https://doi.org/10.53656/phil2024-03-03

FUNDAMENTAL UNCERTAINTY IN CLINICAL JUDGMENT: A PHENOMENOLOGICAL PERSPECTIVE

Prof. Alexander Gungov
Sofia University

Abstract. From a phenomenological perspective, clinical practice features a special type of uncertainty that in the present article is characterized as "fundamental uncertainty." Unlike routine uncertainty and acrisia, the fundamental uncertainty is due to the abductive reasoning inherent to the clinical process. This type of reasoning differs from deductive necessity and inductive probability in the direction of "the best explanation." In the light of "the best clinical explanation" and "the optimal clinical action" the four stages of clinical practice: anamnesis, diagnosis, treatment, and prognosis are viewed. Their interconnection within a teleological and reflective circularity is underlined. The intersubjective character of the transcendental constitution of all stages of the clinical process is taken into account.

Keywords: fundamental uncertainty; abduction; clinical practice; teleological circularity

1. Pre-Phenomenological Uncertainty

Our phenomenological interpretation will be made from a special type of uncertainty common to clinical procedures, *fundamental uncertainty*. It should be differentiated from other types of uncertainty such as *acrisia*, which is a rare condition of the absence of determinable clinical symptoms or signs that leads to an undecided and uncertain character of a patient's disease in terms of diagnosis and prognosis. More common than *acrisia* is *the routine uncertainty* due to insufficient personal knowledge or scientific evidence, limited practical understanding or competence, and challenging interpersonal relationships. The routine uncertainty can be overcome by routine means such as the RAPS framework (recognize, acknowledge, partner, and seek support) (Patel et al. 2024, pp. 829 – 836). Trisha Greenhalgh provides a more detailed description of the routine uncertainty, "First, there is uncertainty about the evidence – the 'voice of medicine' dimension of the consultation, for which the key questions relate to the completeness, accuracy and relevance of research-based evidence and on the balance between potential benefits and potential harms. Second, there is uncertainty about the patient's story – the

'voice of the lifeworld' dimension, about which scholars of narrative medicine have offered much sound advice. Third, there is uncertainty about what best to do for a particular patient given a particular set of circumstances; this kind of uncertainty includes the philosophical question of how tacit knowledge informs clinical judgement. Finally, there are the many uncertainties (and associated threats to quality and safety) that inevitably arise when clinical care becomes a collaborative endeavour in which human-human, technology-human and technology-technology interactions all loom large" (Greenhalgh 2013, p. 54). Those three domains of routine uncertainty are spread among four principal clinical methods or approaches to clinical judgment, "(a) evidence-based medicine, which considers uncertainty in probabilistic (Bayesian) terms; (b) narrative medicine, which considers uncertainty in terms of the open-endedness of the story form and the creative space in which storytelling is performed; (c) medicine as case-based reasoning, which considers uncertainty in terms of situated ethical judgements and tacit knowledge (and which, I feel, overcomes many of the limitations of evidence-based and narrative-based medicine); and (d) multi-professional care, which considers uncertainty in terms of how knowledge, reasoning and action are spread across a network of people and technologies" (Greenhalgh 2013, p. 39).

2. The Relevance of Husserl's Phenomenology for Clinicians

Unlike acrisia and the routine uncertainty, the fundamental uncertainty is not a cognitive, practical, or any other type of clinical deficiency. As Dr. Elena Goranova[1] profoundly observes in a private letter, "The uncertainty stems from the fact that medics counteract the natural processes of disease and aging." And I would add that physicians counteract not an abstract destruction of the alive biological matter, but a destructive process within human life, which is always not just biological, not just individual but rather interpersonal. This is the reason why the fundamental uncertainty is a substantial inherent element of any clinical practice. This is an abductive uncertainty, which differs from both deductive necessity and inductive probability. It is easily discoverable when approached from a phenomenological position. In what follows, we offer an outline of variations of clinical uncertainty in the four stages of the usual clinical process: anamnesis, diagnostics, treatment, and prognostics, as well as in the two aftermath stages of monitoring and prevention.

If we assume the theoretical (and practical) position of Edmund Husserl's phenomenology, we discard the naturalistic prejudice of an independent reality. Reality, including clinical practice, is always given to us within our consciousness; that is, we obtain access to it via the intentionality of our consciousness. Everything in the world is a result of the constitutional activity of our consciousness in the process of an active or passive intending to something. Nevertheless, we do not lose objectivity, becoming isolated within our own subjectivity, but rather elevate the status of objectivity to *consciously constituted* in the form of *noema*. *Noema* as conscious

objectivity is one of the poles of the intentional complex – the other one being *noesis*, or conscious activity. *Noema* and *noesis* are not separated by a gap but imply each other and can exist only as interdependent *moments* of unity of consciousness.

