

Review (in English) by Dilmar Alieva of

Richard Jung¹

***Experience and Action:
Selected Items in Systems Theory***

Sociológia,
Slovak Sociological Review,
Journal of Institute for Sociology,
Slovak Academy of Sciences.
Volume 41, 2009, No. 6, pp. 564-573.

¹ Center for Systems Research,
Kouřimská 24, CZ 84 01 Kutná Hora, Czech Republic;
+420 607 587 627, www.RichardJung.cz , Richard.Jung@post.Harvard.edu

Reviews

Richard Jung: Experience and Action: Selected Items in Systems Theory

Edition Echoraum Wien, 2007, 308 p.

Echoraum of Vienna has recently published *Experience and Action: Selected Items in Systems Theory* by Richard Jung (1926), a man with a remarkable personal and professional life.

Already in his early youth he participated in an anti-fascist resistance. He was consequently deported to the Little Fortress concentration camp at Terezin. Later, in post-war Czechoslovakia, he was also politically active as a representative of the youth movement.

Already during his high school and university studies he provided himself with a wide multidisciplinary background for his later professional life. After graduating from agricultural school, he studied law at Charles University (1945-1948). At the same time, in 1947 he began to study political science and social anthropology at the London School of Economics. During his stay in England, he also had an opportunity to study philosophy and ethics at the Woodbrooke Quaker Study Centre. His interest in these subjects led him in the same year to Paris to study Indian philosophy at the Ramakrishna Mission. In 1948, he emigrated to Finland and thereafter to Norway. While making his living by doing various jobs he managed to continue his studies, first at the Graduate School of Political Science and Social Work in Helsinki, where he pursued political science and later at the University of Oslo, with a specialisation in political science and sociology. In 1954, he moved to the USA where he studied at the Department of Sociology at Columbia University. He completed his university training at the Department of Social Relations at Harvard University (1955-57), where, in addition to sociology, he also studied social and clinical psychology and social anthropology. At Harvard, he got a PhD in social relations under the supervision of T. Parsons.

² Original page number in *Sociologia*, Volume 41, 2009, No.6, pp. 564-573.

Jung also worked as Parsons' assistant for some time. He reflected upon this in his biographic study on Parsons (Jung 2006). During his long and fruitful life, he also worked at other prestigious American universities, such as Pittsburgh, Cornell or Rutgers University and Vassar College. Apart from the USA, he worked also at the University of Alberta in Edmonton (where he is a professor emeritus) as well as at universities in Amsterdam, Augsburg, and Duisburg, Brunel University (now renamed University of East London), El Colegio de Mexico, the University of Hawaii and finally also at the Charles University in Prague. The multi-disciplinarity of his education was evident in his teaching. He lectured not only in the fields of psychology, sociology and political science,  565 but also in communication, cybernetics, and the comparative theory of animal behaviour. Most importantly, he had a life-long engagement in the area of systems analysis and cybernetics, for which he was awarded in 2008 by the American Society for Cybernetics the Norbert Wiener Gold Medal. The award especially highlights his role as a founder of the Center for Systems Research at the University of Alberta as well as in Kutna Hora. After 1989, R. Jung took the opportunity to move back and settle down in the country of his origin which allowed him (as a scholar and university professor) to actively participate in its post-communist formation. Currently, he lives in Kutna Hora as an active local citizen.

Throughout his rich life, R. Jung had unique opportunities not only to meet but also to cooperate with renowned sociologists such as Robert Merton, Paul Lazarsfeld or Talcott Parsons. He worked together with Ludwig von Bertalanffy, the author of the general systems theory, and was a friend with many other highly regarded social scientists. He consistently refers to these colleagues with respect and gratitude. His book is thus a profound recognition of his friends and colleagues and a special recollection of the most important outcomes of his scholarly work so far. The fact that this book is retrospective predetermines, to a certain extent, the book's genre. Although it is a collection, the title *Experience and Action* transforms the book into a monograph. Nevertheless, considering the quality of each chapter, the significance of the themes and the erudition of the author, the book can be regarded as a set of mini-monographs. The chapters present the author's main

papers written throughout a half a century (starting in 1957). Due to their encyclopaedic character they give the impression of perfect literary units.

