

AXIOLOGICAL SYSTEMS THEORY

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Keywords: Need, Value, Efficiency, Performance, Axiological profile, Change, Deviation

Contents

1. Introduction
2. Fundamental Principles of Axiological Systems Theory
 - 2.1 The Values Production Principle
 - 2.2 The Synergetic Principle
 - 2.3 The Transforming Principle
 - 2.4 The Teleological Principle
 - 2.5 The Integrative Principle
3. John van Gigch's Contribution
 - 3.1 Chapter 7—The Morality of Systems
 - 3.2 Chapter 10—Social Indicators and the Quality of Life
4. The Basic Transformation Model
 - 4.1 Inputs
 - 4.2 Transformation
 - 4.3 Outputs
 - 4.4 Control
 - 4.5 Environment
5. The Solved Problems of Axiological Systems Theory
 - 5.1 The Universalisation of Outputs
 - 5.2 The Quantification Problem
 - 5.3 The Standardization of Indicators
6. Some Practical Applications of Axiological Systems Theory
 - 6.1 Organizational Efficiency
 - 6.2 Deviation Analysis
 - 6.3 Social Change
 - 6.4 Ethical Behavior
 - 6.5 Other Applications
7. Conclusion
- Glossary
- Bibliography
- Biographical Sketch

Summary

Human individuals as well as societies as unities are teleological and thus axiological in nature. Values can then be considered to be the fundamental raw material that make and shape the social phenomenon. If “Value” is the degree of usefulness or suitability of things to satisfy necessities or afford comfort and content, then it can be extrapolated that everything, or almost everything, in the field of human relations, can be considered

as an enormous and complex framework of necessities and interests which can be satisfied only through the achievement of values. Thus: the worker tends to aim for an adequate standard of living, security, and personal satisfaction; the student looks for knowledge and preparation for the future; the sportsman for health and perhaps glory and prestige; the man of religion seeks a subjective security with a view to a grand beyond; the housewife wants security and affection; and even the retired person, at the end of his/her days, pursues peace and tranquility, or maximum freedom and personal satisfaction, when his/her responsibilities at work no longer occupies all the time. This can also be seen in institutions: Education stresses knowledge; Economy, the material side of living; the Armed Forces, security and order; and so on. The reason for existence of institutions, the aim of all human association, from the two lovers or two friends, to the United Nations Organisation, passing through the family, the firm, or the state, is solely due to the need for carrying out and attaining values which will satisfy original or derived necessities. A central hypothesis of the axiological approach is that any systemic theory of society cannot avoid dealing with values as the basic raw material for defining, measuring, and improving its performance.

1. Introduction

Although little known, the axiological approach to complex societies goes back a long time. One of the first to draw attention to the importance of values within social systems was Pitirin Sorokin. His book *Society, Culture, and Personality*, published in 1962, described the structure of the axiological universe in terms of ideological cultures, ideological systems, and material and behaviorist cultures. He focused on the contradictions between the meaning of each individual's values and norms, and their integration within complex social systems. Sorokin emphasizes the crucial role that values and norms play in the functions and behavior of complex societies and institutions organized as systems, or, as he says, as "collective unities." Sorokin saw clearly that the achievement of values was the main *leitmotiv* of any society.

Talcott Parsons followed Sorokin in acknowledging the importance of values in society. In his work *The Social System*, Parsons attaches maximum importance to the cultural context much more than to social, physical, and biological contexts of society. For Parsons the cultural subsystem (the world of values as orientation of the human action) is the most crucial for information and directs or determines the other three subsystems. Therefore, when he assigns a cybernetic hierarchy (according to the control of social action) to the four subsystems, he places highest the normative stability function, which corresponds to the structure of values assumed by the system. The theoretical approach known as Functionalism is, among other things, the application of this hierarchy to the value systems envisaged/accomplished by society.

Mario Bunge makes an essential contribution when he generalizes the teleological functions of human beings and social groups, emphasizing that even animals are equipped with a value system to choose between different alternatives. Throughout his important and numerous works, Mario Bunge points out not only that all societies

pursue value systems, but also that they can be operationally defined and measured. Besides this, Bunge always defends the interdisciplinary integration of sciences with a view to achieve through and for society the best possible system of values.

K. W. Deutsch was one of the first political scientists who understood that values are essential for defining and measuring the performance of political systems. While other political scientists focus their attention on outputs merely as decisions, actions, integration of interests and other medium concepts, Deutsch proposes a list of universal end-values to be performed by any political system, and thus relating the ultimate goal of any polity with the best systems of values achieved for the sake of the people at large.

