## **Political Science among the Social Sciences**

## By Mattei Dogan CNRS and UCLA www.matteidoganpersonal.com

The process of intermingling in the social sciences is not a new phenomenon. But in the past it happened rarely whereas now it is occurring rapidly. Half a century ago ago the chancellor of the University of Chicago, one of the most innovative academic campuses of its time, complained about the erosion of frontiers between disciplines: "It is alarming to note that history moves into the humanities, that economics becomes mathematics, that anthropology and psychology ally themselves with biology, and that geography is at home with the physical sciences" (Kimpton, 1956, "The Social Sciences Today," in White, Leonard, ed, *The State of the Social* Sciences, Chicago, University of Chicago Press, p. 349). But the chancellor did nothing to stop this process. Academic administrators cannot impede the logic of scientific advancement. They can simply recognize this spontaneous dynamic, and institutionalize it, as is done today in hundreds of the world's most creative scientific institutions.

Since the middle of the nineteenth century, the history of science is, above all, a description of the multiplication of subdisciplines and the new branches of knowledge. Any book on the contemporary history of science demonstrates that the main route for scientific advance is specialization. Most specialists are not located in the so-called core of a specific traditional discipline. Rather, they are in the outer peripheries, in contact with other disciplinary specialists. They borrow and lend across frontiers.

The number of "generalists" is rapidly decreasing, making way for more cross-disciplinary specialists. Indeed, there are fewer and fewer generalists and more and more specialists. The same phenomenon is visible in medicine. When two scholars meet for the first time, the inevitable question they ask each other is: "What is your field?" At congresses, scholars meet according to specialties.

At one extreme, we see some who shut themselves within the traditional frontiers of their disciplines, thereby narrowing their perspective and reducing their chances for innovation. At the other extreme are the enthusiastic imitators. In some domains borrowing is too much a matter of simple imitation and not enough a matter of imaginative adaptation. Each discipline lives in symbiosis with the other social sciences. In fact, disciplines have no choice, because they are genetically programmed to generate specialties as they advance. Progress in the social sciences occurs more often, and with more important results at the intersections of disciplines, where segments of formal disciplines overlap.

As a science's margins grow, its practitioners generally become increasingly specialized, and neglect their formal original discipline. It is for this reason that scissiparity, the amoeba-like division of a science into two, is a common process of fragmentation. As a result of such divisions, no theoretical or conceptual framework is still able to encompass an entire discipline.

Innovation in the various sectors of social sciences depends largely on exchanges with other fields belonging to other disciplines. At the highest levels of the pyramid of social science, most researchers belong to a subdiscipline: historical sociology, political economy, social psychology, social geography, political anthropology, area studies and so on. Alternatively, they may belong to a field or subfield: mass behavior (related to sociology), elite 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).

Specialization is the first stage in the process of innovation. Specialization engenders fragmentation. Fragmentation, in turn, leaves gaps between specialties. The borders of disciplines expand into a no-man's-land between formal disciplines, creating new and exciting hybrid fields. It is through such interaction that the social sciences advance. The process is straightforward. As old fields advance, they accumulate such patrimonies that they eventually split up. Each fragment of the discipline confronts fragments from other fields, across disciplinary boundaries, thereby losing contact with its siblings in the original discipline.

The multiplication of scientific activities and the growing complexity of knowledge have brought a division of labor, visible in the increasing expertise in all domains. The history of scientific advancement is a history of concatenated specialization. In spite of this evidence, "even since the social sciences began to develop, scholars have repeatedly expressed apprehension about the increasing fragmentation of knowledge through specialization (Smelser, 1967, p. 38).

The intermingling of social sciences has gone so far that the editors of the *International Encyclopedia of Social and Behavioral Sciences* (2001) have included in this monumental thesaurus many "intersecting" and "overarching" fields. In order to "capture the complexity of the work on the edges of sciences," the editors of the Encyclopedia have connected some fields by simply adopting the particle "and," which signifies a junction, mathematics and computer sciences, for example.

Several disciplines straddle both the social sciences and the natural sciences: anthropology, geography, psychology, demography, archaeology, linguistics or criminology. By virtue of this fact alone, each of these disciplines is fractured, and cohabitation of the two parts beneath the same disciplinary roof create problems.

Specialization requires high qualifications in a specific domain, and the process has tended to disjoin activities which had previously been united, and to separate scholars belonging to the same formal discipline, but who are interested in different fields. Specialties are considered as parts of a larger discipline, but the modern scholar normally does not attempt to master the entirety of his discipline. Instead, he limits his attention to one field, or perhaps two. Familiarization with the entirety of a discipline has gradually become impossible. No longer can a given theory encompass a whole disciplinary territory. Talcott Parsons was the last sociologist to attempt such a theory. It is for this reason that scissiparity, the amoeba-like division of a discipline into two, is a common process in fragmentation. Specialization also provides researchers with methods so that they need not develop them anew. Refinements in methods are more easily transmitted among specialists.

