From "Dialectica," Vol. 13, No. 3/4

Note sur la philosophie d'inspiration scientifique, J.-CL. PIGUET. Starting from the correlativity of the subject and the object in cognition, and from the modal character of all cognition, the author shows: (1) that "science-inspired philosophy" (e. g. Teilhard de Chardin) does not comply with the specific modalities of that correlativity; (2) that it hypostasizes and absolutizes either the subject or the object; (3) therefore that it unduly passes from science to philosophy, when it founds itself upon the idea either of an absolute subject or of an absolute object; (4) that it extrapolates on scientific results and is accordingly a false science; (5) that it ignores the specificity of philosophical investigation and is consequently a false philosophy.

In this notice, in which he refers to Maurice Gex and Raymond Ruyer, the author contents himself with criticizing negatively the way in which the "science-inspired philosophy" solves the problem of the relations between science and philosophy, without prejudice to a positive solution and without excluding the possibility of there being one.

The Logical Structure of the Scientific Method, J. K. FEIBLEMAN. If science is still taught by the apprentice method, it is because the scientific method has never been properly abstracted. Full abstraction discloses that there is only one scientific method. Although its employment in the separate experimental sciences is always mediated by extenuating circumstances, essentially the same set of procedures, conducted in approximately the same order can be discovered in laboratory practices. The scientific method is an on-going process, which nevertheless lends itself to analysis into six well-defined stages. These stages are: observation, hypothesis, experiment, theory, prediction and control. Each of these stages except the first emerges logically from the one before, and each except the last leads logically into the next. Observations are for the purpose of discovering hypotheses; and hypotheses are established in order to test them against fact by experiment, against theory by mathematical calculations, against the application of laws to future particulars by prediction, and finally against the application to practice by the control over fact. Hypotheses which pass these tests successfully are considered to be established, tentatively, as laws.

Dialectic—The Logic of Philosophy, G. E. MULLER. Dialectic defines itself as a unity of contrary and contradictory opposites; as such it is the logic of systematic philosophy in distinction from formal logic of object sciences. Systematic philosophy is the systematic destruction of all "systems". Every "system" "ism", or standpoint poses what it is by opposing what it is not, its own "other"; and vice versa. Every standpoint, and every facet of reality evident to it, gains its value in this critical self-limitation. Every one may be the immediate beginning or the mediated result of all the others; the symbol of dialectic therefore is the infinite circle.

Philosophy is dialectic reflection of (and on) all essential values of individual and historical human existence in reality. All philosophical disciplines are implied in and derived from this definition: philosophy of nature; the logic of sciences; self knowledge; ethics; aesthetics; philosophy of religion.

Epistemologically, the dialectical concept of knowledge is the "synthesis apriori" of subject and object (idealism and realism) and of rational form and irrational content (rationalism and non-rationalism) in process.

Existentially, dialectic is the ever-renewed attempt to balance contrary value-claims, and is the struggle for values against their contradictory negations.

Ontologically, self knowledge is grounded in the dialectical nature of reality of World-Itself, which discloses itself through self-knowledge as One universe in its Many dimensions; as eternal Being in its temporal, infinite individuations in nature and in history.

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Subjectivity in Whitehead, H. M. TIEBOUT, Jr. Whitehead's analysis of human selfhood does not involve a vitalistic reductionism. Whitehead does not derive his doctrine of the human self from a general cosmological analysis, but arrives at his general cosmology by generalizing from his description of human selfhood. Whitehead's cosmology is existentialist, rather than vitalist. A detailed study of Whitehead's analysis of the ontological factors in the concrescence of an actual entity shows many similarities to Sartre and Heidegger. Within this existentialist cosmology, Whitehead works out a distinctive doctrine of human subjectivity in general.

From "Inquiry," Vol. II, No. 1, 1959, Vol. 3, No. 1, 1960

Chance in Social Affairs, VILHELM AUBERT. For reaching decisions in various fields of social affairs, societies have institutionalized methods of chance. Three sociological types of chance phenomena are distinguished: random responses precipitated by ignorance, chance devices, and chance theories. Manifest and latent functions of these methods and theories are discussed, such as communication with the supernatural, innovation and creativity, representativity and equality and justice.

The Genetic Fallacy and Naturalistic Ethics, ROLLO HANDY. Naturalistic ethicians are often accused of failing to distinguish between (1) the origins and the developed nature of a moral rule or emotion, (2) analysis of meaning of ethical terms and a causal explanation of ethical facts. Further, naturalists are said to make the truth of falsity (validity or invalidity) of a statement depend upon genetic factors. It is shown that, while a naturalist may confuse these questions, there is nothing in his position which necessitates these confusions.

Notes on the Application of Formal Methods in the Soft Sciences, JENS ERIK FENSTAD. The criticism often levelled against mathematical logic to the effect that it is of little applicability, is largely justified when one considers the attempts which are made to apply it to whole branches of science (like biology etc.). Mathematical logic may, however, be of great use in formulating theories in various sciences, provided that it is applied to limited problems, and with the further provision that the calculi are simple enough to be handled by non-mathematicians. A simple calculus is introduced and possible applications discussed.

