

SOCIOLOGY OF YESTERDAY, TODAY AND
TOMORROW *

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Analytical-factfinding and synthesizing-generalizing periods alternate in the history of science and philosophy; at the end of the 19th and the beginning of the 20th century sociology was predominantly synthesizing and generalizing, while the sociology of the last 40 or 50 years has been preeminently analytical and fact-finding. Preoccupied mainly with techniques, narrow concrete problems and analytical theorizing, detached from empirical realities, recent sociology has neither produced a great synthesis nor discovered a great, empirical uniformity. Its theories and research represent mainly reiteration, variation, refinement, and verification of methods and theories developed by sociologists of the preceding period. Through empirical research, recent sociology has given us a fuller knowledge of a few "specks" and dimensions of the total, immense, multidimensional sociocultural reality but it has not substantially increased our understanding of the total "superorganic" reality. If sociology is going to grow as a basic science of sociocultural phenomena, it is bound to pass into a new synthesizing-generalizing phase. Empirical signs indicate that for several reasons this transition has already begun. Stipulating certain conditions, we can reasonably expect a synthesizing sociology, unifying into a rich, logically and empirically valid system all the sound parts of the existing analytical theories and integrating all the little and "middle-range" uniformities of today's sociology.

THE "PREPARATORY" CHARACTER OF
TODAY'S SOCIOLOGY

SPENCER, Tarde, Bernard, Whitehead, Berr and Joël noted a recurrent alternation of analytical, fact-finding periods and generalizing or synthesizing periods in the history of science and philosophical thought.¹

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¹ "Each science has its eras of deductive reasoning, and its eras when attention is chiefly directed to collecting and collating facts." Herbert Spencer, *First Principles*, New York: Appleton, 1888, p. 269.

"It is safe to predict that a century of adjustment . . . will follow the century of discovery . . . Civilization requires that an afflux of discovery and an effort to harmonize discoveries shall coincide or follow one another." Gabriel Tarde, *The Laws of Imitation* (trans. by Elsie Clews Parsons), New York: Henry Holt, 1903, pp. 151ff.

"Thus we observe experimentation and systematic theorizing alternatively succeeding one another

In the terms of this theory, the general sociology of the last 45 years or so (1920-1965) appears to be more analytical and fact-finding than the general sociology of the preceding period (1875-1920). Compared with the recent period, general sociology at the end of the 19th and the beginning of the 20th century was more productive in formulating vast sociological syntheses, in discovering broad uniformities and trends, and in building grand systems of sociology. Exemplified by the systems of Spencer, Marx, Durkheim, Tarde, Weber, Scheler, Simmel, Spengler, Tönnies, Ward, Sumner, Pareto, Ross and others, this period established and developed sociology as a generalizing science, boldly delineated its essential character, its subject-matter, tasks, and methods. Their synthesizing theories are still the basic framework and referential systems for today's sociology.

The diagnosis of contemporary sociology

as predominantly analytical, elaborative, and fact-finding is derived from several of its essential characteristics.

1. In comparison with research done during the preceding period, recent sociological research has been directed more toward the techniques of investigation and somewhat less toward the discovery and formulation of *substantive, broad theories* concerning basic sociocultural problems.

2. The bulk of recent sociological research has dealt mainly with the *comparatively specific "microsociological" problems* and only a minor part of it has investigated such "macrosociological" fundamental problems of sociocultural reality, as "civilizations," "cultural systems and supersystems" or "global societies" and the social systems of history. This preoccupation with narrow, concrete phenomena has led many sociologists to take a *negative attitude toward broad investigations of the basic sociocultural forms and processes*, toward "grand systems of sociology," and toward philosophical analysis of the presuppositions and assumptions of empirical research.

3. The main body of current research represents mainly a *reiteration, variation, refinement and verification of the methods*

and theories developed by sociologists of the preceding period, beginning with the Mechanistic and ending with the Sociologistic schools.² Almost all the technical refinements and the reformulations of previous theories and uniformities concern the secondary features. Few of these improvements represent anything revolutionary or basically new.³ They supply us with larger statistical samples and collections of "facts;" they suggest some refinements of the techniques of interviewing or questioning, statistical sampling, data processing and content analysis, some elaboration of sociometric, psychometric, psychodramatic, "scalogrammatic," "group-dynamic," "operational," "projective," "cybernetic," "semantic," "experimental," "functional-structural," and "analytical" research; they furnish us with a number of formulae of uniformities, indexes, and tests, allegedly more "precise" than before; and once in a while they offer an improved variation of a previous sociological theory. But when these refinements, improvements, and reformulations are viewed in the light of the preceding currents of sociological thought, they turn out to be, at best, improvements of details only and sometimes no improvements at all. In spite of an enormous amount of sociological research done in this period, with a few exceptions it has been a "pedestrian," "epigonic" and "Alexandrian" rather than a truly creative period. No new Platos and Aristotles, Newtons and Galileos of sociology have emerged during the period, nor even many leaders of the caliber of the eminent sociologists of the end of the 19th and the beginning of the 20th century—Spencer, Tarde, Durkheim, Weber, Pareto, Scheler, Spengler, Ward, Summer, W. I. Thomas, and the like. It remains "epigonic" also in its accentuation of "negative" social phenomena like crime, insanity, conflicts, and other forms of "sociocultural pathology" instead of a concentrating on such positive

