

The 5 Questions

1. Why were you initially drawn to Philosophy of Medicine?

I am a philosopher who has mainly been doing philosophical ontology and overarching philosophy of science, but I have never felt any inclination always to stay within these areas. In the early eighties, I was asked by a philosophically interested GP, Niels Lynøe, to join a discussion group where some GPs met and discussed common problems, often of a very theoretical character. Some years later he asked me to become assistant supervisor for his dissertation in social medicine (1991), and I accepted; also, he persuaded me that we should together write (in Swedish) an introductory book to the philosophy of medicine. So we did; it appeared in 1992, and got a second enlarged edition in 1997. Furthermore, I was supervisor for a Licentiate thesis (1995) that he wrote at the department for the philosophy of science, Umeå University.

Without Niels, now professor in medical ethics at Karolinska Institutet, Stockholm, I am sure I would never have tried to do anything that is specific to the philosophy of medicine. One reason for my assuredness has to do with the 'overlap' view that I say more about in my answer to question 2. In brief: medicine and philosophy overlap and do sometimes interfere with each other; philosophy of medicine cannot be reduced to the mere application within medicine of already outside of medicine established philosophical results. This view implies, among other things, that in order to do something within the philosophy of medicine you need either to have quite a knowledge yourself of medicine or to cooperate with someone who has. My collaboration with Niels has recently resulted in our book "Medicine & Philosophy. A Twenty-First Century Introduction" (Ontos Verlag: Frankfurt 2008). Most of my answers below can be abstracted from this book.

2. What does your work reveal about Philosophy of Medicine that other academics, citizens, or economists typically fail to appreciate?

It shows that there is an important overlap between medicine and philosophy. On part of medicine it involves all the main fields such as clinical practice, clinical research, biomedical research, epidemiological research, medical informatics, and medical ethics; on part of philosophy it involves not only epistemology and ethics, but also philosophical ontology. As the term 'overlap' makes clear, I am not of the opinion that medicine is through and through impregnated by philosophy. Often, philosophy is of no immediate consequence for specific research projects or for specific clinical situations, and then medicine and philosophy can fruitfully proceed in isolation from each other. But now and then a philosophical issue becomes highly relevant, and this possibility is of such a character that all medical scientists and practitioners had better to be aware of it.

Many practical-minded people and scientists think falsely that they cannot enter philosophical territory without making a jump over a fence that marks a border between philosophical reflections and their ordinary activities. But philosophical problems can pop up just where at the moment they are situated. Suddenly their implicit stance in relation to an unnoticed philosophical problem makes a difference to their normal undertakings (examples in my answer to question 5). In such situations, they tend to react by defending a certain specific philosophical position while at the same time denying that it is a philosophical position. All opposing philosophical views appear to them to be simply nonsense, and then there is of course no reason for them to engage in a dialogue.

The overlap between medicine and philosophy can pop up in class-room situations, too. Sometimes students put forward questions that the teachers evade by saying that they are 'too philosophical'. Of course, such an answer *may*

in a particular situation be exactly the adequate one; there is a division of labor between science and philosophy. I am fairly sure, however, that many contemporary medical teachers use the phrase 'too philosophical' in such a derogatory sense that the students are given the false impression that philosophical reflections can never ever be of scientific or practical relevance. One consequence of the overlap view is that this is bad teaching.

Another important consequence of the proclaimed overlap is that neither medicine nor philosophy can be the utmost arbiter for the other. On the one hand, philosophers should not be given a juridical function within medicine, i.e., they should not be appointed legislators, judges, or policemen with respect to scientific theories, methodologies, and ethical problems within medicine; their role should only be that of a consultant. On the other hand, neither should medical people tell intervening philosophers to shut up only because they are philosophers. Quite another thing is that it might be relevant for medical people to ask philosophers better to learn what present-day medicine in fact says; the philosopher's abstract eye may easily miss some important details.

3. What, if any, practical and/or social-political obligations follow from studying medicine from a philosophical point of view?

I think a simple and brief analogy can make my basic position clear. In society at large, as I see it, citizens have two complementary obligations. First, they have to tell their community about serious crimes that they are fairly sure have been committed; but, second, they should not try to give a final verdict on the accused persons until these have been proven guilty. In medical communities, first, medical-philosophical persons have the obligation to make their community aware of what they take to be serious philosophical mistakes that influence medical research and/or clinical practice. But, second, they have to await discussion and scrutiny before they really try to make their views change medical research and/or clinical practice.

