred years in the process of modern economic growth” (Lewis 1955: 53). John Kenneth Galbraith wrote in 1951: “If one marks off a belt a couple of thousand miles in width encircling the earth at the equator one finds within it no developed countries . . . Everywhere the standard of living is low and the span of human life is short” (Galbraith 1951: 39–41). Charles Kindleberger (1965: 78) wrote some fifteen years later: “The fact remains that no tropical country in modern times has achieved a high state of economic development.” Kenneth Boulding (1970: 409) goes one step further: “The principal failure of economics, certainly in the last generation, has been in the field of economic development [which] has been very much a temperate zone product.”

These economists are cited by Andrew Kamarck, director of the Economic Development Institute of the World Bank, in his *The Tropics and Economic Development* (1976). There is no reference at all to politics in that book, but it nevertheless manages to challenge our perception of politics in tropical areas. Trypanosomiasis, carried by the tsetse fly, prevented much of Africa from progressing beyond subsistence level: “For centuries, by killing transport animals, it abetted the isolation of tropical Africa from the rest of the world and the isolation of the various African peoples from one another” (Kamarck 1976: 38). Twenty years ago an area of Africa greater than that of the United States was thereby denied to cattle (Kamarck 1976: 39). Agricultural production in humid tropics is limited by the condition of the soil, which has become laterite (Kamarck 1976: 25). Surveys in the 1960s by the World Health Organization and by the World Food Organization estimated that parasitic worms infected over one billion people throughout the tropics and sub-tropics. Hookworm disease, characterized by anemia, weakness and fever, infected 500 million in these areas (Kamarck 1976: 75).

These ecological factors are confirmed by a considerable amount of research in tropical areas during the last two decades by geologists, geographers, biologists, zoologists, botanists, agronomists, epidemiologists, parasitologists, climatologists, experts of the World Bank and several agencies of the United Nations, and also by hybrid political scientists well-versed in tropical agriculture, the exploitation of minerals, and sanitary conditions of these countries. The situation has improved during the last generation, according to dozens of reports prepared by international organizations.

Translating these economic and social conditions into political terms, it is worth asking questions such as these:

- Why are almost all pluralist industrial democracies in temperate zones?
- Why has India—which according to some theories “should not be democratic,” and which is a relatively poor tropical country—nevertheless had, for a long period, a democratic regime?
- Is there any relationship between the fact that most of the 30 million square kilometers of continental Africa (excluding the Mediterranean rim) are in the tropics, and the facts that this continent is the poorest and is without a single truly pluralist democracy capable of surviving more than a few years?
- To what extent should ecological factors be included in the parameters of economic, social and political development?

Such questions can be asked not only by the old “school of development,” but also by its successor, the new “school of transition.” One team (G. O'Donnell, P. C. Schmitter and L. Whitehead) gave to their book the prudent title: *Transitions from Authoritarian Rule*, which does not indicate the final outcome. Another team (led by L. Diamond, J. J. Linz and S. M. Lipset) took a risk by suggesting, in the title of their book *Democracy in Developing Countries*, that democratic institutions are indeed taking root in these countries, which were previously considered by one of these coeditors as not responding to the “requisites of democracy.”

Neither of these two teams make an explicit and functional distinction between the genuine pluralist democracy, Dahl's polyarchy, and the limited, partial, façade or embryonic kind of democracy. Processes of democratization, stages of modernization, liberalization, electoral games, respect for human rights are only steps toward the “western model.” Today the word “democracy” without an adjective can be misleading. As anyone would admit there is a large variety of democratic regimes. Democracy comes by degrees, as is shown by the data collected by Raymond Gastil in his series *Freedom in the World*. Only by a clear distinction between types of democracy would it be possible to frame a tentative reply to the first question asked above: why until now have truly advanced democracies tended to flourish in temperate zones?