since Galienus up to the present time." C. Bernard, quoted by François Mentré, *Les Générations Sociales*, Paris: Editions Bossard, 1920, p. 37. H. Berr contends that such an alternation recurs in social and humanistic disciplines every 30 to 40 years (quoted by Mentré, *op. cit.*, pp. 36-38).

"New directions of thought arise from the flashes of intuition bringing new material within the scope of scholarly learning . . . One aspect of the adventures of ideas is this story of the interplay of speculation and scholarship, a strike sustained through the ages of progress." Between the alternating periods of creative intuitional synthesis and scholarly elaboration and analysis, there are periods of "happy balance," the periods of "culminating greatness." Alfred N. Whitehead, *Adventures of Ideas*, New York: Macmillan, 1933, p. 138 and Ch. 7. Karl Jöel similarly refers to the alternation of periods of "binding and loosening" (*Bindung und Losung*), integration and differentiation in the history of philosophical thought, in *Wandlungen der Weltanschauung: Eine Philosophische Geschichte als Geschichtsphilosophie* (2 vols.), Tübingen: J. C. B. Mohr, 1928-31, Vol. I, pp. 22-26.

About various two-phase rhythms, see Pitirim Sorokin, *Social and Cultural Dynamics*, New York: Bedminster Press, 1963, Vol. IV, pp. 398ff. (orig. pub. American Book Co., 1941).

² Analyzed in my *Contemporary Sociological Theories*, New York: Harper, 1928.

³ See a corroboration of this in my *Fads and Foibles in Modern Sociology*, Chicago: H. Regnery, 1956 and in my *Sociological Theories of Today*, forthcoming.

phenomena as genius, creativity, altruism, and so on.

4. Sociological research has increasingly assumed the form of collective research. Thanks to the participation of a large army of researchers in collective research projects, "the steam shovels" of numerous investigating crews have dug up an enormous mass of "facts." In this mass of facts now and then some grains of cognitive "gold" have naturally been found; but the excavations have turned up only a few gold nuggets and have failed to strike a rich vein of a new sociological knowledge.⁴ The few such nuggets that have been discovered have been found mainly by the "individual prospectors," both sociological and non-sociological.

5. Despite the preoccupation with narrow problems, research techniques, and fact finding, recent sociologists have also displayed a strong proclivity to formulate the most heterogeneous "analytical" theories and to construct generalized "conceptual schemas" and models of sociocultural phenomena claimed to be applicable either to all social systems, groups, and cultures or to many of them ("middle-range theories"). This activity has become so popular that one of our colleagues ironically called it: "Look, Ma! I'm theorizing."

One of the consequences of this proclivity has been an astounding proliferation of most heterogeneous, often discordant, so-

ciological theories, paradigms, and systems.⁵ This is a natural result of the prevalent analytical and fact-finding methods of studying multidimensional sociocultural realities. By their very nature, these approaches consist of concentrating on *a selected aspect*

⁵ Current classifications of the main types of today's sociological theory reflect this multitude and discordance. Don Martindale lists as the main types "Positive Organicism," "Conflict Theory," the "Formal School," "Social Behaviorism," and "Sociological Functionalism," in *The Nature and Types of Sociological Theory*, Boston: Houghton Mifflin, 1960. Charles and Zona Loomis describe the seven sociologists they studied as "typological analyst," "generalizing and specializing analyst," "interaction theorist," "structural analyst," "historical and systematic analyst," "analyst of social institutions and systems," and "theorist of general social action and social system," in *Modern Social Theories*, Princeton, N.J.: Van Nostrand, 1961. Armand Cuvillier enumerates the following sociologies: biological, psychological, Durkheimian school, metaphysical, systematic, phenomenological, relational, historical, behavioral, sociopsychological, instinctivist, personalistic, and others. See his *Manuel de Sociologie* (2nd ed.), Paris: Presses universitaires de France, 1962, Ch. 2. Nicholas S. Timasheff distinguishes neopositivistic, ecological, functional, analytical, philosophical and historical currents of sociological thought in *Sociological Theory*, New York: Random House, 1957, Paulo Dourado de Gusmão, in *Teorias sociológicas*, Rio de Janeiro: Fundo de cultura, 1962, differentiates the following types of sociological theory: encyclopedic, evolutionary-organic, economic, psycho-sociological, realistic-sociological, relational, mechanistic, *verstehende*, cultural, fluctuational, cyclical, phenomenological, sociometric, epistemological, and socio-actional. A still more complex and detailed classification is given by Helmut R. Wagner in "Types of Sociological Theory: Toward a System of Classification," *American Sociological Review*, 28 (1963), pp. 735-742. He divides all sociological theories into three main classes: A. "Positive Sociological Theories," subdivided into neopositivism, human ecology, structure-functionalism, social behaviorism, and biopsychological theory of culture; B. "Interpretive Sociology," subclassified as theory of cultural understanding, interpretive sociology of action and interaction, interpretive social psychology, and social phenomenology; C. "Non-scientific or Evaluative Theory" with its subclasses: social-philosophical theory, ideological social theory, and humanitarian reform theory. Each of the subclasses is subdivided in turn into several subdivisions. See also Roberto Agramonte, *Estudios de Sociologia Contemporaneas*, Mexico: Universidad Nacional Autónoma, 1963, and Alfredo Povina, *La Sociologia Contemporanea*, Cordoba: Assandri, 1954.