There are also the well-known works on values of Abraham Maslow and Milton Rokeach, the former centered on the needs of the people and the second on the values that satisfy them. Both demonstrated the importance of priorities in the evaluating process, the importance of personal choice, and elucidated the relationships between needs and values. Another essential contribution of the works of Maslow and Rokeach is that they not only suggested that these values are expressed by human behavior, but that they are also universal in nature, and thus valid as a reference pattern. As B. P. Hall says, they are value priorities that we all relate to and have, even though we only have time in our lives for a few at a time.

The Social Indicators movement, which started in the 1960s under the influence of the philosophy of the State of the Nation promoted by President L. Johnson, was developed by Gross, Bauer, and Biderman who undertook a big theoretical effort to justify what indicators should be used, and therefore make explicit the systems of interrelated values to be used. This effort represented one of the first operational definitions of the systems of values performed. The movement has already been developed by the specialized agencies of the United Nations Organizations (FAO, WHO, UNESCO, etc.). The UNO created a body to deal directly with the theoretical and methodological problems of Social Indicators—the United Nations Research Institute for Social and Human Development (UNRISD), based in Geneva, Switzerland. The importance of this movement was also made by the journal *Social Indicators Research*, and the creation of the Working Group 05 on Social Indicators within the International Sociological Association.

Ronald Inglehart in 1977 exemplified the tendency toward non-materialistic goals based on the change of values in modern western societies. His book entitled *The Silent Revolution*, makes a distinction between *System-Level Changes*, *Individual-Level Changes* and *System-Level Consequences* and contends that beneath the frenzied activism of the sixties and the seeming quiescence of the seventies, a silent revolution was occurring involving two fundamental aspects: a change from an overwhelming emphasis on material values toward a greater concern for more spiritual values; and a concern with the quality of human life. Inglehart also emphasized the central role of values in modern societies.

One of the most explicit contributions to the axiological approach to social systems is Brian P. Hall's *Value Shift* book, where he describes how values interfere in any kind of society and how, through value analysis and the study of their interrelation, societies can reach high degrees of development. The titles of the two parts of the book: (1) *How*

Values Shape Conscientiousness and (2), Human Transformation: People, Leaders and Organizations, demonstrates the role that values play in the development and improvement of societies and organizations.

Bruce Buchanan deals with the strategic role that all values play in the systematic guidance of behaviour. He focuses on the function of values and the need for systematic assessment in terms of relationships and results, rather than as fixed or arbitrary concepts. He stresses the light shed on values by the systems perspective, as decision criteria through which needs are met. He takes up the challenge of reassessing the nature and eminently worthwhile role of values in social life.

Martin L.W. Hall stressed the connection between systems theories and methodologies and human values. He explored how these two concepts can be combined as part of an operative organizational intervention methodology. For him, systems and values when used in an integrative manner can become a methodological approach that is useful in virtually any situation within virtually any organizational system.

Besides these seminal works, there have been numerous contributions on developing the role of values as functions of social systems. The works of L. Kohlberg on morality; M. De Pree, S. R. Covey and E. Schein, R. Harrison, C. Handy, T. E. Deal and A. A. Kennedy, and J.A. Garmendia on organizations and management; and H. Gardner, L. Rath, M. Harmin and S. Simon, and Benjamin Tonna and B. P. Hall on education. During the Fourteenth World Congress of Sociology, held in Montreal in 1998, papers by Helena Herve, Arnulf Kolstad and Petter Bjorsen, Marjun Lauristin, Larisa Lemberanskaya, and Neelan Prasad, as well as those on value orientation by S. Yi, M. Zoh and M. Chi, showed the importance of values and the emergence of an axiological theory of systems.

2. Fundamental Principles of Axiological Systems Theory

The following five principles have been emphasized in the literature on social systems:

2.1 The Values Production Principle

With regard to the production of values, authors have acknowledged that organizations are: (a) made up of human beings (Parson); (b) that these human beings feel necessities, and (c) that necessities can only be satisfied through values (values are the other side of the coin, according to the anthropologist C. Klukhkohn).