India as a democratic country is a clinical case, a scientific “anomaly” in the sense given to this word by Thomas Kuhn. Comparativists interested in this case should proceed as biologists do when they have the good fortune to discover an abnormality, they could follow the advice of Claude Bernard in *Introduction à la médecine expérimentale* (1865), which is still a pertinent

book. They could start with one of the best indicators that we have in comparative politics: small agricultural ownership. The Indian peasant is poor, but he is a proprietor!⁷⁰

Concerning tropical Africa and other similar areas, natural sciences and demography should be brought into the picture when asking, as Samuel Huntington does: how many countries will become democratic? Dependency theory may be of some help for Latin America and Eastern Europe, but it is much less so for tropical Africa. The literature on the ecological parameters of the tropics can be contrasted with the literature about the transfer of flora and fauna from one temperate zone to another. For instance, Alfred Crosby's 1986 work on *Ecological Imperialism: The Biological Expansion of Europe 900–1900* casts new light on the building of American power. If the eminent comparativist Charles Darwin were still alive, he would criticize monodisciplinarity, in particular W. W. Rostow whose theory of “stages of growth” does not admit any physical or environmental constraints on growth.

G Comparative Politics as a Hybrid Domain

The process of hybridization appears not only in exchanges of concepts, theories and methods among disciplines and between subfields. It is also evident in exchanges of information, substance, indicators, statistical data and in the daily praxis of empirical research. This trade is excedentary for some disciplines and deficitary for others. Social geography borrows information from physical geography, which borrows in turn from geology, rather than the reverse. Political science has contracted an enormous foreign debt, because politics cannot be explained exclusively by politics. Political phenomena are never produced *in vitro*, artificially in the laboratory. They are always related to a variety of factors behind politics. Dozens of non-political variables are used to explain politics. This is one of the main reasons why political science is interwoven with the other social sciences.

The storage of information produced by other social sciences is particularly important in the domain of comparative politics, to such a degree that it could be said that a comparison across nations necessarily encompasses several disciplines. In the history of comparative politics there was a privileged time of co-operation and convergence during the 1960s. During the fifteen years between 1958 and 1972, three dozen important books and

⁷⁰ On land ownership, see the data collected by Tatu Vanhanen.

articles were published, which shared three characteristics: comparison by quantification, by hybridization and by cumulative knowledge. “Such a combination had never previously been achieved in the history of political science” (Dogan 1994: 39). This privileged moment also marks a break with European classical comparisons in the sociological style of Tocqueville, J. S. Mill, Marx, Spencer, Weber and Pareto.

At that particular moment sociology was no longer at the center of the constellation of social sciences. For the first time in the history of social sciences, it was political science. In the new constellation a number of stars are visible—it is unnecessary to name them. What should be emphasized is the process of cumulative knowledge, in which several dozen specialized scholars and experts have participated.

The alarm concerning the parochial state of comparative politics—after the subjugation of all social sciences during the period of totalitarianism in Europe (Scheuch 1991) and before their renaissance in the United States—was raised by Roy Macridis in 1955. Around the same time (1954) the Statistical Bureau of the United Nations started to publish “social statistics,” none of which was political. They concerned demographic variables, income, standard of living, social mobility, sanitary conditions, nutrition, housing, education, work, criminality.

In 1957, Reports on the World Social Situation began to be published by the Department of Economic and Social Affairs of the United Nations. Chapters in these publications on “The Interrelations of Social and Economic Development and the Problem of Balance” (in the 1961 volume) or on “Social-economic Patterns” (in the 1963 volume) are contributions that can be read today with great interest, even if the political data so important for comparative politics are absent from these analyses.

Two years after that series began came Lipset's *Political Man* (1959), the most cited book by political scientists for two decades. In fact, however, this book borrows from all social sciences and very little from political science. One year later Karl Deutsch produced his “manifesto” (Deutsch 1960), followed by a seminal article a few months later (Deutsch 1961). Both articles deal with indicators which are not directly political. The following year an important article by Phillip Cutright (1963) was published which appears in retrospective to have been prophetic: it is the only article of that time to give priority to political variables. In the same year Arthur Banks and Robert Textor published their *A Cross-Polity Survey* (1963) in which the majority of the fifty-seven variables proposed and analyzed are not political. Shortly thereafter, the first *World Handbook of Political and Social Indicators* (Russett et al. 1965) discussed seventy-five variables, of which only twelve are strictly political and eight others economic-cum-political.

A year later G. Almond and G. Bingham Powell published a fundamental book, *Comparative Politics* (1966), in which several social sciences, particularly social anthropology, are seen in the background. From that moment on the field of international comparisons becomes bifurcated. One road continues with quantitative research, in which contributors constantly use non-political factors in their analysis of “correlates of democracy.” An important recent input comes again from the Development Program of the United Nations, the Human Development Report (1990 et seq.). In this publication GNP per capita is dethroned and is replaced by a new indicator: Purchasing Power Parity (PPP).

