

The bio-psycho-social model and its potential for a new theory of homeopathy

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Introduction

As everybody may agree, modern science is a mighty tool for solving problems in many fields and aspects of our lives. We all benefit from the facilitation that scientific progress has provided for each of us, from electric light to modern means of transportation and communication. And we are aware of the many prestigious discoveries in cosmology and atomic physics, by means of astronautics, space telescopes, or particle accelerators. On closer inspection, however, many achievements and applications of modern science turn out to be not only advantageous for humanity, but also involve risks and perils, as, for example, with nuclear energy. In fact, the more harm uncontrolled scientific technologies inflict on living beings, the higher the need for medical science to repair the collateral damage and potential backlash of scientific advance on human beings, as well as on the flora and fauna of the planet.

Conventional modern medicine, however, relies upon the very same principles and methods as the neighboring fields of science. To be sure, it has distinguished domains of competence and excellence, for example epidemiology, bacteriology, pharmacology, etc. It is strong and convincing wherever medical problems can be approached by way of generalization, quantification, and statistical recording. Just as physicists or chemists, conventional medical scientists methodically confine themselves to searching for generally accepted natural laws, preferably in terms of causality, mechanism, economics, and efficiency. They try to explore diseases, effects of medicines, and correlations between parts of the body, as if these were neutral objects or entities, existing independently of a particular context. Ensnared by spectacular successes in controlling and commanding life-threatening conditions of the organism and in measuring and manipulating ever smaller structures and functions of cells, genes, and molecules, indeed most scientists, technology writers, and lay persons today are highly tempted to conclude that probably everything in medicine can be explored in such a manner – if not right away, then at least some day in the future.

Conventional medical science

This widespread attitude of a generalized positivism of science, can however be challenged in a multitude of ways and in fact proves to be untenable, if examined systematically. Trying to put the critical arguments and objections in a nutshell, we might say, modern science suffers from a forgetfulness of its own genesis, an unawareness of its blind spot, or an illusion of its autonomy. The problem is that scientists are prone to forget that what they are doing is much more than just recording measured data. This can be and in fact is done by robots and computers as well. Yet, running a science is a human activity which presupposes human subjects, who are never confined to passive absorption and adaptation to allegedly objective external conditions, but are always also constructing and interpreting the world around themselves. Running a science, therefore, is by no means a neutral innocuous job, but inevitably has utmost practical and ethical implications.

Philosophically speaking, human knowledge is always reliant on underlying notions, concepts, and paradigms, which are brought into play by human minds. But at the same time human knowledge is always in danger of being misled, distorted, or adulterated by the notions, concepts, and paradigms employed. Science, especially modern science which

emerged some 300 years ago and has been dominating conventional medicine for 150 years, traditionally tends to fixate on a canon of methodical rules and laws. Rather than constantly considering their scope and limits, modern medicine tries to explain as much as possible by means of reduction, subsumption, and generalization.

On the other hand, philosophy, poetry, and art, as well as history and theory of science, are continuous attempts to rebuff, oppose, and disapprove the superiority and exclusiveness of predominant paradigms and mindsets. They usually try to open up new spaces, create new categories, or claim new liberties to enable the appearance of phenomena which otherwise would not emerge on the horizon and become visible or perceptible at all.

The topic of a forgetfulness of its own genesis on the part of modern science is not a merely theoretical issue, but is proving to have crucial practical relevance. This shortcoming is the origin of many of the problems medicine is facing at present. Modern scientists who for example are trying to explore the memory of human body and soul, are bound by the scientific method to look for putative objective entities, such as biomolecular engrams, chemical transmitter substances, neuronal flows, brain structures, or the like. They take an offish look at someone else's body. But it is an exoteric view from outside, the pretentious attitude of an allegedly neutral observer on an allegedly distant object. The inner dimension of what we call memory, its function, meaning, and dynamics, however, cannot be said to be understood by merely enumerating its necessary physical and chemical conditions. At this point, the category of subjectivity, although long-neglected by scientific medicine, claims its legitimate constitutional place in medical theory.

Introducing the “subject” into medicine

During the last century, significant attempts have been made to introduce the “subject” into biology and medicine. Nevertheless, there is no evidence that up to now this project has unsettled the conventional model of mainstream medicine to any considerable extent. Certainly, introducing the “subject” into medicine never meant just adding another term to a traditional set of tools and concepts, but rather a paradigmatic change, that is to say, a revolutionary deconstruction and reconstruction of the fundamental scientific framework.