Reading the thirteen closed mini-monographs is not a light matter — which Ranulph Glanville commented on in the foreword to Jung's book, as did Jiří Musil in the *Czech Sociological Review*. Contemplating the subject of the book, one gets an impression of respect towards the author's solemn approach to his theme, but one might also get an impression of esotericism. Reading Jung's book might leave the reviewer somewhat hesitant. In order to competently review this kind of book, one ought to be an erudite scholar, and not only in the field of sociology, but also to have spent some time with Professor Jung himself in order to understand his way of thinking and style of explaining.

A list of the topics the author addresses in the *first part* of the book already indicates what an immensely demanding task it is to read and review Jung's book. According to the foreword, this first part is focused on the issues of *system and meaning*. The topics cover a broad range of central theoretical problems from the explanatory scheme and logic of type construction to postmodern systems theory. It also includes the author's reflections on  566 problems of levels and boundary conditions in the theory of action, on quaternion of metaphors for the hermeneutics of life, on the time sequence of communication and control and on first order observations in second order cybernetics. If one also considers the array of topics contained in the *second part* of the book, devoted largely to the theory of action in its larger context of naturalism and humanism, the relation of action to experience, or sub-topics like system of motivation, system of decision and system of orientation, the truly challenging character of the book becomes apparent. A qualified review could perhaps be accomplished by a multidisciplinary team, since an adequate reader needs to be proficient both in sociology and in related disciplines. Nevertheless, I am grateful to the author for returning us, who remember the past, back to the epicentre of the problems which sociology and also social science in general has lived through in the previous century.

The studies in the book are not arranged in chronological order. Thus many papers published later are often placed before those published earlier.

For instance, a study on naturalism and humanism, published in 1981, is placed almost at the beginning of the book while the chapter on system of orientation is filed at the end. The author chose this order even though the theme of orientation emerged in the author's work as early as 1964. Considering how the author subsequently kept returning to this subject in the 1970s, 1980s and even in the 1990s, it is undoubtedly crucial for his scholarly production. It also represents a cornerstone of his own conception of action, which has become an important object of his life-long analytical endeavour; in the context of his whole work, it emerges even earlier than cybernetics or the systems approach. Therefore, his theory of action deserves apriority in the sequence of my explication.

Jung's concept of action strikes us as an original contribution to one of the central sociological themes since the end of the 19th century. The first chapter of the first part, dealing with the *conceptual scheme*, already reveals the original ideas and concepts which the author employed at the beginning of the 1960s when preparing his dissertation. At that time, his thinking was quite influenced by the version of the theory of action that had been developed by T. Parsons and his colleagues at the Department of social relations at Harvard University and presented in *Toward a General Theory of Action* (1951). This was understandable, since Jung had spent several years at that department. However, even at that time he attempted to go his own way, and to modify the concepts outlined by T. Parsons. Although he adopted some of Parsons' basic concepts such as need-dispositions, value orientations and role orientations, he also created his own theoretical grounds conceptualised through the *psychosocial system* and its variables which, unlike Parsons' *pattern variables*, are named *state variables*. The psychosocial system is explained neither as an  567 organism of behavior, nor as an individual actor, but rather as a kind of set of classes of state variables, in relation to which the behavior of the individual organism appears as its "physical referent (p. 163). A certain dependence on Parsons' theory is present not only on the level of vocabulary, when Jung uses words like "integration" or "adaptation" as appellations for some classes of variables (besides his own terms such as "generalization", "fixation", "functional differentiation" or "manipula-

tion") but also at the level of contents which those terms refer to. The author acknowledges a similarity between his own classes of variables and the "dimensions of action space" developed by Parsons, Bales and Shils as the original framework for structure-functionalist analysis. Moreover, he himself also uses various combinations of his own variables as "building blocks" of the psycho-social system. In fact, this system acts as an original superstructure above the individual organism, within which we find what was traditionally represented as constituting the personality. It seems that under the influence of behavioural psychology, the author preferred its use of "variables" to replace the traditional concept of "personality" with a "psychosocial system". Thus, in Jung's early paper, the absence of the concept of actor, which renders the system of action abstract and impersonal, becomes very significant.