The other road gave priority to sectoral comparisons, for instance the eight volumes on political development, published by Princeton University Press, where politics is for most of the time a dependent variable explained by non-political factors. There are several good reviews of the “political development” school (Almond 1990; Wiarda 1989). Today this school seems to have reached its limits, to be out of steam, to have exhausted the theme. It is a good example of crowded fields subjected, after a period of productivity, to diminishing marginal returns: “the higher the density of scholars in a given field, the less likely innovation is per capita” (Dogan and Pahre 1990: 36). This “paradox of density” designates creative marginality as the opposite of density of scholars.

In the recent period, the field of comparative politics has expanded in all directions, penetrating into the territories of other disciplines: transition to democracy, values and beliefs, crisis of confidence, public corruption, ungovernability, limits to growth and so on. (These new directions figure throughout many other chapters of the *New Handbook*.) Is the field of comparative politics becoming imperialistic?

As we can see, comparative politics does not consist only in cross-national analysis. It is also necessarily a cross-disciplinary endeavor, because in comparative research we are crossing units (nations) and variables (numerical or nominal). The variables are usually more numerous than the units. The relations between variables are often more important for theoretical explanations than the discovery of analogies and differences between nations.

In comparative politics there is no single major book that attempts to explain politics strictly by political variables—except in constitutional matters. But of course the dose of hybridization varies according to the subject and to the ability of the author to leave in the shadow what should be implicitly admitted. For instance, in their comparisons of political systems, scholars like Klaus von Beyme or Giovanni Sartori might not need to discuss at length social structure or cultural diversity. By contrast, Arend

Lijphart (in his comparison of consociational democracies) and Ronald Inglehart (in his analysis of beliefs and values) do have to stress the importance of social, religious, linguistic and historical variables. In these cases, Lijphart and Inglehart cross the disciplinary boundaries more than von Beyme and Sartori do.

Comparative politics across disciplines means first of all crossing history. The relation between comparative history and comparative politics merits a lengthy discussion. Here it is sufficient to admit that the two subfields do not cooperate along their common frontiers, but only at certain gates, and usually on the territory of other hybrid fields: historical sociology, social history, economic history, cultural history, asynchronic comparisons. Some of the most important books in comparative politics also belong to this “hyphenated history,” from Dumont's *Homo Hierarchicus*, Bairoch's *De Jericho à Mexico, villes et économie dans l'histoire*, Wittfogel's *Oriental Despotism*, Wallerstein's *Modern World System*, to Lipset's *The First New Nation* or Bendix's *Kings or People*. Ironically, these contributors to comparative politics and hyphenated history are neither political scientists, nor historians; they are, administratively, sociologists.

IV Conclusion

Different disciplines may proceed to examine the same phenomenon from different foci. This implies a division of territories between disciplines. On the contrary, hybridization implies an overlapping of segments of disciplines, a recombination of knowledge in new specialized fields. Innovation in the various sectors of political science depends largely on exchanges with other fields belonging to other disciplines. At the highest levels of the pyramid of political science, most researchers belong to a hybrid subdiscipline: political sociology, political economy, political psychology, political philosophy, political geography, public administration, area studies and so on. Alternatively, they may belong to a hybrid field or subfield: mass behavior (related to social psychology), élite recruitment (related to sociology and history), urban politics (related to social geography), welfare states (related to social economy and social history), values (related to philosophy, ethics, and social psychology), governmental capabilities (related to law and economics), poverty in tropical countries (related to agronomy, climatology and economic geography), development (related to all social sciences and to several natural sciences).

There is probably as much communication with outsiders as between

internal subfields. For instance, a political psychologist who studies protest movements and alienation interacts only a little with the colleague who uses game theory to study the same topic. He may find intellectual common ground with the social historian who studies the phenomenon in previous times, or with the sociologist who studies the impact of unemployment or immigration on violence and delegitimation in some European countries. There is no communication between two political scientists analysing the crisis of the social security system, one by abstract modelling, the other in vernacular language. The first is in contact with modellers in economics, and the second cites scholars from other disciplines.