In my *Sociological Theories of Today*, *op. cit.*, I classify the main currents of recent sociological

⁴ Of 1045 "findings" (empirical scientific discoveries) Berelson and Steiner claim for the recent "behavioral sciences," at least 90 per cent are really truisms, platitudes, discoveries made long ago by philosophers, biologists, and other scientists rather than by "behavioral sciences;" a large portion of these "findings" represent disguised methodological, philosophical, and speculative propositions which can hardly be called "scientific empirical discoveries." Only 5 to 10 per cent of these 1045 "findings" can be accepted as minor scientific discoveries in recent psychology, biology, anthropology, and sociology. Although their "inventory" of scientific discoveries is enormously inflated, it omits several "middle-range" uniformities discovered by recent sociology which are much more significant cognitively than most of the "minor findings" listed in the "inventory." See Bernard Berelson and Gary A. Steiner, *Human Behavior: An Inventory of Scientific Findings*, New York: Harcourt, Brace and World, 1964.

or set of facts, abstracted and detached from complex, multidimensional phenomena.

Being analytical or fact-finding, each of such theories isolates from the total, multidimensional reality of the human universe one of its dimensions, elements, parts, or relationships, studies it in detail, and then presents the results of the study in the form of a fully developed "ecological," "functional," "structural," "psychological," "behavioral," "formal," "dialectic," "phenomenological," "cybernetic," "sociometric," "psychoanalytical," or some other type of sociological theory. Exactly in this way a vast number of strikingly different and often discordant currents of sociological thought have emerged and proliferated in modern sociology.

This over-abundance of heterogeneous analytical and fact-finding theories in modern sociology is simultaneously its dialectical advantage and disadvantage, its strong and weak point, its important contribution to the further growth of scientific sociology and a potential factor in its stagnation and sterility.

Detailed study of specific elements or dimensions or parts or relationships, abstracted from the total sociocultural reality, permits each sound analytical and fact-finding theory to give us more adequate knowledge. All sound analytical and fact-finding theories, *taken together*, enrich our knowledge of many important aspects of

thought as follows. (Each subdivision of each main current is in turn divided into several subclasses.)

1. *Singularistic-Atomistic Theories*
 - A. Physicalistic-Mechanistic
 - B. Quantitative-Atomistic
2. *Systemic Theories: Macrosociologies of Cultural Systems or Civilizations*
 - A. "Totalitarian"
 - B. "Non-Totalitarian"
 - C. "Dichotomic"
 - D. "Typological"
3. *Systemic Theories of Social Systems*
 - A. "Social Action" and "Analytical"
 - B. "Functional-Structural" and "Nomenclature"
 - C. "Dialectic"
 - D. "Pseudo-Behavioral" (Mixed)
 - E. Mixed Taxonomies of Social Systems (Groups)
 - F. Mixed Theories of Social Change
4. *An Integral System of Structural and Dynamic Sociology*

the total sociocultural reality. Such is the advantage and contribution of the various analytical and fact-finding theories in modern sociology.

Their disadvantage, fallacy and danger consists in *imperialistic extension* of the main propositions of each analytical or fact-finding theory over different realities or over the total sociocultural reality and in a *lack of integration, reconciliation and mutual complementation* of the heterogeneous and discordant analytical and fact-finding theories into one integral theory that gives a sound knowledge of not one but of all the basic aspects of the total sociocultural universe, and thus a fuller knowledge of the whole sociocultural reality.

The danger of an unwarranted extension of the conclusions of each analytical and fact-finding theory over the whole sociocultural universe, or over different realities is quite real. As a matter of fact most such theories are so extended, and thereby commit the errors of identifying or equating the total, multidimensional reality with one of its dimensions or element or relationship, the whole with its part, different sociocultural realities with the specific, selected reality investigated by a given theory.⁶ These errors often outweigh the knowledge given by analytical and fact-finding theories. For this reason they frequently foster pseudo-scientific ignorance rather than scientific truth. As long as any science consists largely of this sort of theory, it remains a semi-science, giving not only the truth but also half-truth, sham-truth, and plain error. So far as the modern, predominantly analytical and fact-finding sociology depends on theories of this kind, it remains a semi-science.