For centuries, in the wake of Descartes' definition of animals as mechanisms and La Mettrie's reification of human beings as machines, even the so-called life sciences applied the very same criteria of scientific research as physicists or chemists used to do. The latter, however, are dealing with dead objects, such as masses, forces, pressures, etc., while the former ought to be in charge of the phenomena of the living. Generally speaking, every branch of scientists tried to reduce the whole world, the animated as well as the inanimate, to mechanical, physical, chemical, mathematical, or statistical laws and causal connections. This had, and still has, a tremendous impact on modern medicine, on our concept of man, and on homeopathy.

The ordinary view of man today is determined by the way conventional scientific medicine examines his parts and functions. Accordingly, human beings are deemed to be complicated mechanisms, health is deemed to be their regular and efficient function, and disease is deemed to be their failure, that can be objectified by measured values. As a corollary of the scientific method, drug effects are deemed to be causal impacts on the body, such as chemical reaction, physical suppression, or material substitution. To come to the point, in the conventional scientific approach no difference is made between the causality of drug action in vitro and in vivo. The substance is deemed to execute its determined effect with or without the subject of the patient.

Taking this setting of coordinates and variables as a basis for the assessment of any kind of medicine, it is clear what, for example, homeopathy will look like. According to evidence-based medicine, the all-dominant tool to implement modern scientific standards in medicine at large, homeopathy as a rule proves not to fulfill the criteria of biomedical technologies which can be standardized, quantified, and statistically determined. In a naïve manner of conclusion, this verdict by leading medical authorities may sound to a wide public as if homeopathy had proven not to be scientific at all. In reality, it discloses nothing but an incompatibility of the conventional scientific method on the one hand and the practice and art of homeopathy on the other.

This result, in turn, may be interpreted as evidence of failure of the conventional biomedical paradigm rather than a disproof of the homeopathic method of healing. The challenge for homeopaths, therefore, would rather be to find and establish an own scientific theory than to adapt and comply with external standards of conventional medicine. Moreover, the challenge for medicine at large would be to develop a theory of medicine which is wide enough to explain both what conventional and what homeopathic doctors are doing. To be sure, both schools of medicine treat living beings. Hence, any theory that does not imply specific phenomena of the living, such as subjectivity, relationships, and communication, is doomed to fall far short of real life.

The bio-psycho-social model of man

In search of a theory of medicine which is comprehensive enough to also provide a conceptual framework for homeopathy, we may find a valuable key in the work of the German physician of Baltic origin Thure von Uexküll (1908–2004), in the 20th century one of the protagonists of the attempt to introduce the “subject” into medical theory. Since the 1950s, Uexküll distinguished himself as one of the founders of psychosomatic medicine in Germany, suggesting and elaborating the so-called bio-psycho-social model of human beings. His basic idea and vision was to establish a scientific model of man which on the one hand overcomes the reductionism, mechanism, and materialism of the conventional scientific method and on the other enables us to understand the human being as a unity in various aspects: for example a unity of different levels of existence, such as vegetative, animal, and mental functions, but also a unity between organism and environment, in short between subject and object.

In conventional science, neither physiologists, psychologists, nor sociologists are considering the entire human being, but instead each of them is exclusively applying the method, concepts, and paradigms of his specific field, thus observing different things and talking another language to that of his colleagues. Contrary to that, Uexküll tried to base his theory on categories broad enough to be applied to all of the different layers, dimensions, and relationships of the patient. To this end, he utilized cybernetic, semiotic, and constructivistic concepts of systems theory. These approaches were developed in control engineering, linguistics, philosophy, and sociology, but not yet introduced into medicine.

Preliminary work, upon which Thure von Uexküll could heavily draw, had already been done by his father, Jakob von Uexküll (1864–1944), a German-baltic zoologist and pioneer of theoretic biology. He was born in Estonia, went to school in Reval (Tallinn), and graduated from the University of Dorpat (Tartu). Inspired by his studies of Immanuel Kant (1724–1804) and German and Baltic romantic naturalists, like Johannes Müller (1801–1858) und Karl Ernst von Baer (1792–1876), at the beginning of the 20th century he introduced the concept of a “functional cycle” and that of a “specific environment” of animals, challenging the traditional supposition of an alleged objectivity which was said to exist independently of particular subjects.

Long before modern constructivists and neuroscientists started to claim that what we call reality is an image, idea, or illusion rather than an objective invariable world which would be one and the same for everybody, Jakob von Uexküll came to similar conclusions by means of his experiments with sea urchins and other marine and terrestrial animals. He demonstrated in an impressive way that every living being constructs and therefore has and commands its own subjective environment. How for example the environment of a tick (*Ixodida*) feels or looks like, can be deduced from its sensory and motoric organs. The tick can only perceive and react to the sensual qualities of warm or cold, up or down, and, is butyric acid present or not? Accordingly, only such information has a meaning for the tick, while anything else is meaningless, not perceived at all, and thus, never becomes part of its subjective environment.