All major issues are crossing the formal borders of disciplines: breakdown of democracy, anarchy, war and peace, generational change, the freedom–equality nexus, individualism in advanced societies, fundamentalism in traditional societies, ruling class, public opinion. Most specialists are not located in the so-called core of the discipline. They are in the outer rings, in contact with specialists of other disciplines. They borrow and lend at the frontiers. They are hybrid scholars. The number of “general” political scientists is rapidly decreasing. Everyone tends to specialize in one or several domains. When two political scientists meet for the first time, the spontaneous question they ask each other is: “What is your field?” This is true also for other disciplines. At professional congresses, scholars meet according to specialities. Congresses that bring together crowds of people who have little in common consume a lot of energy which could be better invested in the organization of meetings by fields bringing together specialists from various disciplines.

Suppose it were possible to select, from all political scientists in the various countries, the five or six hundred scholars who are doing the most creative research, those who advance knowledge, the most renowned of them. Suppose further that we except from this upper-stratum of eminence the scholars who specialize in the study of constitutional matters and the governmental process of their own country, some of whom are famous in their own field. After making this double delimitation, we would discover that among this body of scholars, the majority are not “pure” political scientists. They are specialists of a research domain which is not exclusively political. Those who shut themselves within the traditional frontiers of political science are narrowing their perspective and reducing their opportunities to innovate—except in constitutional matters and the organization of the state apparatus.

At the other extreme are the enthusiastic imitators. In some domains borrowing is too much simple imitation and not enough imaginative

adaptation. If it were possible to rank the various subfields and schools on a scale of eclecticism it would appear that sophisticated statistical analysis and economic heuristic assumptions are the two most imitative schools. I have commented already about the over-quantifiers. I refer to Neil J. Smelser, a specialist of economic sociology, for a solomonic judgment about economic modelling: "Anthony Downs's model of political behavior imitates economic theory by postulating a version of political rationality and building a theory of political process on this and other simplifying assumptions" (Smelser 1967: 26).

Political science lives in symbiosis with the other social sciences, and will continue to be a creative science only if it remains extrovert. In fact, this science has no choice, because it is genetically programmed to generate grandchildren who will talk different tongues and who will sit, as Almond says, "at distant tables." These tables are distant because they are placed at the interstices of disciplines in the enormous hinterland of political science.

References

Those interested in pursuing these issues are referred particularly to these further readings: Dogan and Pahre's *Creative Marginality* (1990) and Mackenzie's *Politics and the Social Sciences* (1967); collections by Lipset on *Politics and the Social Sciences* (1969) and by Deutsch, Markovits and Platt on *Advances in the Social Sciences* (1986); the OECD report *Interdisciplinarity, Problems of Teaching and Research in Universities* (1972); and the "Social Sciences" section of UNESCO's *Main Trends of Research in the Social and Human Sciences* (1970).

- Allardt, E. 1964. Patterns of class conflict and working class consciousness in Finnish Politics. Pp. 97–131 in *Cleavages, Ideologies and Party Systems*, ed. E. Allardt and Y. Littunen. Helsinki: Westermark Society.
- Almond, G. A. 1990. *A Discipline Divided: Schools and Sects in Political Science*. Newbury Park, Calif.: Sage.
- and Powell, G. B. 1966. *Comparative Politics: A Developmental Approach*. Boston: Little, Brown.
- Anckar, D. 1987. Political science in the Nordic countries. *International Political Science Review*, 8: 73–84.
- Andrews, W. G. 1982. *International Handbook of Political Science*. Westport, Conn.: Greenwood Press.
- 1988. The impact of the political context on political science. Paper presented to the World Congress of the International Political Science Association, Paris.
- Andrain, C. A. 1980. *Politics and Economic Policy in Western Democracies*. Belmont, Calif.: Wadsworth.
- ANNALES. 1989. Special issue: *Histoire et Sciences Sociales*. *Annales—Economie Sociétés Civilisations*, 44 (#6).