Lack of integration, reconciliation, and mutual complementation of numerous analytical and fact-finding theories in today's sociology is also an important danger seriously threatening a further creative growth. Each such theory gives a knowledge of only one "speck" (element, relationship, di-

⁶ All such theories violate the principle of limits beyond which they become fallacious or faulty. See on this principle my *Society, Culture and Personality*, New York: Harpers, 1947, Ch. 46, and *Social and Cultural Dynamics*, Vol. IV, Ch. 14.

mension, or uniformity) of the immense multidimensional total sociocultural reality; moreover, the "speck" is studied in a state of isolation, torn out of the "whole configuration" of which it is a part. *All the existing theories of this sort yield, at best, knowledge of several scattered "specks" of the total sociocultural universe, without enlightening us much about their mutual relationships, their place in the total universe, or about the universe itself as a whole.* Such knowledge is obviously meager and quite limited. It resembles the knowledge of a few pieces of an unassembled jig-saw puzzle. The puzzle remains unsolved despite knowledge of its pieces. Like several pin-points of light in the darkness of night, the knowledge supplied by theories in question illuminates a few "specks" in the darkness but it does not make visible the total reality hidden in darkness, so that *we often misinterpret even the lighted-up "specks."* Misinterpreting the "specks" pin-pointed by analytical and fact-finding theories is unavoidable. When we forget the truths, well-established in the physical, biological, and psychological sciences, that whether "the speck" is "an elementary particle," "atom," "cell," "tissue," "organ," "organism," "human being," "group," or an isolated cultural phenomenon (in art, science, philosophy, ethics, politics and economics), *the same "speck" or "unit" has different properties when it is in a state of isolation and when it is constituent part of a unified (holistic) system.* For instance, a neutron after its entrance into the nucleus of an atom becomes more stable, while in its "free" state it exists only a short time and dissociates into proton, electron, and neutrino. The properties of atoms, ions, and radicals tangibly change when they enter a molecule. The same is true of cell, tissue, organ, organism, man, social group, and cultural phenomenon.⁷

As a result of the unwarranted extension

⁷ This verity is unquestionably proved by the recent upsurge of systemic theories in all sciences: physical, biological, psychological, and sociocultural. On this recent upsurge of systemic theories, on the proofs of this verity, and the respective literature, see my *Sociological Theories of Today*, *op. cit.*, Ch. 5 *et passim*.

of the knowledge of "specks" supplied by analytical and fact-finding theories, and of the meagerness and uncertainty of such knowledge, the recent predominantly analytical and fact-finding theories have increased our knowledge of the total sociocultural reality only slightly, especially in the field of the multidimensional, macro-sociological systems of "civilizations," cultural supersystems, and great historical social systems. In some cases they have even yielded more pseudoscientific sham-truth, half-truth, and plain error than valid truth.

This explains why further production of analytical and fact-finding theories cannot greatly enrich our knowledge of the total sociocultural reality and why sociology (or other science) has to pass—for its further growth—from the phase of predominantly analytical theory and fact-finding research into one syntheses, reconciliation, and integration of all sound analytical and fact-finding theories and their narrow uniformities into much broader, generalized, multidimensional theory and uniformities. These considerations explain also why analytical and synthesizing periods alternate in the development of sciences and philosophy. If sociology, or any science, cannot pass from one of these states into the other, it is bound to become stagnant and increasingly sterile because a mere increase of the known "specks" of the total sociocultural reality cannot give us an adequate knowledge of the whole. On the other hand, without increasing knowledge of these specks and their empirical realities, few if any fruitful syntheses, broad generalizations, and valid uniformities can be formulated: without new and relevant empirical material, the synthesizing and generalizing theories are bound to turn increasingly into empty abstractions, ascetically detached from empirical realities and adding little to our understanding of their what, how, and why.

To sum up: Today's predominantly analytical and fact-finding sociology is at a cross-roads. If it chooses to stay for an indefinitely long time in that state, it condemns itself to the sterile state of knowing more and more about less and less; if it chooses the way of growth, it must pass

eventually into the phase of synthesizing, generalizing, and integrating sociology.

Now questions arise: What are the chances of such a passage? Are there symptoms or signs that sociology is already making such a transition, and if there are such signs, what is likely to be the shape of sociology to come?

PROGNOSIS OF THE SHAPE OF SOCIOLOGY TO COME

Any prediction of the future course of science or creative activity can be but conjectural because the very notion of creativity implies something new, unforeseen, and unpredictable.