This appreciable lack of subject in Jung's theory is compensated in his later papers. In the book, these are represented by the chapters *Levels and boundary conditions in the theory of action* and *Naturalism, humanism and the theory of action*. Both are studies from the 1980s and therefore complement each other well. The latter begins with reflections on "models of man" embedded in the antinomian framework of *naturalism* and *humanism*. It contrasts the traditional interpretation of man as natural fact with the perspective within which man is treated as a construct, distinguishable by his/her mind, free will and sense of responsibility. Finally, in the modern era, a third model of man appeared. Here, man is an artefact produced by an artificial symbolic environment which he himself co-produces. Man is thus an outcome of socialisation, social control and a created social order, the central feature of which are rules of conduct, concerning not only practical judgement, but also beliefs, evaluations and expressions.

Throughout his study, the author also specifies four concrete metaphoric forms: an *organism*, a *mind*, a *machine*, and a *template*. He keeps returning to this topic; in the first part of the book he even devotes a single chapter to this issue titled *A quaternion of metaphors for the hermeneutics of life*. Different approaches demonstrate the differences between the *naturalistic* perspective, focusing on *energy* systems, and the *humanistic* tradition, dealing with systems of *meaning*. Treating these two modes of analysis as different, yet as

complementary, the author considerably blunts the sharpness of the traditional  568 methodological dispute (*der Methodenstreit*) between the advocates of explanation and of understanding in social science, i.e. between scientism and humanism. While the naturalistic approach emphasizes physiological and ecological systems, the humanistic perspective accentuates psychological and sociological systems (p. 182). When we analyse a system as physiological, then it is understood as a system of activity, explicable via the concepts and principles of physics, chemistry and biology. In this case, the metaphor of man as an *organism* is appropriate. However, when understanding a human being as a psychological system, man is conceived as a system of *action* and analyzed according to the principles of economy, psychology and sociology. Within this approach, the metaphor of *a mind* for a human being seems adequate. While these two well known metaphors not only illustrate the differences between naturalism and humanism but also between "the ontology of a man as a fact and as a construct" (p. 184), the two remaining metaphors are less well articulated. The metaphor of a *machine*, familiar already since La Mettrie, sees the individual as a disposition and his/her activity as a performance. Finally, the fourth metaphor considers the individual a semantic plexus, "wherein each nexus of meanings constitutes a rule, convention or a constraint which enables the interpretation of the activity of the system as conduct". This paradigm is the least developed within the Indo-European tradition and the author himself had to find an appropriate name for it. Nevertheless, it appears to be suitable for sociology since sociology has acquired a practice of working with types and patterns. According to the author, concepts such as "role" or "status" represent templates, while the concept of "institution" is a configuration of templates (p. 104). In this interpretation, the individual is outlined as a system of internalised constraints and may give the impression of a marionette. Contrary to the metaphor of a machine, which, according to the author, enables *technical* discourse, the metaphor of a template makes possible *ritual* discourse and basically implements the dramaturgic principle "brilliantly applied by Goffman to everyday life" (p. 104). Despite the obvious sociological relevancy of this last metaphor, the author nevertheless follows the second one, which

interprets man as a mind. He abandons original behaviouristic restrictions and reaches the level of theory of action, which he is more attracted to, since he is interested in "the meaning of action and not in the thermodynamics of behaviour" (p. 186). Like Parsons, he also attempts to outline a general theory of action with the constant reference point of the individual actor.

To construct a unified theory of action, the author employs a method that he calls *phenomenological systems analysis* which reveals his effort to overcome the methodological divisions peculiar to today's social science. He not only intends to draw on the procedures of systems analysis, as characteristic of systems engineering, but also on the conceptual potential of phenomenology  569 with its sense of human experience as are "intentionality, temporality, granularity, and reflexivity" (p. 183). According to the author, it is indeed phenomenology that, besides structural hermeneutics, accounts for epistemological foundations of the humanistic approach to the study of man. Realizing that the problem of scientific explanation represents a stumbling block for humanistic science, the author spares no effort to solve this chronic problem of humanism. One must value his scientific courage and inventiveness in his quest for a suitable humanistic equivalent which would adhere to the formal structure of logic and recognize the necessity of phenomenologically grounded conceptualisation of human action. He suggests such a mode scientific explanation in which, on the map of the subjective experiences intentionality, autonomy and constraint, there would be projected "logical valid formulations" (p. 183) that would fit well into the phenomenological characteristics of experience previously mentioned.