Specialization within disciplines is evident at national and international professional meetings. Everyone who has participated in these gatherings of several thousand people has noticed the absence of coherence; twenty or thirty panels run simultaneously, most of them mobilizing only a handful of people. The plenary sessions attract only a small minority of participants, most uninterested in issues encompassing entire disciplines.

Disciplines fragment along substantive, epistemological, methodological, theoretical and ideological lines. To those in the field, the theoretical and ideological divisions are likely to seem more important than to others. Based on his experience as editor of an important journal, Ralph Turner gives a description of this process in sociology: "In the 1930s and 1940s the aspiration to be a general sociologist was still realistic. There was a sufficiently common body of core concepts and a small enough body of accumulated research in most fields of sociology that a scholar might make significant contributions to several, and speak authoritatively about the field in general. It is difficult to imagine the genius required for such accomplishments today" (R. Turner, 1990, p. 70).

Specialization by fragmentation is the first process. Recombination of specialties across disciplinary borders is the second. In the history of science a twofold process has unfolded: fragmentation of formal disciplines on the one hand, and a cross-disciplinary recombination of the specialties resulting from fragmentation on the other. The new field may become independent, like social psychology - or may continue to claim a dual allegiance, like historical economy. In the later case, librarians are not sure whether to place the work in history or economy sections. Such a recombination has already been called hybridization (M. Dogan and R. Pahre, *Creative Marginality: Innovation at the Interstices of Social Sciences*, Westview Press, 1990, p. 63; French version: *L'Innovation dans les sciences socials: la marginalité creative*, Paris, P.U.F., 1996). A hybrid is a combination of two branches of knowledge.

As old fields grow they accumulate such masses of material in their patrimony that they eventually split up. Each fragment of a discipline then confronts the fragments of other fields across disciplinary boundaries, losing contact with its siblings in the old discipline. A sociologist specialized in urbanization has less in common with a sociologist studying elite recruitment than with a geographer interested in the distribution of cities; the sociologist studying social stratification has more in common with his colleague in economics analyzing income inequality than he does with his fellow sociologist specialized in organizations; psychologists studying child development are much more likely to be interested in developmental physiology or in the literature on language acquisition than they are in other branches of psychology; a political scientist researching political socialization reads more sociological literature on the agents of socialization (family, church, school, street-corner society, cultural pluralism, etc.) than literature in political science on the Supreme Court, legislative processes, party leadership or the recruitment of higher civil servants. Those working on the subfield of international relations in the nuclear age have little recourse to the classical literature in political science, but rather to economics, technology, military strategy, diplomatic history, game theory, nuclear physics and engineering.

Research enlisting several disciplines involves a combination of segments of disciplines, of specialties, not whole disciplines. The fruitful point of contact is established between sectors, and not along disciplinary boundaries. Different disciplines may proceed from different foci to examine the same phenomenon. This implies a territorial division between disciplines. On the contrary, hybridization implies an overlapping of disciplinary segments and a recombination of knowledge in new specialized fields. Innovation in each discipline depends largely on exchanges with other fields belonging to other disciplines.

Most hybrid specialties and domains recognize their genealogical roots through their use of the noun: political economy, political sociology, social geography, historical sociology, genetic demography, psycho-linguistics, social anthropology, social ecology, biogeography and many others. Some hybrid sciences do not indicate their filiation in their name for instance, cognitive science.

In sum, the process of fragmentation by specialization and recombination of specialties has taken the following five forms:

- 1. By division into two. Biologists call it scissiparity. One of the oldest bifurcations goes back to Aristotle who underlined a division between philosophy and political theory. In the same way, cognitive science and social psychology branched out from psychology.
- 2. By displacing the traditional boarders between disciplines. The appearance and growth of specialties at disciplinary crossroads has had a shrinking effect on older disciplines. When social psychology became independent, the old psychology lost a lot of ground. When administrative science became autonomous, a large iceberg detached from political science.
- 3. By the migration of scholars from older formal disciplines toward a new territory. It is in this way that the first generation of sociologists or political scientist were recruited almost everywhere in the world.
- 4. By the convergence of two domains into a new specialty, consisting in the recombination of fragments of sciences, women's studies for example. Another example is in medicine where the fragments of cardiology and fragments of pneumology combine.
- 5. By borrowing from other disciplines, by exchange of substance, data, methods, techniques, theories and concepts. All disciplines own a patrimony of concepts, methods and theories that they exchange, willingly or not. The propagation of some theories across all disciplines looks like an epidemic, to which many succumb.

Specialization and hybridization are two phases of the same process. Specialties do not remain independent forever. On the contrary, they rapidly recombine with other specialties. The hybridization of scientific knowledge can be illustrated by hundreds of individual and collective examples. In my previous research with Robert Pahre, we gave several dozen concrete examples (Dogan and Pahre, 1990, chapters 6, 7 and 8).