With this stipulation, and assuming there will be no global, suicidal war, I am inclined to believe, first, that sociology will continue to grow not only externally as it has done successfully in the recent period, but internally, as a generalizing science of the superorganic or sociocultural reality; second, that to accomplish this growth it will increasingly pass from the present, predominantly analytical and fact-finding character to the predominantly integrating, synthesizing and generalizing one; third, that there are already some signs of such a passage and transformation; fourth, that this coming sociology, through its integration, reconciliation, and mutual complementation of the existing, largely discordant, analytical and fact-finding theories will greatly increase the knowledge of the whole superorganic, human universe as well as of its basic empirical dimensions, relationships, and uniformities; fifth, that it will investigate the positive, creative, sociocultural phenomena no less than the negative, pathological, and destructive; sixth, that after realizing all the syntheses, generalizations, and uniformities possible at this stage, sociology will pass into a new analytical and fact-finding phase, to collect relevant new facts and to study analytically important new "specks" of sociocultural reality. This alternation of the two phases will continue in the future if and as long as sociology matures and grows.

Such are my guesses. Now what are the reasons and empirical signs that today's analytical and fact-finding sociology is going to pass eventually into the phase of a

synthesizing, generalizing, integrating sociology that unifies all the sound parts of analytical and fact-finding theories into a logically and empirically valid multidimensional system?

My first reason for that prognosis has already been given: no growing science can eternally remain in the analytical and fact-finding phase. Sooner or later it has to pass into the phase of great synthesis; otherwise, it is doomed to be stagnant and sterile. The same is true of the synthesizing-generalizing phase. I have also mentioned my second reason: the empirical fact that these phases frequently alternate in the history of growing sciences and systems of philosophical thought. If logically and empirically such an alternation were unnecessary, it would not have recurred many times in the lives of growing sciences. On the other hand, the stagnant periods in the development of science, philosophy, fine arts, religion, ethics, politics and economics show a long, conservative adherence to the prevalent, established, routine patterns of thought, style, or activity. The longer such patterns persist, the more frequently repeated and practiced, the more hackneyed, sterile, and uncreative the respective sciences become. My third reason is the important empirical fact of a growing concordance among the existing analytical and fact-finding theories, their progressive convergence toward an expanding set of principles and propositions consistent with all or most of them. Here is a brief enumeration of some of these principles and propositions.⁸

1. Explicitly or implicitly, all currents of sociological thought now accept sociocultural phenomena as a meaningful, "normative," "value-laden," "superorganic" realm of reality, different from the inorganic and organic realities.

2. Whether recent currents of sociology clearly specify the internal structure of sociocultural phenomena, they all admit (directly or circuitously) three distinct components of these phenomena: *interacting*

⁸ This thesis of convergence is developed and demonstrated in my *Sociological Theories of Today*, *op. cit.*, Ch. 18 *et passim*; in my *Society, Culture and Personality*, *op. cit.*, and in my *Dynamics*, *op. cit.*

individuals who create, realize, and exchange, through meaningful actions and reactions (interactions), meanings, values and norms; "immaterial" meanings, values and norms (often called "symbols" or "images"), superimposed on inorganic and organic phenomena and thus transforming these into the superorganic reality of *sui generis*; and *the bio-physical media in which and through which the interacting individuals "objectify," "materialize" and exchange their "symbolic," "immaterial" meanings, values and norms.* These bio-physical media are the "vehicles" of meaningful interaction and "the solidified conserves" of the meanings, values and norms accumulated in the countless meaningful interactions during the course of human history. This third component is often called "material culture" or the "material substratum" of society.

3. Sociocultural phenomena have three different levels of realization: *ideological*, given in the minds of persons; *behavioral*, realized in overt, meaningful interaction; and "*material*," objectified by and solidified into the bio-physical "vehicles" and "conserves." Under different terms—"material culture," "material basis of society," "symbols," "ideologies" or "ideological superstructure," "ego" and "alter," "social behavior," "social roles" and so on, these three levels are recognized—clearly or vaguely—in practically all sociological theories of our time.

4. Viewed from a different standpoint, all sociocultural phenomena have *cultural, social, and personal aspects*. Though in their empirical forms these aspects are distinctly different from one another, nevertheless, they all represent three main concrete forms of multidimensional superorganic phenomena. For this reason the empirical forms of the cultural, social, and personal aspects of sociocultural reality are closely interdependent and none can be adequately understood without consideration of the other two. This theory in diverse independent formulations appears in most of the recent sociologies, psychologies, and psychiatries.