The acceptability of this approach, combining "humanistic curiosity" with scientific method, is supported by his own inquiry into the domain of the theory of action which has led him to such extraordinary outcomes as the formulation of the general principle of the theory of action that differs from Parsons' famous principle, according to which individuals strive for gratification and avoid deprivation. Jung, however, considers the principle of the *reduction of the maximum possible amount of inauthenticity*, according to which "an action has to reduce, as much as possible, any discrepancy between the state of the individual as an organism and his definition as an actor" (p.

191). This sounds like a categorical imperative, whose violation is experienced as "guilt, shame or fear" (p. 191). By considering the existential level of action, the author is closer to the current trends in the theory of action, such as ethnomethodological and existential sociology, than to Parsons. It is not surprising that Jung derived the concept of authenticity from Heidegger (p. 89).

The next chapter represents the semantic core of the book, and by its heading, *Thinking about experience and action*, provides the book's title. To a large extent, it intimates the author's unique undertaking to overcome traditional, often damaging barriers in social science and to combine seemingly contradictory scientific standpoints. In realization of this mission, there occasionally arise terminological paradoxes, such as "cybernetic phenomenology" or "the cybernetics of experience". However, these always imply something inventive. When discussing the topic of cybernetic phenomenology, he approaches the issue with attention to the details of the conception of action, working with the categories *actor*, *situation* and *action* which basically stand for the individual, environment and the exchange between them (p. 202). He draws on Parsons who defines action as "a distribution of energy subject to a specific constraint". Yet, since he was unsatisfied with the classic tradition of  570 the analysis of action, he turned toward phenomenology as "the only method of conceptualization that is acceptable in theory construction" (ibid). While the utilization of phenomenology allows for the radicalization of conceptualization, the employment of cybernetics enables the radicalization of explanation, Phenomenology describes action as a system of experienced meanings, while cybernetics explains observable regulatory characteristics. However, his reflections on cybernetic phenomenology surprisingly conclude with a rejection some empirically untenable concepts as "intentions and goals that still dominate in quasi-evolutionary explanations and are deeply entrenched in Parsons' original definition of action, which is that "an actor seeks goals in situations" (p. 202). He does not agree with using "the pre-scientific, introspective, and romantic functionalism with its teleological fallacy" as a method of explaining action. Instead of a teleological explanation, he proposes a functional explanation similar to that in quantum or electro-

magnetic theory, or in the theory of relativity. This, according to him, is the only way to move from pre-scientific explanations, in the spirit of Heron of Alexandria, towards logical structure of modern theories.

On the periphery of these critical considerations, one may note that besides the "teleological fallacy" of "romantic functionalism", into the abyss plunges the conception of social action established since Weber, which posits as its dispensable elements a goal and purpose of action. This is not speaking of phenomenology itself, among whose categories the author, following tradition, regards intentionality and purposiveness as primary. Moreover, the system of intentions represents a crucial element within his conception of action. When defining intentions, which, in the spirit of Brentano, he characterises as a relationship between subject and object (p. 88), the author points out their Janus-faced nature. Indeed, the internal face of an intention, that is facing the subject, appears as an *experience* but its relational (not necessarily external) face of intention that is turned toward the situation, appears as an *action*.

The system of intentions, as a system of *experiences* and/or a system of *actions*, comprises special theories of action such as the subsystem of *motivation*, the subsystem of *decision*, and the subsystem of *orientation*. These subsystems are discussed in the last three chapters of the second part of the book. Each of the subsystems fulfils its specific task: orientation manages *uncertainty*, motivation manages *tension*, and decision manages *risk*. The interplay of these subsystems themselves "is managed by the system of intentions, which manages *in-authenticity* (p. 254).

In this case we are dealing with action constructed as *a system* on a functionalist basis. The author chooses the functional mode of explanation as the proper format for a theoretic endeavour in sociology despite the fact that it has been elaborated and successfully applied mainly in physics. According to  571 him, there is a certain similarity between its exact utilization in cybernetics, game theory, the theory of decision making, the theory of information and those functional formulations that are used in biology, psychology, economics and sociology. The functional mode interprets the activity of a system essentially as action, i.e. as "a distribution of certain amount of

energy through time and space" (p. 255). The action of a system is described in terms of its transition from state P to state Q along a particular trajectory. The key problem of a theory of action is to find a unique trajectory among all the possible ones by a method of searching for variables that maintain extreme values during the transition from P to Q.