4. What do you see as the most interesting criticism against your own position in philosophy of medicine?

Let me first state my position, which can be dubbed 'pragmatic realism'. It has three main parts. First, the one already exhibited: there is an *overlap* between medicine (and science in general) and philosophy. Second, medical science and medical practice are, just like all human scientific and practical endeavours, *fallible*. Third, with respect to both moral and scientific-methodological rules I am a so-called *particularist*, i.e., I am convinced that substantial general rules of both these kinds can be overruled by a new situation, but that this fact does not imply moral and epistemological relativism. In other words: both moral and methodological particular decisions can be judged as being more or less right, but all substantial general moral and methodological rules are only default rules.

Of the three parts distinguished, the overlap view has been very little discussed for reasons that I will soon explain; fallibilism has been discussed, but not really in the form it takes when combined with particularism. In relation to morals, particularism goes back to Aristotle and his concept of 'phronesis' or 'practical wisdom'; and until recently it has very much been neglected in contemporary philosophy. I guess that it is this relative lack of criticism of pragmatic realism that explains why, at the moment, I do not really know what to regard as the most interesting criticism; today, I am equally convinced of all the three parts. But let me expand on what I have just said.

Both the overlap view and fallibilism have as their background and presupposition a belief in the traditional so-called correspondence conception of truth: if an assertion (a truthbearer) about something in the world is true or truthlike, then there is something in the world (a truthmaker) that corresponds or partly corresponds to the assertion and makes it true or truthlike, respectively. It is such correspondence truth-claims that are said to be fallible, and it is

in their search for such truths that science and philosophy overlaps. This truth conception, however, has been heavily under fire during the second part of the twentieth century; a fact which partly explains the lack of direct criticisms of the overlap view and fallibilism. Most prominent among the critics of correspondence is the Oxford philosopher Michael Dummett, who thinks it does not make sense to speak of a distinction between truthbearers (assertions or propositions), truthmakers (facts), and an external relation (correspondence) between them; instead facts are claimed to be *identical* with true propositions. He takes his departure in the philosophy of mathematics, and his anti-realist position may even in my opinion be adequate in relation to mathematics, but it is impossible to generalize and say that it is adequate also in relation to the empirical sciences. A denial of the correspondence conception of truth is one thing in relation to mathematics and quite another in relation to medical science.

Such anti-realism aside, the overlap view is surrounded by three opposing views. There are ontological realists who place philosophy *above* science, others place it *below*, and some *beside*. In the 'above' camp we find Kant and all pure rationalists such as Descartes and Hegel. They claim not only that all philosophical problems can be solved independently of the sciences, but also that empirical science has to stay within a framework discovered by philosophy alone. In the 'below' camp we find those who think that true philosophy should confine itself to logic and conceptual analysis; a position most conspicuously stated by the logical positivists, but adhered to also by some other strands within analytic philosophy. These thinkers can be said to place philosophy below science, since they think that philosophy can only contribute to knowledge about the world by sharpening the logic-conceptual tools used in empirical science. Then, third, there are a few philosophers in the 'beside' camp. They claim that philosophy is of no relevance whatsoever to science; most famous is the epistemological anarchist P. Feyerabend. However, if there are few philosophers in this camp there are the more scientists. Many scientists seem to be happy to agree to what the Nobel laureate physicist Richard Feynman is reported to have said: 'Philosophy of science is about as useful to scientists as ornithology is to birds'.

All the three overlap-opposing views make philosophers completely sovereign in philosophy; correspondingly, the 'below' and the 'beside' view make scientists completely sovereign in science, whereas the 'above' view of Descartes-Kant-Hegel subordinates theoretical scientists to philosophers. At present, however, none of these views is on a broad scale discussed within the philosophy of science. Rather, the overlap view is made invisible by the epistemologically nihilistic view of radical social constructivism, i.e., the view that both everyday conceptions and all scientific theories are, just like novels and plays, only social constructions without truth content. But I cannot take this view seriously. The claim 'everything is a social construction' does, when thought through, (i) deny modern cosmology and evolutionary biology, and (ii) break the semantic rule that it does not make sense to speak of a construction if there is no constructor outside of the construction. The radical social constructivists do simply not take these oft repeated remarks seriously. Neither do they seriously consider what fallibilism has to say about 'theories as social constructions', which means that they do not clearly see that there is another competing position beside theirs that regard theories as a kind of social constructions, too.