- Apter, D. E. 1968. *Conceptual Approaches to the Study of Modernization*. Englewood Cliffs, N.J.: Prentice-Hall.
- Bairoch, P. 1988. *De Jericho à Mexico, villes et économie dans l'histoire (Cities and Economic Development)*, trans. C. Braider. Chicago: University of Chicago Press.
- Banks, A. S., and Textor, R. B. 1963. *A Cross-Polity Survey*. Cambridge, Mass.: MIT Press.
- Barnes, S. H.; Kaase, M.; et al. 1979. *Political Action, Mass Participation in Five Western Democracies*. Beverly Hill, Calif.: Sage Publications.
- Bartoli, H. 1991. *L'Economie Unidimensionnelle*. Paris: Economica.
- Beaud, M. 1991. *Economie, théorie, histoire: essai de clarification*. *Revue Economique*, 2: 155–72.
- Bendix, R., ed., 1968. *State and Society: A Reader in Comparative Political Sociology*. Boston: Little, Brown.
- 1978. *Kings or People*. Berkeley: University of California Press.
- Benson, O. 1963. The mathematical approach to political science. Pp. 30–57 in *Mathematics and the Social Sciences*, ed. J. Charlesworth. New York: American Academy of Political and Social Science.
- Bernard, C. 1865. *Introduction à la Médecine Expérimentale*. Various editions.
- Beyme, K. von. 1979. *Die Parlamentarischen Regierungssysteme in Europe*. Munich: Piper.
- 1985. *Political Parties in Western Democracies*. Aldershot: Gower.
- Boulding, K. 1970. Is economics culture-bound? *American Economic Review (Papers and Proceedings)*, 60 (May): 406–11.
- Cardoso, F. H., and Enzo Faletto, E. 1979. *Dependencia y desarrollo en America Latina (Dependency and Development in Latin America)*, trans. M. M. Urquidi. Berkeley: University of California Press.
- Clastres, P. 1974. *La Société contre l'Etat, Recherches d'anthropologie politique*. Paris: Editions Minuit.
- CNRS. 1990. *Carrefour des Sciences: L'Interdisciplinarité*. Paris: CNRS.
- Cutright, P. 1963. National political development: measurement and analysis. *American Sociological Review*, 28: 253–64.
- Dahl, R. A., and Lindblom, C. E. 1953. *Politics, Economics and Welfare*. New York: Harper and Row.
- Deutsch, K. W. 1960. Toward an inventory of basic trends and patterns in comparative and international politics. *American Political Science Review*, 54: 34–56.
- 1961. Social mobilization and political development. *American Political Science Review*, 55: 493–514.
- Markovits, A. S.; and Platt, J., eds. 1986. *Advances in the Social Sciences*. New York: University Press of America.
- Diamant, A. 1990. If everybody innovates, will we all sit at separate tables? Paper presented to the World Congress of the International Sociological Association, Madrid.
- Diamond, L.; Linz, J.; and Lipset, S. M., eds. 1988. *Democracy in Developing Countries*. 3 vols. Boulder, Colo.: Lynne Rienner.
- Dogan, M. 1968. Un fenomeno di atassia politica. Pp. 465–88 in *Partiti Politici e Strutture Sociali in Italia*, ed. M. Dogan and O. M. Petracca. Milano: Edizioni Comunità.
- 1994. Limits to quantification in comparative politics. Pp. 35–71 in *Comparing Nations*, ed. M. Dogan and A. Kazancigil. Oxford: Blackwell.
- and Derivry, D. 1988. France in ten slices: an analysis of aggregate data. *Electoral Studies*, 7: 251–67.
- and Kasarda, J. D., eds. 1988. *The Metropolis Era*. 2 vols. Newbury Park, Calif: Sage.
- and Pahre, R. 1989a. Fragmentation and recombination of the social sciences. *Studies in Comparative International Development*, 24 (#2): 2–18.