Even though the author's functionalism may formally resemble Parson's procedure (a delineation of subsystems as well as a determination of boundary conditions between them, for instance), they are not identical at the very least in that they differ in their understanding of functional dependencies. While Parsons emphasises more the "serving" version of function, as used in biology (a part serves the whole), this author works with the "physical" version of functional dependencies, interpreted as relations between dependent and independent variables that can be also expressed mathematically. In any case I can state with satisfaction that Jung, like Parsons, approaches action as a system, applying to it the principles of systemic approach and cybernetics on the level of situated individuals whose activities are also *actions*; on the level of *interactions*, typical for groups of individuals; and on the level of *transactions*, which are typical for collectivities as aggregated systems. All three forms of activities are still formulated as various levels of the analysis of action (p. 88).

If we for a while pause to compare Jung's conception of action with other well-known versions (R. Maclver, F. Znaniecki, T. Parsons), it is worth noting that unlike the other scholars, Jung introduces the category of indefiniteness. However, his category does not refer to Heisenberg's principle of uncertainty used in post-classical physics. Jung develops his own approach to indefiniteness that is linked to space-time (208). In an original way he breaks in with a principle greatly favoured in modern American sociology of the "here and now" For the author, "here and now" are the anchors of certainty and the embodiment of the present in the way it is perceived by an individual, identifying itself as a "Self. Everything that is outside of the actual (the past and the future) falls under the realm of indefiniteness which comprises a whole range of appearances - from real to potential. It is not surprising that R. Glanville labelled this second part of the book *The Rape of Indefinite-*

ness, thus making Jung's conception even more deeply philosophical, which cannot fail to impress the reader. In his reflections on Spinoza's *Sive*, which he understands as "and/or else", Jung introduces the principle of "dual description  572 (or construction." This principle is critical in the evaluation of cybernetic systems, all of which have a Janus face (p. 146).

It is no coincidence if we have the impression of a sort of doubleness of author's position. On the one hand, the chapters of the book thematically and stylistically are in tune with the locution prevalent in current psychology and sociology. The titles of the studies themselves allude to this position. On the other hand, it seems as if the author continuously tries to withdraw from current schemes and to surprise us. He does so either through the introduction of a new theoretical sub-discipline in the form of phenomenological cybernetics or by using original formulations, which reveal the inner wrestling of the man of science against the man of letters who is deeply rooted in him. Jung is a notable writer as revealed by his Czech book *Postcards from the 20th century (Pohlednice z 20-tyho stoleti)*. But glimmers of his poetic writing are discernible already in the titles for the stages in a journey towards general systems theory, defined in the chapter *Postmodern systems theory*. To prove the breadth of his imagination, it is sufficient to name some of them, such as *Dream and wakefulness, Paradise lost and bacchanal gained, or Ephemeral islands of experience in a shore-less sea of indefiniteness*.

Nevertheless, Jung appears in his book not as essayist but as an exact scientist with a great sense of systematic thinking, who is able not only to adequately organise and classify his material, as testified by the many classificatory schemes and charts embedded in the text, but also by his ability to work his way to significant findings. From this point of view, the author is primarily valuable for a sensitive reader who would be able to appreciate the nearly exhaustingly systematic nature of his explication of demanding subject matters.

Even though this review is more or less limited to Jung's contribution to the theory of action, due to its greater sociological relevancy, I also have to draw attention to other relevant parts of Jung's book. Of special importance are those with methodological character, dealing with such topics as the na-

ture of explanation, logic of type construction, systems theory, and second-order cybernetics, the impact of which goes beyond the province of sociology. Considering the current deficit of exacting methodological literature of this kind, we should glowingly welcome Jung's extraordinary work with the hope that it will attract the attention of not only sociologists and psychologists, but also methodologists of science, specialists in systems theory, cybernetics, the theory of information, or the theory of decision making. However, in order to make the book accessible to a broader Czech and Slovak public, it would be wise to translate either the whole book or at least some of its parts into the Czech or Slovak language.

LITERATURE

JUNG, R., 2006: Talcott Parsons: vzpomínky na osobu a úvahy o díle. In: Šubrt, J., (ed.), 2006: Talcott Parsons a jeho přínos soudobé sociologické teorii. Univerzita Karlova v Praze. Praha: Nakladatelství Karolinum, p. 53-89.

Dilbar Alieva