5. The same can be said of the distinction between *cultural systems* (with their subsystems and supersystem) and *congeries*, between *social systems* (organized groups) and

social congeries (unorganized and disorganized aggregates of individuals), and between *integrated personality systems* and *unintegrated and disintegrated personalities*. The objective ground for this distinction between system and congeries is the undeniable fact that in the sociocultural universe causal or causal-meaningful unities (systems) exist, as well as singularistic aggregates whose parts are adjacent in space or time but devoid of any causal bonds. This distinction is confirmed by and explains the fact that sociocultural systems are studied by the recently emerging systemic theories while sociocultural congeries are investigated by the singularistic-atomistic theories. As long as systemic theories study sociocultural systems and atomistic-singularistic theories investigate sociocultural congeries, both approaches and their methods are fully warranted, and they complement each other.

6. From this distinction between system and congeries three other principles follow. They are also increasingly recognized by most currents of contemporary sociological thought. The first of these principles consists in distinguishing *cultural systems* and *congeries* from *social systems* and *congeries*. This distinction warrants a study of cultural and social phenomena as separate dimensions of the total superorganic reality (with a subsequent unification of the results in a higher synthesis, clarifying the relations of the cultural and the social dimensions to each other and to the personal dimension of the total superorganic reality). This distinction and a subsequent synthesis are already largely accomplished. They manifest themselves in the establishment of the theories of "*culturology*" contrasted to those of "*sociology*"; in the macro- and micro-sociological theories of *cultural systems* (civilizations," *Hochkulturen*, and "supersystems") differentiated from those of *social systems*; in two kinds of the theories of *Wissensoziologie*—one taking as independent variable the category of *social groups* to explain *cultural systems* and *congeries*, the other taking the *cultural* category as independent variable and the *social*, as dependent variable. The same is true with regard to the *personality dimension* in its relations with the *cultural and social dimensions* of the total sociocultural reality. Few psychologists now

endeavor to understand or explain any individual—his “mind” and behavior—without considering social and cultural factors; few sociologists ignore the accumulated knowledge of psychology concerning the mental and behavioral properties of a human being. *Psychological and sociological studies of this dimension are complementary, not mutually discordant or exclusive*, as a few voices still contend.

7. The second principle following from the distinction between system and congeries is a growing effort to classify cultural as well as social systems in a logical order, in which each system is a subsystem of a larger system, beginning with the smallest units and ending with vast cultural and social supersystems. In the field of *cultural systems* this trend is exemplified by Spengler's, Toynbee's, Northrop's, Kroeber's, and my own theories of “civilization” and cultural supersystems, with their subdivisions of these supersystems into their main systems, these into smaller systems and so on down to the smallest cultural systems.

In the field of *social systems* this trend manifests itself in similar attempted gradations of social systems beginning with the smallest “social units,”—dyads, triads, and “small groups” as subsystems of larger social groups and ending with such social supersystems as self-sufficient “society,” self-sufficient “community,” “nation-state,” “global society,” and vastest “social systems” of other sociologists.

8. The third principle resulting from the distinction concerns the proper methods of studying systems and congeries. Since congeries include a single unique phenomenon *or* a mass of singularistic-atomistic phenomena, the problem of proper methods (and also the kinds of cognitive results expected from each method) can be briefly summed up in terms of the proper method for, and the kind of cognitive results expected from, studies of unique, unrepeatable sociocultural phenomena, of singularistic-atomistic mass phenomena repeated in time or space, and of social and cultural systems. Unique sociocultural phenomena can only be *described*, as in an ideographic history. They do not provide a firm basis for generalized conclusions or for formulating uniformities. The unique sociocultural realities correspond to

the single atom or particle in the microphysical world. The physicists call this world “the microcosm of lawlessness,” “the realm of discontinuity and uncertainty.” This characterization of the physical “microcosm of lawfulness” fits well the unique sociocultural phenomena. They are poor ground for hunting uniformities, generalized propositions, or scientific predictions.

Congeries of singularistic psychosocial phenomena, frequently repeated in time and space (e.g., births, deaths, marriages, divorces, repeated fluctuations of prices, etc.) lend themselves to statistical observations and once in a while to inductive or experimental tests. They correspond to the ever-repeated macrophysical phenomena of large aggregates of atoms susceptible to mass observation by statistical and inductive methods. In physical as well as in psychosocial sciences these methods often discover chance uniformities in the relations among such phenomena. On the basis of the discovered uniformities, their future states can often be predicted with varying degrees of accuracy within specified conditions and time-space limits.