Apparently, different animals attach different importance to phenomena that they perceive. But even the same individual may attach great importance to something only for a limited time, while at another time the same thing is considered to be unimportant. This difference in assessment depends upon the animal's inner state. When hungry, potential foodstuff gains the highest meaning within the perceptible world. When looking for a sexual partner, however, the perception focuses on different things, thus forming another subjective environment, as long as this preference lasts. The difficult point to understand here is that nobody can really know about anything like a neutral objective reality in which all animals would live and interact. Instead, each one is living in its own subjective environment, which is the result of a permanent construction process, depending on one's own prevailing inner state.

The basic unit of living, therefore, may be conceptualized as a "functional cycle", consisting of a sensory and a motoric branch, with a circular process. According to its needs, the organism perceives signs from his environment to which he attaches a meaning and reacts in a way that affects and alters these signs, so that their meaning and thus the organism's environment change. Contrary and complementary to conventional causal-mechanic explanations, this new approach to understanding the interactions between animals and their specific environments is based on the concept of subjectivity. Hence, it is hermeneutic rather than deterministic.

Thure von Uexküll, carrying on his father's innovative and promising approach toward a scientific comprehension of the living, elaborated this basic model of a "functional cycle" for the setting of human beings and supplemented it with the concept of a "situational cycle". Apart from an increasing complexity regarding additional psychic and social levels to consider, as a major distinction of the human condition he considered the possibility of the human mind, instead of directly responding to perceived signs, to merely imagining a situation and, so to speak, behave in rehearsal, without running a risk. To describe this specific human option in terms of systems theory, he coined the concept of a "situational cycle".

The real strength of the bio-psycho-social model of man, however, lies in the capability to overcome the theoretical as well as institutional separation of physiological, psychical, and social problems of a patient. No matter which level of existence one is considering, be it biological cell function, interaction of organs, psychic communication, or social relationships, the semiotic model of attaching, processing, and transforming meaning of perceived signs and thus continuously reconstructing one's subjective environment, proves to be applicable in all cases. Since each cell, organ, organism, etc. has its own environment, its own order of importance, and its own code to detect and process meaningful signs, interactions between different systems or layers have to be interpreted as translation processes (from one system of codes to another) rather than causal-mechanic effects, which in the psychological and social dimension have no explanatory power, anyway.

The consequence of this model of semiotic and cybernetic processes underlying the permanent reconstruction of our environment is that everybody is living in his own individual reality. Construction of a common reality is possible (e.g. between doctor and patient), but needs extra communication and translation of signs between the individuals and their subjective environments. To make things more complicated, each unit of a subject and environment also has its individual history, starting at the point in early infancy where the basic unity had separated for the first time, where both subject and object came into being, emerging out of non-existence, and came into the world.

Tracing back the development of the self, its senses, its first impressions, feelings, and conceptions, to the point where the systemic processes described in the bio-psycho-social model were not yet running, but still had to be created and initiated, Uexküll uses the German term “Stimmung” in order to characterize this original state at the fringe of scientific language and notions. This notion cannot easily be translated into one single English word, due to its many facets, such as mood, atmosphere, general feeling, sentiment, tone, or tuning.

Thus, a kind of tuning would be the precursor of any unit of communication, as the minimal form of being. Later, by means of socialization of the new born child, this pre-verbal experience will gradually be translated and transformed from a vegetative, to animal, and the human level, when strategies and programs of perception and activities are generated to solve problems. Conversely, even in adulthood any bio-psycho-social state or conflict will always be constituted by a reproduction and realization of this original individual “Stimmung” and its destiny within the biography of the patient.

The relevance for homeopathy

This wording, which in other respects is not customary in conventional hard-core science, may remind us of the well-known definition of disease which Samuel Hahnemann (1755–1843) some 200 years ago had introduced while attempting to provide a tentative theory of his new science and art of healing. Disease, he said, is a detuning or derangement (“Verstimmung”) of the life force, thus using the root of the same German term “Stimmung”. Accordingly, healing would be the leading back of the detuned life-force into its original state of tuning.