- 1989b. Hybrid fields in the social sciences. *International Social Science Journal*, 121: 457–70.
- 1990. *Creative Marginality: Innovation at the Intersections of Social Sciences*. Boulder, Colo.: Westview Press.
- 1993. *Las Nuevas Ciencias Sociales*. Mexico City: Grijalbo.
- Dowse, R. E., and Hughes, J. A. 1975. *Political Sociology*. New York: Wiley.
- Dumont, L. 1966. *Homo Hierarchicus: Le Système des Castes et ses Implications*. Paris: Gallimard.
- Easton, D. 1959. Political anthropology. Pp. 211–62 in *Biennial Review of Anthropology*, ed. B. J. Siegel. Stanford, Calif.: Stanford University Press.
- and Schelling, C. S., eds. 1991. *Divided Knowledge Across Disciplines, Across Cultures*. Newbury Park, Calif.: Sage.
- Gunnell, J. G.; and Graziano, L., eds. 1991. *The Development of Political Science*. London: Routledge.
- Finifter, A. W., ed. 1983. *Political Science: The State of the Discipline*. Washington, D.C.: American Political Science Association.
- Frieden, J. A., and Lake, D. A. 1991. *International Political Economy*. New York: St. Martin.
- Frogner, A. P., et al. 1974. *Vote, Clivages Socio-Politiques*. Louvain: Vander.
- Galbraith, J. K. 1951. Conditions for economic change in underdeveloped countries. *Journal of Farm Economics*, 33 (November): 255–69.
- Gastil, R. 1980–1989. *Freedom in the World*. New York: Freedom House.
- Greenstein, F. I., and Lerner, M. 1971. *A Source Book for the Study of Personality and Politics*. Chicago: Markham.
- and Polsby, N. W., eds. 1975. *Handbook of Political Science*. Reading, Mass.: Addison-Wesley.
- Grolier, E. de. 1990. Des théories aux concepts et des faits aux mots. *Revue Internationale des Sciences Sociales*, 124: 269–79.
- Hayek, F. A. 1956. The dilemma of specialization. Pp. 462–73 in *The State of the Social Sciences*, ed. L. White. Chicago: University of Chicago Press.
- Heberle, R. 1963. *Landbevölkerung und Nationalsozialismus: Eine Soziologische Untersuchung der Politischen Willensbildung in Schleswig-Holstein*. Stuttgart: Deutsche Verlagsanstalt.
- Hirschleifer, J. 1985. The expanding domain of economics. *American Economic Review (Papers and Proceedings)*, 75 (#6): 53–68.
- Hoogerwerf, A. 1982. The Netherlands. In *Andrews 1982*: 227–45.
- Huntington, E. 1924. *Civilization and Climate*. New Haven, Conn.: Yale University Press.
- Huntington, S. 1984. Will more countries become democratic? *Political Science Quarterly*, 99: 193–218.
- Inglehart, R. 1990. *Culture Shift in Advanced Industrial Society*. Princeton, N.J.: Princeton University Press.
- Intriligator, M. D. 1991. Some reflections about the interactions between the behavioral sciences. *Structural Changes and Economic Dynamics*, 1: 1–9.
- Johnston, R. J. 1994. Geography journals for political scientists. *Political Studies*, 42: 310–17.
- Kamarck, A. M. 1976. *The Tropics and Economic Development*. Baltimore, Md.: Johns Hopkins University Press for the World Bank.
- Kasperson, R. E., and Minghi, J. V., eds. 1969. *The Structure of Political Geography*. Chicago: Aldine.
- Kavanagh, D. 1991. Why political science needs history. *Political Studies*, 39: 479–95.
- Key, V. O. 1950. *Southern Politics*. New York: Knopf.