The image of an independent world is put in brackets, that is, transformed through phenomenological reduction to a *noema-noesis* complex; this procedure is also given the ancient Greek term *epoche*. Phenomenological reduction goes hand in hand with transcendental reduction, which means that consciousness is not a container full of ideas but a specific activity, that is, a necessary condition for the existence and cognition of the universe. Transcendental reduction allows the common sense *empirical I* (the I of the clinician and of the patient) to be preceded by the *transcendental Ego*, which is a necessary condition of the former.

Constitutional activity is carried out either as *empty intentionality*, that is, signification, or as *fulfilled intentionality*, named *intuition* by Husserl. Intuition in this sense has nothing to do with an irrational or supranatural insight but rather indicates the fully-fledged presence of a certain objectivity unlike the significance of the empty intention where objectivity is just marked or indicated but not present in its flesh. Every objectivity is characterized by some kind of *evidence*. Here, evidence means *ontological presence* and *cognitive/logical truth*. A recitation of the usual signs and symptoms of seasonal flu by a medical student or a novice physician would be an empty intention of signification, whereas the features of a patient whose illness can be subsumed under the nosological unit of flu by an experienced clinician would be an example of intuitively fulfilled intention.

The constitution of any objectivizing intentionality proceeds in time. Temporality is the intrinsic structure of the constitutional activity of consciousness. Through temporality, any constitution of objectivity, perceptional, recollective, imaginative, reflective, etc., unfolds in a teleological manner. It carries out the goal or telos of the specific objectification drawing upon the fundamental teleology of the transcendental Ego (backing the empirical I or personality of every clinician). Teleology develops in multiple circles between an object as it is given (a patient's symptoms, signs, and findings preceding any interpretation) and this object as it should be (the same patient's symptoms, signs, and findings after a knowledgeable and experienced interpretation). "An object as it should be" is the *tetic object*, which, in general, is the true object and in the clinical practice is *the most adequate* or *the most appropriate* diagnosis. The teleological constitution of the conscious objectivity proceeds in circles because the *tetic object* is the original *object as it is* but on a higher level of ontological and cognitive reality featuring clearer, more adequate, and, in some cases, apodictic evidence. The original *object as it is* returns to itself as the *tetic object*, that is, as its circular telos. The entire process of the teleological circular constitution of objectivity in time is close to the Aristotelian idea of *entelechy*, where the efficient, formal, and final causes presuppose each other in a united self-perpetuating movement.

The transcendental Ego is not a self-isolated, solipsistic, and even fantastic or self-contradictory entity involved in constituting fictitious objectivity. Any transcendental Ego is part and parcel of an intersubjective community, of an intersubjective society, and of the intersubjective world. The transcendental constitutional activity of an Ego is always intersubjective in its form and results. In clinical practice, the best example of this is a *consilium* or convocation of at least three clinicians to make a diagnosis and prescribe the optimal treatment. Their conclusions are not references to a pre-given, pre-existent, and independent reality but to an intersubjectively constituted common objectivity where the experts interpret both the patient's status and the opinions of the other experts, and they are interpreted by their colleagues. In the course of the constitution of intersubjective objectivity, the mutual constitution of the physicians as well as physician-patient and patient-physician-patient constitutions are also carried out.

3. The Fundamental Uncertainty in Clinical Practice

Along the lines of the intersubjective constitution of objectivity, anamnesis or medical history cannot be viewed as a more or less accurate narrative of *sheer facts*. If a patient's possible slips of memory, ill-informed imagination, or any subjective deficiencies distort the narrative in the anamnesis, it is the clinician's task to restore the true narrative based on the most authentic sheer facts. However, clinical practice considered from a phenomenological perspective shows that expressions such as "true narrative" and "accurate sheer facts" do not make much sense. Clinical facts cannot be separated from the patient's background, his personal features, his general knowledge, or from possible medical information or disinformation and various prejudices, which all impact his memory, imagination, and comprehension. The attending physician does not expect *a true* but *a plausible, verisimilar, and credible story* about the patient's health, discomfort, and complaints. Furthermore, listening to that story, the physician is fully aware that the patient's account might not be objectively accurate but rather biased, disorganized, lacking significant elements, and sometimes self-contradictory. Usually, the patient's story is restructured or reconstituted by the physician on purpose or unintentionally (which in phenomenological terms is "passive intentionality"), drawing upon his medical knowledge, clinical experience, and talent.