This principle can be generalized. Therefore, the worker, the student, the sportsman, the man of religion, the retired person, and so on, are all inevitably looking for values, that is: for material well-being, health, knowledge, prestige, security, and so on. This can also be seen in institutions: Education stresses knowledge; Economy, the material side of living; the Armed Forces, security and order; Justice, the equality of everybody before the law; the Health Service, physical and mental well-being of the community, and so on. The reason for the existence of institutions, the aim of all human association, from two lovers or friends to the United Nations, passing through the family, the firm, or the state, is solely due to the need for carrying-out and attaining values which satisfy

original, or derived, necessities. Values are the “cement” of society, and if society exists, it is because people look for values to compensate for their shortcomings and satisfy motivations. The raw material of society might not be social action, communication, conflicting situation patterns, and so on, but what might be called “End-Values,” as universal motivations of individuals, possibly in any space-time contingency. To this effect, therefore, any social theory that one could entertain cannot fail to center itself on the values pursued by the individual in his social relations. And, still less, the systemic theory, which uses the globality of the object as a fundamental principle. In this case, the classification of a system’s elements according to their relevance, is prior and unavoidable. This classification of elements is obviously necessary, since not all the elements of the said complexity can be represented by the systemic approach.

If the principle of “complexity” and the subsequent separation of essential and less essential elements is put into practice with the required rigor, any theory of social systems might necessarily move towards “values” as the most relevant elements of the system. Any systemic approach which leaves value orientations to one side, no longer satisfies the requirement of Relevance and would no longer be perfectly systemic. And, naturally, any social theory that no longer considers values as the prime raw material, would possibly end by hiding or adulterating the final goals of society and, consequently, the true interests of the individuals that form and shape it.

2.2 The Synergetic Principle

The idea of a social system as a set of persons assembled only because of their needs and for the satisfaction of them, formally defines the *raison d’être* of any social organization. Therefore, if the individuals a, b, \dots, n , need to satisfy the needs N_1, N_2, \dots, N_n , looking for their corresponding values V_1, V_2, \dots, V_n , the “benefits” gained by the group, as an organized whole, are bigger than the sum of the individuals’ benefits, thus showing the interest in and the origin of any association of persons. The superior capacity of social systems to satisfy individuals’ needs is the central and determining reason of the existence of society.

Renewed acknowledgement of this fact has important epistemological implications, since only by regarding human beings as the crucial element of society is it possible to perceive their needs and therefore the values supposedly intended to satisfy them. The “need/value” binomial thereby becomes the essential prime material of sociological analysis. Both “needs” as a factor of motivation, and “values” as a factor of satisfaction, can be operationalized and quantified to depict the most outstanding achievements of complex social organisations, their deviation from pre-determined standards and the extent to which they ultimately adapt to the environment. Standardized and therefore comparable “axiological profiles” comprise a tool that can be generally applied to establish a preliminary measurement of the degree of overall organizational efficiency.

2.3 The Transforming Principle

Is, then, any kind of society inevitably organized as a transforming system, which transforms Inputs (resources used: human, material, and financial) into Outputs (degree

of satisfaction of the population's needs)? The notion of society as a “transforming entity” can be found in much of social scientific literature, from Sorokin to Easton, from von Bertalanffy to van Gigh. For Piaget, systems are invariably transformation systems, and the human being itself has been considered as a mere “transformer of energy” (Elbert) or as “a machine that we provide with what we call food and which produces what we call ideas” (Ingersoll). Whether societies ultimately build or destroy, regress or progress, is another question. A few ideas which aim to measure the worth of such a transformation process will be discussed below.

Must all social organizations inevitably be regarded as systems to transform “inputs” into “outputs?” Is “transformation” the core feature of their organization, the most structural and foundational trait of all organized social groups? Is this, then, an ontological rather than a merely theoretical or methodological function? The possible answers to such questions should be carefully weighed, because they may be character-forming. They may oblige the observer, one fears for the rest of his/her life, to look first at “Outputs” and “Inputs,” to separate and classify them, to distinguish which are means and which ends, to measure them if possible and compare them, and to judge a society's worth on the grounds of the relations between them, all the while hoping for and advocating the maximization of outputs and the minimization of inputs as a logical corollary to his/her assumed rationality. The complex processes explaining any given input/output ratio can only be addressed after reviewing such considerations, since a concept can hardly be explained before it is appropriately defined. All of this entails “sociologizing” one's vantage, regarding social organization from the exclusive standpoint of the man in the street and, ultimately, moving the watch-station out of the office and into the public square.

If this sort of “vantage” is institutionalized in social science, would the management, criticism, and development of social organizations be more operational and effective? Although this “transforming analogy” is adopted in principle by axiological theory, it would seem preferable to leave such questions open and allow the reader to decide just how pertinent the systemic concept and its respective implications may be.