- Kindleberger, C. P. 1965. *Economic Development*. 2nd edn. New York: McGraw-Hill.
- Knutson, J. N., ed. 1973. *Handbook of Political Psychology*. San Francisco, Calif.: Jossey-Bass.
- König, R. 1973. *Handbook der Empirischen Sozialforschung*. 3rd edn. Stuttgart: Enke.
- Kuhn, T. S. 1957. *The Structure of Scientific Revolutions*. 1962 edn. Chicago: University of Chicago Press.
- Kuhnle, S. 1982. Norway. In Andrews 1982: 256–74.
- Lambert, R. D. 1991. Blurring the disciplinary boundaries: area studies in the United States. In Easton and Schelling 1991: 171–94.
- Laponce, J. 1989. Political science: an import-export analysis of journals and footnotes. *Political Studies*, 28: 401–19.
- Le Bon, G. 1912. *La Psychologie Politique*. Paris: Flammarion.
- Leca, J. La science politique en France. *Revue Française de science politique*, 32/4: 653–18.
- Lepsius, R. M., ed. 1981. *Soziologie in Deutschland und Osterreich*. Opladen: Westdeutscher Verlag.
- Lerner, D. 1958. *The Passing of Traditional Society*. New York: Free Press.
- Lewis, G. C. 1832. *Remarks on the Use and Abuse of Some Political Terms*. London: B. Fellowes.
- Lewis, W. A. 1955. *The Theory of Economic Growth*. Homewood, Ill.: Irwin.
- Linz, J. J., and Miguel, A. de. 1966. Within-nation differences and comparisons: the eight Spains. Pp. 267–320 in *Comparing Nations: The Use of Quantitative Data in Cross-National Research*, R. L. Merritt and S. Rokkan. New Haven, Conn.: Yale University Press.
- Lipset, S. M. 1959. *Political Man*. New York: Doubleday.
- ed. 1969. *Politics and the Social Sciences*. New York: Oxford University Press.
- 1979. *The First New Nation: The United States in Historical and Comparative Perspective*. New York: Norton.
- and Hofstadter, R. 1968. *Sociology and History: Methods*. New York: Basic.
- Loewenberg, P. 1983. *Decoding the Past: The Psychohistorical Approach*. New York: Knopf.
- Lynn, N. B. 1983. Self-portrait: profile of political scientists. In Finifter 1983: 114–15.
- Mackenzie, W. J. M. 1967. *Politics and the Social Sciences*. Harmondsworth: Penguin.
- Mackinder, H. J. 1904 The geographical pivot of history. *Geographical Journal*, 23: 421–37; reprinted in *The Scope and Methods of Geography, and The Geographical Pivot of History*, ed. E. W. Gilbert. London: Royal Geographical Society, 1951.
- Macridis, R. C. 1955. *The Study of Comparative Government*. New York: Random House.
- Martinelli, A., and Smelser, N. J. 1990. Economic sociology. *Current Sociology*, 38 (#2): 1–49.
- Marvick, D., ed. 1977. *Harold Lasswell on Political Sociology*. Chicago: University of Chicago Press.
- Mead, M. 1961. Anthropology among the sciences. *American Anthropologist*, 63: 475–82.
- Merton, R. M. 1973. *The Sociology of Science*. Chicago: University of Chicago Press.
- Migdal, J. S. 1983. Studying the politics of development and change: the state of the art. In Finifter 1983: 309–38.
- Mitchell, W. C. 1969. The shape of political theory to come: from political sociology to political economy. In Lipset 1969: 101–36.
- Mommsen, W. J., and Osterhammel, J. 1987. *Max Weber and His Contemporaries*. London: Allen and Unwin.
- Narain, I., and Mathur, P. C. 1982. India. In Andrews 1982: 194–206.
- O'Donnell, G.; Schmitter, P.; and Whitehead, L., eds. 1986. *Transitions from Authoritarian Rule*. 4 vols. Baltimore, Md.: Johns Hopkins University Press.