A *plausible story*, unlike *the true one*, is not of character necessary; it is not probable, either, because its uncertainty cannot be calculated. It is not just possible because "possibility" is too general and too vague a term in clinical settings. Within the difference between a "true narrative" and "plausible story" lies the fundamental clinical uncertainty, which is easily coped with and even welcomed by a skilled clinician. It does not prevent the physician from making sense of patient's condition as he places what he has heard in various scenarios encompassing the whole picture of patient's complaints, possible diagnosis, appropriate treatment, expected prognosis, etc.

In the stage of diagnostics, what physicians look for is, again, not *the true* diagnosis but *the most appropriate* one to explain the patient's predicament. The most appropriate diagnosis is not deductive reasoning from general premises to a particular or single conclusion, nor is it inductive from a single fact to a general conclusion through a particular meddle premise. The process of diagnostics is abductive reasoning beginning from *single facts*: a patient's clinical symptoms, signs, and findings, which are considered in the light of one or more *general nosological units* in order to reach a conclusion about *the particular diagnosis* of an individual patient. The logical scheme of *diagnostic* abduction is **S-G-P**, where S stands for single, G for general, and P for particular. Correspondingly, the logical schemes of deduction and induction are respectively **G-P-S** and **S-P-G**. Abductive reasoning does *not* supply the clinician with *deductive necessity* or with *inductive probability* but with an *abductive "best explanation"* of patient's condition.

This is true not only in when hypothetic diagnoses are outlined but also when the appropriate diagnoses are singled out from the inappropriate ones in the procedure of *differential diagnosis*. The differential diagnosis, which uses *the method of exclusion* (*per exclusionem*), seemingly coincides with the *deductive modus tollens*. Despite the resemblance between these types of reasoning, *the clinical method of exclusion* is not deductive but abductive reasoning because, unlike modus tollens, clinical exclusion cannot infer with necessity that the absence of a consequent (clinical symptoms or signs) guarantees the absence of the antecedent (the disease that would cause them). Even more, it is appropriate to speak about "a paradox of the differential diagnosis method of exclusion" because unlike in modus tollens the differential diagnosis exclusion not only lacks the necessary determination from the absence of the consequent to the absence of the antecedent, but paradoxically allows the absence of the consequent to be compatible to the presence of the antecedent, whereas the presence of the consequent to be compatible to the absence of the antecedent.

The same paradoxical fate expects "the inductive method of differences" within the procedure of the differential diagnostics. There is no inductive probability that various differences in clinical conditions between patients who have in common a low blood oxygen saturation would point out to different diagnoses – covid and flu, for instance. Nor it is inductively probable that the difference in patient's clinical signs and symptoms from the usual clinical manifestation of covid would imply absence of covid and presence of flu or of another respiratory disease. Moreover, so called "*inductive* methods" in clinical practice clearly are expected to act as *abductive*. When resorting to "inductive methods" in clinical setting, like in common abductive reasoning, we begin from single signs and symptoms in order to reach a particular diagnosis. The only deviation from standard clinical abduction is that the middle term in any of the "*inductive* methods" is not the general nosological unit but the general topos or presupposition that "different causes difference."

This observation confirms once again that in diagnostics both what seems to be *modus tollens* and what is called "*inductive* methods," in reality, are examples of abductive reasoning.

The difference between *the best explanation*, on one hand, and *necessity* or *probability*, on the other, contains once again *fundamental clinical uncertainty*. It is part of the experienced clinician's skills, knowledge, and intentions to cope with this type of uncertainty. When constituting abductive reasoning, the main assistance comes from a double teleology inherent to the development of a disease and its identification, which consists of the teleology of the homeostasis and that of the clinician's conscious activities of looking for the best explanation, based on the fundamental teleology of the transcendental Ego. This double teleology contributes in a significant degree to ameliorate the fundamental uncertainty in the process of diagnostics.

There is also a fundamental uncertainty when clinical treatment is approached phenomenologically. What a patient needs is *the optimal*, that is, *the most favorable*, treatment and not *the most effective one*. The difference between *the most favorable* and *the most effective* becomes a responsibility of the physician to cope with. In a similar manner, prognosis is *the most expected* course of a disease and healing for a specific patient and not *the most probable* one. *The most expected course* is not calculable through probabilistic and statistical methods. Prognosis as *the most expected course* of healing relies upon the consciously constituted unity of the anamnesis, diagnosis, and treatment. Prognosis features another type of abduction whose logical scheme is **P-G-S –** this is *diagnostic* abduction. Here, clinician's reasoning proceeds from the particular diagnosis of a given patients to one's most expected clinical condition, which consist of single symptoms, signs, and finding.