When Hahnemann tried to explain to his contemporaries in theoretical terms what he had found and what he was doing practically, the medical theory of his time was just about to abandon traditional notions and concepts, such as semiology, teleology, and vitalism, and to embrace modern ideas and programs, such as causality, mechanism, and materialism. Hahnemann, living and operating at the interface of two unequal epochs, availed himself of inhomogeneous components of medical theory in order to connect to the scientific discourse of that transitional period. This is why some of Hahnemann’s conceptions today seem antiquated and outdated, some modern and progressive, and some postmodern, revolutionary, or even perennially valid.

Homeopathy at large, however, is still left wanting for a consistent and conclusive theory. In fact, due to the lack of awareness of its theoretical roots, homeopaths easily tend to capitulate when exposed to criticism and try to comply with the demands of what they think is current scientific standard. To prevent being alienated from one’s own practical experience by inadequate theoretical objections, however, a good understanding of the strength and weakness of the respective theory is required. With the bio-psycho-social model of man today most of the refutations on the part of conventional scientific medicine may be rebutted. That way, a new self-confidence and contentment could arise amongst homeopaths whenever they

become aware that what they are doing in practice is in full accordance with the most coherent, significant, and up-to-date model of medicine.

As long as one clings to the conceptual framework of conventional medicine, it is virtually impossible to make sense of most of the traditional homeopathic terms and concepts, such as life-force, detuning, dynamic action, semiology, idiosyncrasy, etc. However, since they can all be translated into the language of the bio-psycho-social model and understood and verified within its set of categories, the problem lies more on the side of conventional medical theory than on that of the homeopathic method and practice. To be sure, in order to avoid notorious misunderstanding and misinterpretation, homeopaths would be well advised to consequently avoid Hahnemann's misleading terms and henceforth substitute them by theoretically consistent expressions.

Developing a new theory of homeopathy

Some examples may illustrate the potential of the bio-psycho-social model (BPS model) for a new theory of homeopathy.

- Terms and concepts such as life-force, life-principle, or vitality are incompatible with the methodological reduction of conventional medicine on mechanism, materialism, and positivism. In the BPS model, however, there is no problem in admitting this kind of constitutive dimension of all living phenomena. In fact, its entire theory is based on it. To be sure, for theoretical reasons, it is much better to call it intentionality or "subjectivity". Conceptualized as autopoietic programs or control loops this term can be more easily connected to other sciences.
- Individual differences in the susceptibility, constitution, and disposition of patients are a fundamental problem for conventional medicine, whose major methodological tools are mean comparison tests on the background of the paradigm of cause-effect-impacts. The fact that human individuals, according to their present state and personal history, respond differently to one and the same substance, however, gets its full assertion in the BPS model with the basic semiotic process of "functional cycles". According to one's inner state (including the memory of past stages of one's individual development), a patient may at one moment attach high significance to one particular remedy, while at another time, according to his changed state, attaches highest importance to another. A Staphisagria state may not last forever, but might change to a Pulsatilla state, for example.
- While in this case conventional science would either be focused on supposed causal effects on the level of molecular biology or jump to psycho-social imputations, such as hypochondria, auto-suggestion, or placebo-effect, in the BPS model the patient is consequently considered as a unit and his reaction towards a remedy is understood in a uniform (semiotic and cybernetic) way, covering all his layers of existence simultaneously. Contrary to the conventional paradigm, according to which without material substance no drug effect would be possible, in the BPS model even the controversy about ultramolecular dilutions is irrelevant, because its starting point is not a putatively objective world of matter, but the subjectivity of the patient who attributes and processes subjective meaning to whatever phenomena he likes or needs, be it material or immaterial information. Not the remedy acts, but the patient! And anyway, he at least has to be accepted as real.
- To make this last point as clear as possible, it should be considered that the terminology of medicinal "potencies", pathogenic "agents", or morbidic "influences" is highly misleading. It rests on the conventional materialistic assumption (from which even Hahnemann could not disengage himself completely), that external entities have causal effects on the patient. Apart from overwhelming physical or chemical impacts, as by mechanic violence or highly dosed

suppressive drugs, however, in regulatory therapies without the subject of the patient remedies would not at all be involved in the “functional cycles” which at every moment constitute the present state of the patient. Strictly speaking, not the germ is the protagonist, but the individual subject is the “agent” who falls ill when exposed to certain things that he associates with morbidity. And not the remedy causes the cure, but the individual subject has the “potency” to react to particular perceptions and meanings of drugs by way of aggravation, amelioration, or healing.