2.4 The Teleological Principle

If we define “Transforming efficiency” (T) as the Output (Y) : Input (X) ratio, the ultimate aim of any society can be assumed to be to raise the value of $T=Y/X$ and this notion—be it termed Efficiency, Effectiveness, Productivity, or Performance, to echo the prevailing polemic—may be (implicitly or explicitly) regarded as the principal concept of social analysis. If, moreover, the term T is a measure of the effort to reach sustainable or environmentally-friendly development, society's sole *raison d'être* would be to constantly improve this coefficient, by increasing Y while keeping the consumption of X constant, by decreasing X while keeping Y at the same level or, ideally, by accomplishing both at the same time, which may constitute a very acceptable definition of social progress. From the perspective of the second law of thermodynamics (irreversibility of energy), the term T thus confronts the thermodynamic “sin” committed by any social organization (society “steals” energy from the physical surroundings, thereby expediting the death thereof) when it engages in negentropic development and, at times, inordinate dilapidation of natural resources. This

squandering of X for the sake of intemperate “progress” has become one of the major concerns of today’s scientists, at least since the early Club of Rome papers. The notion of sustainable development makes lowering X as important today as raising Y.

2.5 The Integrative Principle

On the other hand it is suggested that, to apply social systems theory rigorously, one must pay careful and constant attention to the most relevant social theories as well as their possible modification by new emerging facts, in order to permit the modeling operation to take into account the primary characteristics of the various theories, in a sustained effort of integration and methodological-theoretical synthesis. This is the reason for the unavoidable necessity of working in systems theory with multidisciplinary and even multi-ideological teams. Thus, it can be anticipated that Axiological Systems Theory (AST) does not seek to adhere to any one theoretical perspective, nor to follow the rules of any particular method. It only aims to represent social reality in the most reliable, valid, and useful way possible. In the axiological/operational approach, its usefulness is always defined with regard to individual and collective necessities of the people who make up the system. An axiological systems approach thus developed might imply at least three consequences that merit mention: the humanist, the critical-empirical, and the scientific.

The humanistic dimension is in fact powered by the principle of sociologization. According to this principle, it is the set of necessities expressed by all the individuals in the system (or a representative sample) that is responsible for teleological directing of the functioning of the system. This means that to concentrate on the description and analysis of this process (the outputs turned back into advantages and disadvantages for the population) requires the maximum possible humanization of any social theory. Maximum personal benefit (in terms of values) is only possible through maximum axiological benefit obtained by each and every individual. The humanism implicit to the axiological approach might thus find its most sublime expression, although it hides from superficial gazes behind the curtain of mathematical formulae.

The critical-empirical dimension is developed in parallel when the model incorporates, as complementary dimensions, what the system actually does (empirical), with what it is able and yet fails to do (critical). By integrating the analysis of action taken (positive) with that of action omitted (less positive), a line of joint treatment is followed to avoid the traditional problems of divorce between empirical and critical approaches. In axiological-operational methodology, what is critically achieved is but complementary to what is critically omitted. The degrees of justice and injustice, participation and alienation, individual liberty and structural confinement, health and illness, richness and poverty, and so on, form a unity which “adds up to zero,” or—what amounts to the same—each increase of the former implies a reduction of the latter. It is logical that this joint treatment should be possible, for example, when societies reach 50 years of life-expectancy are compared to those which achieve 80. If we take the latter as having the optimum level and make it equal to 100, then we can say that the former societies have attained a level of 62.5% (the fact, the empirical), while they fail to achieve the remaining 37.5% (the omitted, the critical). Here we have taken the figure 80 to equal the optimum of 100, but instead of 80 we could have used 90 or 100 years of life-expectancy, according to the qualified opinions of experts for each indicator. For the

former figure we would be using empirical optima, and for the second, ideal optima.

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Biographical Sketch

Francisco Parra Luna was born in 1937. He studied Economics and Business Administration and worked as Controller and Administrative Director at La Cruz del Campo, S.A., in Seville, and Cerveceras Asociadas, in Barcelona. He has Ph.D.s in Sociology and Political Science from the Universities of Lausanne and Geneva (Switzerland) and the Universidad Complutense of Madrid. He is Catedratico de Sociologia in this University. He created the Working Group on Systems Theory of the International Sociological Association and participated as Chairman in several international meetings. He is member of several Academic Associations and belongs to the Editorial Board of several journals on Systems Theory and Sociology. He has published about 50 scientific articles in professional journals and several books, among them, *Towards Comparing National Social Performances* (University of Lausanne, 1974); *Balance Social y Progreso Empresarial* (Edit. Cirde, Madrid, 1980); *Sistema Sociopolitico y Seguridad Social en España* (Ed. Index, Madrid, 1980), *Los Emigrante en españoles en Francia* (Instituto Esp. de Emigración, Madrid, 1981); *Sociologia Industrial y de la Empresa* (published with J.A. Garmendia and

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