Finally, the modern biophysical sciences sharply separate the class of biological and psychosocial systems from “the lawless physical microcosm” of single atoms or particles and from the large aggregates of atoms or particles of macrophysics with their probabilistic relationships and uniformities. Biological and sociocultural systems, no matter how small the number of atoms they represent, display orderly relationships and, now and then, uniformities quite different from the above two classes. Physicists designate these relationships and uniformities by terms ranging from “the inner law of direction” (Eddington), to order determined by a “free will” (Planck), “conscious mind” or Athman (Schrödinger) or “conscious, voluntaristic decision” (Margenau). Schrödinger's analysis of genes and biological organisms illustrates the difference between a biological system and microphysical and macrophysical phenomena. Representing a small aggregate of atoms, genes belong to the microphysical world and, as such, should display the discontinuity, uncertainty, unpredictability, and “lawlessness” of microphysical phenomena. Instead, genes appear

to be highly integrated systems. They contain in themselves a "plenitude pattern" or "the plenotype" of the respective organism—the totality of its hereditary characteristics. Even more, genes preserve their specific individuality unimpaired from generation to generation. Amidst ever-changing environmental conditions they carry on their integrity and plenotype and, through it, they predetermine the essential characteristics of an organism and the stages of its life-course. Thus "incredibly small groups of atoms, too small to display exact statistical laws, do play a domineering role in the very orderly and lawful events within a living organism" (Schrödinger).

These properties of an organism as a system that bears in itself the basis of its individuality and perpetuation, of self-directing change and passage through the immanently predetermined phases in its life-career are applicable, with a slight variation to sociocultural systems. From the moment of their emergence they also bear in themselves the main phases of their life-career, and this life-career consists largely of an unfolding or realization of their potentialities. Like genes and organism they have a tangible margin of autonomy from external forces. External forces can hinder or facilitate a full realization of a system's potentialities (its inherent "plenotype"); now and then they can even destroy a system; but they cannot radically change its inherent properties and the succession of states or phases in its life history, if such a succession is an inherent part of its life-career. Change of a "univariant" sociocultural system differs from that of "bivariant" or "multivariant" systems; the forms, phases, rhythms, periodicities, and directions of quantitative and qualitative changes differ in each personal or sociocultural system largely according to its nature. In this sense any system molds its own destiny.

These properties of systems require the following modifications in the methods of their study.

A. Throughout its study a system must be treated as a unified meaningful-causal whole with its triple interdependence among the components of a system, between the whole system and its components, and between all components and the whole system.

B. A study of a system has to proceed not only "from parts to the whole" and "from each part to the other parts" but still more so "from the whole to the parts" (along the lines of the triple interdependence).

C. *An explanation* of the important structural properties of the whole system, as well as those of its essential parts, and explanation of its "physiological" (repeated) processes as well as of the phases through which system passes in its life course—its rhythms, periodicities and other changes—*must be sought, first of all, in the system itself*, in its life-functions; in the nature of its component meanings, values, norms, and "vehicles and material conserves"; in its human members and their relations with each other; *second, in the relations of the system to other systems* of which it is a subsystem or with which it shares a larger system; *third, in its total sociocultural environment*. Residual problems may be "explained," sometimes, by the *bio-physical milieu of the system* or by interference of some extraordinary—unforeseen and unpredictable—"factors," forces, and events.

This means that the system's structural and dynamic properties, and its life-course, cannot be "explained" by merely environmental factors, or by the system's part taken for "the factor" of the whole system (i.e., by the system's "economic" or "ideological" or "technological" or other part), nor along the line of such formulae as "stimulus-response," "challenge-reaction," and other procedures that largely neglect the system as a unified whole.

The methods for studying sociocultural congeries and systems just outlined are essentially in agreement with the corresponding conclusions of the biophysical sciences. With some variations, these conclusions are also supported by most of the sociologists competent in the problems of epistemology, methodology, and logic.

9. An essential agreement also exists concerning the abstract-empirical character of the important "substantive" sociological theories. *No significant theory can be purely abstract, devoid of relevant empirical content, nor can it consist of a mere collection of empirical facts without an adequate explanatory theory*. The recent "fact-finding" research in sociology has accumulated a

mountain of empirical data, but only a modest part of it has resulted in significant conclusions or has discovered uniformities of a "middle-range" generality. The bulk of this research has produced purely local, temporary, "informational" material devoid of general cognitive value. The main reason for these meager results has been the lack of adequate theory.

In contrast to this shortcoming of empirical studies, many of the recent abstract theories suffer from an "ascetic detachment" from empirical sociocultural realities. Representing a peculiar mixture of "ghostly" social-system models, devoid of empirical content, mechanistic analogies of "equilibrium," "inertia," "thermodynamic laws," "cybernetic feed-back" or "homeostasis," and speculative "pre-requisites" for systems' self-preservation,⁹ these abstract schemas of social systems form abstract networks with mesh so large that practically all "empirical fish" slip through, leaving nothing in the hands of the fisherman-researcher.

Besides, these schemas are constructed in such a "static" way that they fail to register most of the changes in the fished sociocultural "waters." As a result of their "ascetic detachment" from empirical sociocultural facts, they do not enhance our grasp of the empirical realities of the superorganic world. At present, the inadequacy of one-sided theories is generally acknowledged, and sociologists of all "denominations" increasingly try to avoid it.

In short, the growing convergence among different currents of sociological thought appears to represent a trend likely to continue in the future.

