Scientific Contribution

Medicine as task – Karl E. Rothsruh’s philosophy of medicine

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Abstract. Karl E. Rothschuh is one of the most important, but, on an international scale, relatively unknown representatives of German philosophy of medicine in the 20th century. This paper presents and discusses his central concepts systematically, especially those of anthropology, theories of health and disease. Rothschuh distinguishes two methodological approaches to anthropology: a causal analysis that considers human organism as complex causal systems, and a so-called bionomical investigation that clarifies the meaning or function of single processes in respect to the whole organism. These two perspectives complement each other. From a naturalistic point of view, Rothschuh conceptualises diseases as disorganisatorial or disbionomic processes; nevertheless, he stresses the cultural interweavement, and, hence, the normative foundation of diseases. ‘Disease’ is both a relational and a gradual term: It can be experienced and conceptualised subjectively by patients (aegritudo), clinically by physicians (nosos, pathos) and by society (insalubritas). Further, Rothschuh differentiates between the very definition, a notion and a concept of disease. Because of the normative character of disease, medicine cannot be a science striving for pure theoretical knowledge like physics or chemistry. Medicine is a practical science, oriented towards its goals of healing. Because of the societal position of medicine, Rothsruh describes it as task (Aufgabe). With regard to modern developments in philosophy of medicine, this paper discusses Rothsruh’s theories critically and offers some starting points for necessary enhancements.

Key words: anthropology of medicine, concepts of health and disease, medical epistemology, mind-body problem, philosophy of medicine, systems theory, theoretical biology

Introduction

German philosophy of medicine is inextricably linked to Karl E. Rothsruh (1908–1984). Presenting himself as a historian and philosopher of medicine, Rothsruh contributed enormously to the theoretical reflection of health, disease, and human beings as subjects of medicine in the 20th century. He gained a respectable reputation during his lifetime, and left behind an opulent work that consists of several monographs as well as numerous essays. Today, however, Rothsruh is rarely mentioned. His name has disappeared from most contemporary fields within the philosophy of medicine; one reason for this being the desolate state of translation. Among his writings, only The History of Physiology is available in English. Furthermore, some parts of his theoretical framework have been overtaken by current developments in cybernetics, systems theory, philosophy of mind, and philosophy of medicine meanwhile.

Despite the fact that Rothsruh’s theoretical system has partially lost its actuality, and although some of his thinking needs to be revised with respect to the contemporary state of knowledge, this essay attempts to present, to recapitulate, and to discuss critically some of the foundations of Rothsruh’s proposals for theoretical medicine. The focus is thereby directed to philosophical and anthropological fundamentals of medicine. Rothsruh’s theory of the organism serves as the starting point. This scientific anthropology offers a theoretical framework for his concepts of health and disease, which will be elucidated subsequently. Rothsruh’s estimations of the position of medicine will be concluded with some critical remarks on the possibilities, deficiences, and scope of his concepts. This presentation shall enrich some theoretical debates in contemporary philosophy of medicine to assess the significance of Rothsruh’s work in contemporary philosophy of medicine.

1. The idea of theoretical medicine

Rothschuh’s career was not straightforward. This is evidenced by the fact that he had multiple occupations throughout his life. He began as a farmer, moved on to being a physician, and then turned to physiological research. He finally settled down in history of medicine.
by founding the Department for History of Medicine in Münster, which he thereafter worked to build up.

Rothschuh was genuinely convinced of the importance of philosophical reflection on medicine. His early works are mainly influenced by the Jewish German physician and philosopher of medicine Richard Koch. Noteworthy here is, that Rothschuh concealed this connection during the Nazi regime. In 1936 he proposed to establish a new discipline, namely theoretical medicine, in order to investigate the theoretical presuppositions and moral values of the field (Rothschuh, 1936). The theory of medicine is, accordingly, no end in itself; it shall reflect the theoretical foundations of medicine as a means to guide the actions of physicians. Rothschuh strictly demarcated a more speculative or even irrational philosophical medicine – grounded in its author’s personal points of view and values – from a theoretical medicine bound to scientific methods. Major subjects of the latter include epistemological and methodological questions of clinical medicine, the mind-body problem, the theory of the organism as scientific anthropology, theoretical pathology as theory of health and disease, and medical ethics.

2. Theory of the organism as systematic anthropology

Diseases are both natural and cultural phenomena. For Rothschuh, the analysis of disease presupposes a theory of the organism provided by a systematic anthropology. This discipline is neither speculative, nor philosophical nor theological, but empirical, and it strives for a scientific investigation of human beings as natural and cultural existents. So the starting point of his theoretical anthropology is the many-sidedness of men that requires the application of several scientific methods and concepts. “(1) Man is pure organism (body), (2) purely experiencing being (mind), and (3) the bearer of psychosomatic interactions. This human being is exposed to environmental changes (4), which affect his body, and (5) he underlies the influences of his social and cultural environment, his ‘Mitwelt’, that forms him through interactions” (Rothschuh, 1965, p. 59).

We must realise here that the environment is not a static, pre-given factor. It exists rather in correlation to an organism. In accordance with the theories of Jakob von Uexküll, a German biologist (1864–1944), Rothschuh differentiates between Außenwelt, Umwelt and Mitwelt: The first of these terms comprises features of the terrestic milieu, which exist independent of the organism, e.g. the climate or atmosphere. Different organisms are not susceptible to all stimuli of the Außenwelt. For example, human organisms have no receptors for radiation. The Umwelt is that specific part of the Außenwelt with which an organism interacts through its manners of perception and action. Each Umwelt fits to the capacities and needs of an organism. Therefore, Umwelt is more a subjective than an objective term. Rothschuh states it in two-fold relations: The Umwelt is appropriate (geeignet) and the organism assimilated (eingepasst). Finally, Mitwelt covers the societal aspects of an organism’s Umwelt. The next step to Rothschuh’s theoretical anthropology is the delineation of two methodological approaches to the organism: the causal and the so-called bionomic.

3. Causality versus bionomy

First, the organism can be investigated in terms of causality. Rothschuh defines a causal nexus as an inter-objective, constant relationship between cause and effect, which takes place with necessity. Causality is deterministic and relies on natural laws. The coincidence of certain causes or conditions always provokes the same result. Hence, a statement of a causal relationship allows the predicting of effects from a particular constellation of causes. Causal connections can occur with different complexities. Rothschuh distinguishes simple linear and complex causal connections and causal systems. In human organisms, uncountable causal processes are linked simultaneously and successively together with the result that an organised causal system arises. This causal system is marked off with a boundary, the cell membrane, and it is able to interact with its environment. In accordance with the terminology of L.v. Bertalanffy (1901–1972), an Austrian biologist, Rothschuh describes the human organism as a partly open causal system that holds a dynamic equilibrium to its Umwelt.

Rothschuh names the analysis of biological processes under aspects of causality as biotechnical perspective. He believes that this biotechnical approach is predominant in modern medicine. In the light of the biotechnique, the human organism appears as a complex causal system or machine where every process takes place with a blind deterministic necessity.

But a biotechnical investigation of the human organism remains one-sided, because it does not take into account the special order in which causal processes take place in. “The organism is not only a system of causally operating parts and processes, but a structure (Gefüge) of organized causal processes containing units of function” (1965, p. 99). In this context, Rothschuh explains structure (Gefüge) as a non-accidental arrangement of elements, which are