- Olson, M. 1965. *The Logic of Collective Action*. Cambridge, Mass.: Harvard University Press.
- Organisation for Economic Cooperation and Development (OECD). 1972. *Interdisciplinarity, Problems of Teaching and Research in Universities*. Paris: OECD.
- Pye, L. W. 1958. The non-western political process. *Journal of Politics*, 20: 468–86.
- 1975. The confrontation between discipline and area studies. Pp. 3–22 in *Political Sciences and Area Studies: Rivals and Partners*, ed. L. W. Pye. Bloomington: Indiana University Press.
- Radnitzky, G., and Bernholz, P., eds. 1986. *Economic Imperialism: The Economic Approach Outside the Traditional Areas of Economics*. New York: Paragon House.
- Randall, V. 1991. Feminism and political analysis. *Political Studies*, 39: 513–32.
- Rokkan, S., et al. 1995. Special issue dedicated to Rokkan's geo-economic-political model. *Revue Internationale de Politique Comparée*, 2(#1): 5–170.
- ed., 1979. *A Quarter Century of International Social Science*. New Delhi: Concept Co.
- Urwin, D.; et al. 1987. *Center-Periphery Structures in Europe*. Frankfurt: Campus Verlag.
- and Valen, H. 1967. Regional contrasts in Norwegian politics. Pp. 162–238 in *Cleavages, Ideologies and Party Systems*, ed. E. Allardt and Y. Littunen. *Transactions of the Westermarck Society*, vol. x. Helsinki: Academic Rockstore.
- Rostow, W.W. 1963. *The Stages of Economic Growth*. Cambridge: Cambridge University Press.
- Ruin, O. 1982. Sweden. In *Andrews 1982*: 299–319.
- Russett, B. M., et al. 1965. *World Handbook of Political and Social Indicators*. New Haven, Conn.: Yale University Press.
- Sartori, G. 1969. From the sociology of politics to political sociology. In *Lipset 1969*: 65–100.
- ed. 1984. *Social Science Concepts: A Systematic Analysis*. London: Sage.
- Sauvy, A. 1952. *Trois mondes, une planète*. *L'Observateur*, 14 August 1952.
- ed. 1956. Preface. *Le Tiers Monde, sous-développement et développement*. Paris: Institut National d'Etudes Demographiques.
- Scheuch, E. K. 1966. Cross-national comparison using aggregate data. Pp. 131–67 in *Comparing Nations*, ed. R. Merritt and S. Rokkan. New Haven, Conn.: Yale University Press.
- 1969. Social context and individual behavior. Pp. 133–55 in *Quantitative Ecological Analysis in the Social Sciences*, ed. M. Dogan and S. Rokkan. Cambridge, Mass.: MIT Press.
- 1988. Quantitative analysis of historical material as the basis for a new co-operation between history and sociology. *Historical Social Research*, 46: 25–30.
- 1991. German sociology. Vol. iv, pp. 762–72 in *Encyclopedia of Sociology*, ed. E. F. and M. L. Borgatta. New York: Macmillan.
- Sears, D. O., and Funk, C. L. 1991. Graduate education in political psychology. *Political Psychology*, 2: 345–62.
- Siegfried, A. 1913. *Tableau Politique de la France de l'Ouest sous la III République*. Paris: Colin.
- Sills, D. L., ed. 1968. *International Encyclopaedia of Social Sciences*. New York: Macmillan.
- Simon, H. A. 1982. *Models of Bounded Rationality*. Cambridge, Mass.: MIT Press.
- Smelser, N. J. 1967. Sociology and the other social sciences. Pp. 3–44 in *The Uses of Sociology*, ed. P. Lazarsfeld, W. H. Sewell, H. L. Wilensky. New York: Basic.
- Smet (De), R. E., and Evalenko, R. 1956. *Les Elections Belges, Explication de la répartition géographique des suffrages*. Bruxelles: Institut de Sociologie Salvay.
- Sorokin, P. A. 1928. *Contemporary Sociological Theories*. New York: Harper and Row.

- Stouffer, S. A. 1950. *American Soldier*. Princeton, N.J.: Princeton University Press.
- Tönnies, F. 1887. *Gemeinschaft und Gesellschaft*. Berlin: Curtius.
- Trent, J. E. 1979. Political science beyond political boundaries. In Rokkan 1979: 181–99.
- Truman, D. B. 1955. *The Governmental Process*. New York: Knopf.
- Turner, F. J. 1959. *The Significance of the Frontier in American History*. Gloucester, Mass.: P. Smith; originally published 1893.
- United Nations. Department of International Economic and Social Affairs. 1957 et seq. *Reports on the World Social Situation*. New York: United Nations.
- United Nations Development Program (UNDP). 1990 et seq. *Human Development Report* New York: Oxford University Press for the UNDP.
- UNESCO. 1970. Part 1: *Social Sciences. Main Trends of Research in the Social and Human Sciences*. Paris: Mouton.
- Valade, B. 1990. *Pareto: La naissance d'une autre sociologie*. Paris: P.U.F.
- Vanhanen, T. 1984. *The Emergence of Democracy: A Comparative Study of 119 States, 1850–1979*. Helsinki: Finnish Society of Sciences and Letters.
- Wallerstein, I. 1974. *Modern World System*. New York: Academic Press.
- Weingart, P. 1986. T. S. Kuhn: revolutionary or agent provocateur. In Deutsch et al. 1986: 265–85.
- Wiarda, H. J. 1989. Rethinking political development: a look backward over thirty years and a look ahead. *Studies in Comparative International Development*, 24 (#4): 65–82.
- Wiese, L. von. 1926. *Soziologie, Geschichte und Hauptprobleme*. Berlin: De Gruyter.
- Wirth Marvick, E., ed. 1977. *Psychopolitical Analysis: Selected Writing of Nathan Leites*. London: Sage.
- Wittfogel, K. A. 1957. *Oriental Despotism*. New Haven, Conn.: Yale University Press.