- Although on the one hand Hahnemann did use these conventional terms, which obscure rather than elucidate his truly phenomenological approach, on the other hand he untiringly emphasized the so-called “dynamic” or “spirit-like” interaction between patient, pathogen, and remedy. Although his concept of “dynamic” was still vague and blurred, it was absolutely clear to him that homeopathic healing transcends the categories of conventional physical, chemical, mechanical, material, or atomistic thinking. All the more today’s homeopaths should not relapse and waste resources in arguing against conventional causal-mechanical objections and concerns. In spite of its complexity, the dynamics of the semiotic processes underlying drug proving and the art of healing are perfectly represented in the BPS model.

- To give an example from our life world: If single individuals feel sick after looking at a certain picture on the wall, it is not about a causal effect by the picture that could be reproduced in double-blind studies or the like, but it is the individual sensitivity, disposition, history, etc. of the patient and his particular dynamics of attaching and processing meaning to the phenomena he encounters, that tips the scale. Interestingly, Hahnemann literally speaks of “psychic organs” (*Organon*, §§ 215f.), indicating that he consciously used the same terms and concepts to explain dynamic action on the physical as well as on the psychic level. For conventional medical theory this mix of notions and levels might be a nuisance. In the BPS model, however, it is understood in principle that the dynamics of the subject are the same in all dimensions. Hence, the use of analogies is definitely justified.

- For Hahnemann the aim of the homeopathic treatment was to restore the patient’s health, more precisely, to bring him back to the original state in which he was to be found in his healthy days. Importantly, Hahnemann did not mind whether the recovered patient became mild or rough again, good or bad, bashful or shameless, etc. (*Organon*, § 210). Contrary to conventional academic science whose traditional job has always been to establish generally valid criteria and rules to impose on everything and everybody, Hahnemann’s appreciation of the irreducible individuality of the patient’s identity almost irrefutably makes him a forerunner of the BPS model. Ahead of his time, rather than proposing abstract normative ideas of health or the like, Hahnemann was aware that each subject has an individual kernel or tuning which cannot be changed by therapeutic means.

- The BPS model explains why and how every individual, together with his subjective environment, emerges from a basic tuning (“*Stimmung*”) in early infancy, which in turn will accompany the person in any subsequent state experienced throughout his life. Regardless whether the nascent being originally felt frightened, relaxed, curious, greedy, etc., as long as the adult manages to keep his genuine subjective environment coherent, he is healthy. Every subject will forever try to harmonize (“*abstimmen*”) his first imprinted state with the situations and phenomena with which he will interact in his later life. Disability to adjust and match one’s own individual tuning and one’s subjective environment, would result in disease. If we translate Hahnemann’s awkward notion “*life-force*” into the dynamics of functional and situational cycles connecting the subject with his environment, we find his basic concept expressed in updated scientific language.

- Finally, major theoretical positions of Hahnemann, like his teleological, deistic, and semiotic reasoning, will remain incomprehensible as long as they are assessed from the view

of conventional scientific thinking. From the perspective of the BPS model, however, it does make sense when Hahnemann maintains that the only scientific approach to the patient's state is through the physician's perception of his signs and symptoms. Also his painstaking practical directions concerning drug proving, case taking, and follow-up can hardly be appreciated against the background of conventional medicine, which for intrinsic reasons would willingly confer this labor on questionnaires, checklists, and machines. With the BPS model, however, it can be understood and demonstrated, that semiotic cycles are omnipresent and that doctors have to be aware of them, in their empathic relationship to patients as well as when watching the interaction between human beings and the remedy they require.

Conclusion

To conclude this fragmentary list of examples of how the bio-psycho-social model of man could boost homeopathy's long-neglected task of developing a new scientific theory, it may be remembered that theory is not just theory and practice is not just practice. Without always considering the other as well and being aware of the basic unity and dynamic connection of all dualities, as the bio-psycho-social model suggests, we would never understand in scientific terms the fundamental interplay between theory and practice, between subjects and their environment, or between the patient and the remedy. To be sure, Hahnemann obviously understood these things in his heart. In fact, the practical directions he found and established for the homeopathic art of healing, out of a mixture of intuition, reasoning, and directed experience, can hardly be topped, even after 200 years.

Nevertheless, the theory of homeopathy is still lacking coherence ("Stimmigkeit") and conclusiveness. It consists of a wide range of different concepts and contains components of contradictory paradigms. What homeopathy really needs, is a revision of its theoretical armamentarium, in order to meet the demands of the day, to be able to present itself as a legitimate science, to connect to neighboring fields, and to communicate on a par with these. As the history of medicine shows, theoretical consistency, plausibility, and persuasiveness are the basis for social, political, and institutional recognition. As has been outlined in this paper, all these aims might be achieved by adopting the bio-psycho-social model of man as a solid conceptual framework for a new theory of homeopathy.

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