Finally, the fourth reason for my prognosis is that despite their apparent discordance and contradiction, *existing theories are mutually exclusive or contradictory only where they are wrong, while in a number of essential points they are mutually complementary rather than exclusive*. Each contains, side by side with its defective and questionable points, a body of correct propositions which are quite reconcilable with or complementary to the valid propositions of other theories. Considering the multidimensional

⁹ These mechanistic analogies are cognitively much more misleading than the "organismic analogies" of the preceding period.

of the total sociocultural reality, it is only natural that each current of sociological thought attend to, and stress different aspects of, this multifarious reality. So far as these aspects are real, and accurately depicted by different theories, each theory is sound and reconcilable with the sound parts of other theories. Even more, these sound parts can be unified and incorporated into a more "*multidimensional*" and more adequate *integral* theory yielding a fuller and more accurate knowledge of the superorganic universe than each of the existing theories. Some imperfect attempts to build such integral theories are already being made; my integral system is one such imperfect endeavor. No doubt better, more adequate integral systems of sociology will be built in the future.

In their sound parts the singularistic-atomistic theories of social, cultural, and personal congeries are reconcilable and complement the sound body of the systemic theories, for each class of these theories gives a real knowledge of singularistic and systemic forms of the total superorganic reality. The sound part of macrosociological theories of vast sociocultural systems and supersystems complements the microsociological studies of small groups and small cultural unities. Sociologies of cultural systems and congeries complement sociologies of social systems and congeries. Valid contributions from the analytical, structural-functional, dialectic, empirical, integral, and other currents of sociological thought are quite reconcilable with one another. The same can be said of dualistic, trichotomous and other typologies: each of these "opens" a particular dimension of sociocultural reality and thereby enriches our knowledge of it. The *Gemeinschaft-Gesellschaft* dimension, the "militant-industrial," the "sacred-secular," the "familistic-contractual-compulsory," the "primary-secondary" dimension and other typologies do not contradict but complement one another; in their totality they deliver to us a fuller knowledge of more dimensions of the human universe than each does alone. If all these typologies are logically and empirically integrated into a unified system, our knowledge of the total superorganic reality becomes richer and more adequate.

Similar considerations apply to almost all other differences among seemingly discordant sociological theories of social change, among the classifications of social groups, cultural systems, repeated "physiological processes" within systems, and "evolutionary trends," and among many other basic theories. Almost all of them contain part of the truth—some a larger, some a smaller part—and these sound parts can be, and will be increasingly, integrated into scientifically more adequate theories in the future sociology.

Such, in brief, are the reasons for my prognosis of the shape of integral sociology to come. Of the two roads, sociology will choose the road of creative growth and will

eventually enter its new period of great syntheses. I hope that in this conjectural prognosis I may be as lucky as in my previous prognostications of the wars, revolutions, liberation in man of "the worst of the beasts," dictatorships, and other changes in sociocultural life, which I did at the end of the 1920's and reiterated in considerable detail in my *Dynamics*.¹⁰ Despite severe criticism of my "forecastings" almost all of them have come to pass. I hope that my guess of "the shape of sociology to come" will also be confirmed by its objective development in the future.

¹⁰ See *Dynamics, op. cit.*, Vol. III, Ch. 16 and Vol. IV, Ch. 17, and *The Crisis of Our Age*, New York: E. P. Dutton, 1941.

THE COHORT AS A CONCEPT IN THE STUDY OF SOCIAL CHANGE *

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Society persists despite the mortality of its individual members, through processes of demographic metabolism and particularly the annual infusion of birth cohorts. These may pose a threat to stability but they also provide the opportunity for societal transformation. Each birth cohort acquires coherence and continuity from the distinctive development of its constituents and from its own persistent macroanalytic features. Successive cohorts are differentiated by the changing content of formal education, by peer-group socialization, and by idiosyncratic historical experience. Young adults are prominent in war, revolution, immigration, urbanization and technological change. Since cohorts are used to achieve structural transformation and since they manifest its consequences in characteristic ways, it is proposed that research be designed to capitalize on the congruence of social change and cohort identification.

SOCIAL CHANGE AND DEMOGRAPHIC METABOLISM

THIS essay presents a demographic approach to the study of social change. The particular meaning here given to change is structural transformation rather than the network of actions and interactions predicated in the routine operation of the institutional structure. Discussion is restricted to the variations in social organization that are reflected in measurements on individuals, summarized in aggregate distributions of performances and characteristics. Changes in an individual throughout

his life are distinguishable from changes in the population of which he is a component. The biological ineluctability of the individual life cycle carries no necessary implication for transformation of the population. Every society has pretensions to an immortality beyond the reach of its members. The lives and deaths of individuals are, from the societal standpoint, a massive process of personnel replacement, which may be called "demographic metabolism." This essay is concerned with interdependencies between social change and population process, including in the latter both demographic metabolism and the life cycles of individuals considered in the aggregate.

Society is a functioning collectivity of or-

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