No. 2.

Thought and Action, STANLEY H. ROSEN. Commenting on Perelman's article (Inquiry, vol. 1, no. 2) the author criticizes Perelman for confusing important distinctions and heterogeneous elements in speaking of "the classical tradition (in philosophy) for which true knowledge and free action consist in conformity with an order existing prior to all human action", being the paradigm for virtuous action in contrast to the theories of marxism, pragmatism, existentialism and scientism which emphasize the priority of actions over theory. Various authors belonging to the classical, or rationalist, tradition are cited and differences between them noted. One must speak of various traditions of rationalism.

Reply to Stanley H. Rosen, CH. PERELMAN. "The superiority of action over thought is, in my opinion, simply tantamount to refuting that the truth of a statement should stem exclusively from intuition, self evidence or revelation, and to implying that elements furnished by practice, by decision and choice are involved in every knowledge. It is tantamount to asserting the superiority of practical reason which implicates the refutal of an outright separation between thought and action. My own purpose was to make a distinction between two great philosophical tendencies, neither of which, although diametrically opposed to each other, allows an adequate place to practical reason, seeing that the former slights the practice and the latter ignores reason."

Methodological Uncertainties in Political Science, JEAN MEYNAUD. The article is a summary of the author's recent book "Introduction à la science politique", Paris 1959. A survey is given of the main methodological problems in various branches of political science, including determination of its subject matter, political science vs. political sciences, the various types of political analysis, levels of explanation, mathematics and political science, political science and political sciences and applications of theory. It is concluded that the theoretical framework of political science should form a whole articulated with definitions, assumptions and propositions about some definite subject. It should present relations capable of being verified, utilizing the new tools of mathematics wherever it proves fruitful, without neglecting philosophical synthesis, which, however, should not lead to any neglect of empirical research.

An Inquiry into the Concepts of 'Reliability', 'Intersubjectivity', and 'Constancy', JOHAN CALTUNG. Non operational definitions of "reliability", "intersubjectivity" and "constancy" are given; the first two referring to instrument-constancies, and the third referring to empirical objects. It is shown how conclusions can be reached about these important properties of objects and instruments once we know whether the measurements can be said to be constant or not. The relation between object-, instrument-, and measurement constancy is spelled out as a set of closely related truth-functions to facilitate inferences about one of the three when we have (factual or postulated) knowledge about the two others. It is argued all through the paper that this is a kind of reasoning that often should be made more explicit in social science research.

The Alchemists of Sociology, ERNEST GELLNER. Discussing the recent book by Professor Sorokin, "Fads and Foibles in American Sociology", the author says "Indeed, Schopenhauer's classic abuse of Hegel will ever remain the model for those who fight academic pretentiousness. But let us be fair to poor Hegel: whatever his defects, by being turned up-side-down he gave rise to one of the most important sociological theories. So much cannot be said for the contemporary version: a ball of fluffy cotton-wool looks exactly the same any way up."

No. 3.

Aristotle and the Ambiguity of Ambiguity, K. JAAKKO J. HINTIKKA. Aristotle used the term "ambiguous" in various senses. Two different kinds of multiplicity of meaning, multiplicity of applications and homonymy, are distinguished and compared: Multiplicity of applications wider than homonymy. Homonymy equals accidental homonymy. Homonymy vs. synonymy (not really a dichotomy). Partial and complete discrepancy of definitions. Terms with several meanings vs. terms covering different cases. There seem to have been two incompatible tendencies influencing Aristotle's treatment of ambiguity. On the one hand, he was suspicious of every division within the field of application of a term and tended to classify terms whose field admitted of a difference in species with homonymous terms. On the other hand, Aristotle seems to have considered homonyms as fairly typical instances of ambiguity.

Methodological Suggestions from a Comparative Psychology of Knowledge Processes, DONALD T. CAMPBELL. Philosophers of science, in the course of making a sharp distinction between the tasks of the philosophers and those of the scientist, have pointed to the possibility of and empirical science of induction. A comparative psychology of knowledge processes is offered as one aspect of this potential enterprise. From fragments of such a psychology, methodological suggestions are drawn relevant to several chronic problems in the social sciences, including the publication of negative results from novel explorations, the operational diagnosis of dispositions, the status of aggregates of persons as social entities, and the validation of psychological tests.

On Worthwhile Hypotheses, HERMAN TENNESSEN. The function of certain ambiguous statements is that on one interpretation they express extremely audacious and on another interpretation a very trivial hypothesis. By oscillating between these interpretations the statement borrows audacity from one precization and tenability from the other. Various kinds of audacity and worth-

whileness are discussed: Factual triviality and tenability, factual audacity, practical audacity, formal audacity and formal triviality. In terms of concepts introduced, a theorem concerning the significance of an hypothesis in relation to the other hypothesis is put forth: an hypothesis ¹T is more significant than another hypothesis ²T if and only if the estimated product of ¹T's audacity and ¹T's actual tenability exceeds the estimated product of ²T's audacity and actual tenability.