Specialization is not static: the pattern is one of constant flux as the cores of old subfields burn up, much like old stars, and as scholars at the margins create new centers of research which eventually grow dense on their own. Once created, hybrids are subject to the same inherent problems as their parents. After some time, hybrids can become sterile, and if they do not give birth to a second generation of hybrid subfields in time, they risk dying out.

The growth of sciences expands from frontiers and creates new borders and gaps between fields. One of the most famous examples is the move of a large part of political science from law and institutions to behaviorism, and then to neo-constitutionalism. At times, these gaps may coincide with old, long-since stagnant, specialties. As the hybrids form second-generation hybrids, they often rediscover these former fields and expand on previous findings. Recombination of specialties entails the borrowing of concepts, theories and methods.

Concepts are vehicles for communication between specialties formally belonging to different disciplines. Concepts are not equally important in all specialties. For instance, alienation is more frequently used in social psychology than in political economy; segregation more in urban studies than in comparative politics; charisma more in political sociology than in social ecology.

Using two *International Encyclopaedia of Social Sciences* (Sills, 1968 and Smelser and Baltes, 2001) and the analytical indexes of some important books, I have compiled an inventory of more than two hundred concepts that political science "imported":

- From sociology: accommodation, aggregate, assimilation, elite circulation, clique, cohesion, collective behaviour, 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, behaviour, 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 Greek writers: 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 of passage.
  - From theology: anomy (disregard of divine law), charisma.
- From journalists and politicians: imperialism, internationalism, isolationism, Left and Right, lobbying, neutralism, nihilism, patronage, plebiscite, propaganda, socialism, syndicalism.

In the process of adoption and adaptation the semantic meaning of many concepts has changed. 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, postmaterialist culture. In the last two decades political scientists have been very productive in this subfield.

The networks of cross-disciplinary influences are such that they are obliterating the old classification of the social sciences. The trend we perceive today is a movement from the old formal disciplines towards new hybrid social sciences. Consequently, the word interdisciplinarity is not adequate because it carries a hint of dilettantism, and consequently should be avoided or replaced by hybridization of scientific knowledge.

If ten formal disciplines were crossed with each other, we would obtain a 100 square grid. If we did the same with twelve principal disciplines, we would get 144. Some squares would be empty, but more than three-quarters of them would be filled by hybridized specialties, enjoying relative autonomy. These hybrid specialties then branch out on their own, giving rise to a second generation of even larger numbers of hybrids. A full inventory of all potential combinations cannot be made by crossing disciplines on the second generation level since some of the most dynamic hybrid fields have multiple origins. In addition, hybrid fields like prehistory or protohistory (partially rooted in the natural sciences) would not appear in our 144 square grid, which is limited to segmental recombinations of the social sciences. The configuration of hybrid fields is constantly changing. Social psychology, political sociology, human ecology or political economy have long been recognized whereas social psychiatry is still fighting for acceptance.

For a grid of 144 spaces, the parameters are twelve formal disciplines and in most of the 144 squares there are hybrid specialties. The twelve chosen disciplines are the following:

Political Science: The Rainbow Science Sociology: The Chameleon Science

Economics: A Theoretical Center With Many Facets

Social Anthropology: Multifarious Social Geography: Ubiquitous

Social Demography: Dispersed and Lacking a Core Social Psychology: Heteroclite and Frontierless

Social Ecology: A Kaleidoscope

Urbanology: Crossroads

Social Sciences of Religions: Multiple Scrutiny Historical Sociology: A Very Fruitful Hybrid

General History: The Great Basket

These qualifications are not arbitrary: the image of political science the "rainbow science" corresponds to the dispersed nature of this discipline. The same goes for sociology, which I call the "chameleon science" because of the difficulty sociologists encounter in being consistently and totally neutral. Geography, as the label implies, is everywhere, and demography spreads in all directions.

## References

- Dogan, Mattei and Robert Pahre, 1991, *L'innovation dans les Sciences Sociales : la marginalité créatrice*, Presses Universitaires de France (translated and published in six other languages).
- Dogan, Mattei, 1994, "Morcellement des sciences sociales et recomposition des spécialités", *Revue internationale des sciences sociales*, 139, pp. 37-54.
- Dogan, Mattei, 1996, "Political Science and the Other Social Sciences", in *A New Handbook of Political Science*, R.E. Goodin and H. Klingemann (eds.), Oxford University Press, pp. 97-132.
- Dogan, Mattei, 1997, "Les nouvelles sciences sociales : Fractures des murailles disciplinaires", *Revue internationale des sciences sociales*, 153, pp. 467-482.
- Dogan, Mattei, 1999, "Marginality", *Encyclopedia of Creativity*, Academic Press, pp. 179-184.
- Dogan, Mattei, 2000, "Sociology among the Social Sciences", *Encyclopedia of Sociology*, pp. 2913-2926.
- Dogan, Mattei, 2001, "Specialization and Recombination of Specialties", *International Encyclopedia of Social and Behavioral Sciences*, London, Pergamon-Elsvier Science.