The entire clinical process can be metaphorically pictured as a strip of Moebius: it starts on the one end of the strip with the anamnesis, physical examination, various lab and image tests, etc., which are ***single*** health characteristics of a patient. It reaches the central part of the strip where the strip is twisted. The location of the twist marks the ***general*** nosological unit. Then the clinical process proceed to the identification of the ***particular*** diagnosis of that patient. On the Moebius' strip this will be the other end of the strip when it spins back. From this point on the treatment begins. It serves as the basis for the prognosis. Going back on the Moebius' strip prognosis again reaches the point of the twist or the ***general*** nosological unit. Further on, it proceeds to the initial end of the strip reaching the ***single*** symptoms, signs, and findings, but not the ones that led the patient to the physician but the ones that are expected in the possible forthcoming course of disease and healing surveyed by prognosis.

The entire clinical practice can be described as circular purposiveness (teleology). It begins as the story about the past told from the perspective of the future (anamnesis) in order to achieve the story about the future from the perspective of the present and the past (prognosis) – this is *the big completed circle* of the clinical practice, which is

metaphorically portraited by the Moebius' strip. Within it there are relatively *immediate circles* between each two consecutive stages of the clinical process – diagnostics and treatment, treatment and prognosis, etc. Finally, there are *intermediate circles* like the one between anamnesis and treatment. There is also *mutual circular reflection* between the stages in the clinical process: prognosis both reflects diagnosis, therapy, and anamnesis and, in the same time, by this reflection constitutes itself as the most adequate prognosis. The same kind of circular reflection with a teleological intention exists when the other three stages of the clinical practice, anamnesis, diagnosis, and treatment, are taken as the point of departure.

In phenomenological terms, clinical practice is performed as a process of fulfilling an empty and still vague intention of signification. The *single* complains and clinical finding of a patient are reorganized by the clinician as *recognition* and *confirmation* of patient's *particular diagnosis*. This recognition and confirmation are fulfilled against the background of the *tetic* object of the diagnosis, that is, the *general nosological unit*. The treatment following the diagnosis, provides the diagnosis with intuitive fullness and reaches the full and clarified sense of the patient's health condition, which constitutes *the being of the sense* of patient's health and illness. The stage of prognosis is *reflection* on the *being of the sense,* which completes the clinical process. Nevertheless, prognosis being the completion of the core clinical process, it is still not the ending of the care for the patient. There are two aftermath stages of it: *monitoring* or *surveillance* and *prevention*. From a phenomenological perspective *monitoring* is a relationship between the prognostic data and the actual patient's condition. The monitoring is precondition for adjusting patient treatment and any other kind of medical advice based on the entire circular teleology of the clinical practice so far. Concerning *prevention*, it consists in avoiding complications of the current disease and in opposing possible incurring of new medical conditions related to the existing ones. Monitoring and prevention is not a set of algorithmic operations leading to clearly determined outcomes. These two stages of clinical aftermath also feature the fundamental uncertainty as they are an inherent part of the constitution of the entire clinical patient care. That is why, a clinician's responsibility while monitoring and prevention goes beyond adhering to relevant protocols; in the process of monitoring and prevention, a clinician cannot help but step into the teleological and reflective circularity represented by the Moebius strip of anamnesis, diagnosis, treatment, and prognosis.

Greenhalgh underlines "[t]hat the knowledge needed to enact the clinical encounter is often tacit, context bound and ephemeral rather than codifiable, transferable and enduring often goes under-recognised and under-explored by academic commentators on clinical method" (Greenhalgh 2013, p. 48). This kind of knowledge is not just a result of clinical experience and dedication patients' health. It is benefit of the explicit awareness of implicit feeling of the fundamental uncertainty in the process of intersubjective constitution of the clinical practice.

NOTES

1. Dr. Elena Goranova, MD is a leading Bulgarian vascular surgeon.

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✉ **Prof. Alexander L. Gungov, DSc.**
ORCID iD: 0000-0001-9078-1573
Department of Logic, Ethics, and Aesthetics
Sofia University
1504 Sofia
Bulgaria
E-mail: agungov@phls.uni-sofia.bg