Who Means What by "Synonymy"?, C. DOUGLAS MCGEE. The problematic situation of a professor who is going to investigate a natural language in order to find synonyms is discussed. Various criteria of synonymy are put forth and criticized. Nelson Goodman's extensional criteria in "On Likeness of Meaning" are found to be unsatisfactory and to break down in any concrete application of them.

No. 4.

Expectations and Interaction Purposes, JOHAN GALTUNG. The purpose of this article is to give an explanation of the two fundamental concepts of 'expectation' and 'interaction' in sociology. In order to achieve surveyability and perspicuity a system of symbols is introduced in such a way that the symbols denote sets and a class calculus can be employed, but for purposes of clarification and definition only. An effort is made to bridge the distinction between cognitive and normative expectation and to show a similarity between how these concepts are related and the way Quine analyzes the relationship between synthetic and analytic statements. The concepts are then built into a system of expectations of different order, and the apparatus is employed for a critique and analysis of the way in which Parsons introduces fundamental concepts like 'interaction', 'conformity' and 'complementarity'. At the end of the paper some comments about the use of symbols and artificial languages are made.

The Double Awareness in Heidegger and Wittgenstein, INGVAR HORGBY. Attention is directed to the "that" experience of Wittgenstein in the Tractatus ("Not how the world is, but that it is, is the great mystery"). This awareness of being is paralleled to Heidegger's ontic experience "das Seiendes ist". Comparison between these two thinkers is also made concerning the feeling of guilt, the relation to gnosticism, ethics and the ego. It is shown how this awareness of being qua being influences Wittgenstein's philosophy of language, in particular the distinction between saying and showing.

What Should We Say?, HERMAN TENNESSEN. This is a summary of empiriosemantical investigations concerning the use of such sentences as: Can we say x, should we ever (ordinarily) say x, is self-evident (tautological, contradictory, nonsensical), P does not know what he is talking about, x is voluntary (involuntary), and: that is no excuse. Any universal and categorical answer to the question of verbal preferences is bound to be either misleading or trivial. It all depends upon the purposes we have in mind, general and specific, when communicating with our fellow beings. And our current purposes and long term goals are again dependent upon an adequate inter- and intrapersonal communication.

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The Unanticipated Event and Astonishment, THOMAS MATHIESEN. Phenomena that are unanticipated or based on something unanticipated are often neglected by sociologists. 'Astonishment' is selected for analysis as one of the phenomena that are frequently based on unanticipated events. Especially when unanticipated events occur together with certain other social factors, astonishment is a likely reaction. Astonishment is further analysed in terms of some basic elements of social action: the reaction may be a *means* (especially of social control), it may be a conscious end in action, and it may be a condition in action.

Aristotle's Different Possibilities, K. JAAKKO J. HINTIKKA: The most important passages of An. Pr. I which turn on the distinction between the various notions of possibility used by Aristotle, are discussed. Insofar as an earlier analysis of the ambiguity of ambiguity in Aristotle was successful (Inquiry, Vol. II, pp. 137-151) the application of these results to the present investigation serves as a further confirmation of the earlier analysis. Aristotle's own definition of contingency establishes a connection between contingency and possibility proper: contingent is that which is (properly) possible but not necessary. If homonymy were tantamount to the absence of any common element in definition, contingency and possibility proper would not be homonyms. The fact that Aristotle calls them homonyms shows that there is more to his notion of homonymy than that.

Philosophy and the Analysis of Language. DUDLEY SHAPERE. Although the traditions developing respectively from Logical Atomism and the Tractatus shared several assumptions, they diverged at one fundamental point: whereas the former began with the conception of an "ideal language", aiming at some kind of information about "facts", the latter took the reverse course. The weaknesses of each view seem removable only by assuming the other, and this fact has led proponents and commentators to conflate the two views, and hence to overlook the basic circularity of at least the early analytic movement. These and other difficulties are exposed through examination of Ryle's "Systematically Misleading Expressions". It is shown how, from these assumptions and difficulties, later views of Wittgenstein, Austin, Carnap, Quine, and others have evolved, the same ambiguities remaining in new guises.

Austin on Knowing, PATRICK WILSON. Examination of types of statements about, and arguments based on, the way "ordinary people" talk, appearing in J. L. Austin's paper "Other Minds" (P. A. S. Supp. XX (1946). Their relevance to epistemological problems questioned. It is argued that: the accuracy of many particular statements is doubtful; the precise meaning of many is unclear; claims of subtlety of "ordinary" language are exaggerated; the remarks on ordinary usage of "know" are of dubious relevance in philosophy; the relationship between "ordinary" and "correct" usage is obscure; alleged dangers in deviation from ordinary usage are not shown to exist; alleged examples of such deviation are in fact not such; the analysis of "performatory utterances" is incomplete and unsatisfactory.