Fallibilism is the view that we can never, not even in empirical science, be absolutely certain that we have obtained truths about the world. As far as I can see, this view has today become the so to speak natural epistemological position among natural and medical scientists. It differs from skepticism in being affirmative, claiming that it is incredible to think that we have no knowledge at all; especially in view of all the science-based technological and medical inventions that have revolutionized the world. And it differs from radical social constructivism in claiming that certain kinds of social constructions, especially empirical-scientific theories, can have truth-content. Fallibilism was first explicitly spelled out by the pragmatist Charles Sanders Peirce (whose truth-conception differs from most other pragmatists such as W. James, J. Dewey, and R. Rorty) and the critical rationalist Karl Popper (whose views are not identical with everything that goes under the label 'critical rationalism'). However, both Peirce and Popper, each in their own way, combine fallibilism with other views in such a way that it can be hard to see the essence of fallibilism. Some interpretations and criticisms of it are not really concerned with fallibilism as such. Let me briefly explain.

Despite his fallibilism, Peirce puts forward a kind of criterion of truth: true is what in the long run the scientific community will unanimously regard as being true. This is future social consensus around correspondence, but many modern pragmatists see only the consensus aspect, forget about correspondence, and turn Peirce's fallibilism into a

social constructivism. Popper claims that there are no truth criteria within science, and has not been misunderstood the way Peirce has. But, in contradistinction to Peirce, he combines his fallibilism with a belief in the existence of general methodological rules and a criterion for what makes a theory scientific, i.e., he combines fallibilism with non-particularism. Now, it seems to me as if many social constructivists take the correct criticism of Popper's methodology and falsifiability criterion to be also a criticism of his fallibilism, but this is a mistake.

Particularism in moral philosophy has recently, mainly in the hands of J. Dancy, become a position that is seriously discussed in analytic moral philosophy, but not in the philosophy of science. I am quite convinced, however, that what particularism claims about the non-existence of ethical principles applies to methodological principles, too. Aristotle, the first particularist, constrained his particularism to morals and politics, but it has to be extended even to science. Such a proposal has been put forward before, but mainly within the hermeneutic philosophical tradition. And since hermeneutic philosophers have, to put it mildly, great qualms in accepting the correspondence conception of truth, they do not propose exactly the combination of scientific-theoretic fallibilism and scientific-methodological particularism that I believe in.

I would like to end this answer with some speculations about the views of contemporary medical scientists. I have got the impression that most of them implicitly endorse both fallibilism and particularism, but deny the overlap view. This has a peculiar effect: they think of themselves as having no philosophical position at all, and that the combination of fallibilism and particularism is not a philosophical position. Therefore, they regard themselves as being pragmatists in a completely non-philosophical sense of this term. But this means only that they behave as fallibilists and particularists without trying by argument to defend these positions. Their defense is: 'I am not a philosopher; I am just a pragmatic person'. Nonetheless, implicitly and inevitably, they have philosophical positions. Of course, my hope is that all medical scientists will realize the overlap between medicine and philosophy, and then become explicit defenders of a philosophical pragmatic realism.

5. With respect to present and future inquiry, how can the most important problems concerning Philosophy of Medicine be identified and explored?

As can be seen from my last answer, I think there are no general rules by means of which one can identify such problems; neither how to proceed in order to solve them. But I will be happy to point at two medical-philosophical problems whose solutions I think would mean much to the development of medicine and, by the way, to philosophy, too. One is how to understand so-called psychosomatic phenomena. Can they once and for all be deemed social illusions comparable to the natural-perceptual illusion that the sun is moving over the sky? Or, if not: how should psyche-to-soma causation be conceived? Although causal talk is ubiquitous in both everyday life and scientific life, the notion of causality is philosophically elusive. The other problem I would like to highlight is how to interpret *singular* probability statements of the following two forms: (a) '*this particular person* runs, with the probability p , a risk of getting disease D ', and (b) 'given the treatment T , there is a probability p that *this particular patient* will be cured'. Now some more words about each problem.

According to what philosophers use to call 'folk psychology', there are many phenomena that can be given the abstract philosophical label 'psychosomatic phenomena'. For instance, to say 'his strong will saved his life' is to imply that a psychic will-to-live was a causal factor in the curing of a deadly somatic disease; and to say 'his new promotion seems to have made his medical problems disappear' is to imply that certain somatic problems disappeared because of a happy psychological mood. And this folk psychology is as alive in medical research as it is in everyday life. Here, however, the psychic cause in the psyche-to-soma causation is not said to be a positive psychological mood or a will to become cured, but the patients' psychic *expectations* that that they will be cured. As normally conceived, the dummy pills of randomized controlled trials are assumed to function because the persons in the control group expect to become cured by them; the placebo effect is assumed to be a psyche-to-soma effect. The very aim of the RCTs is of course to isolate and find a purely biomedical effect, a soma-to-soma causation, but this does not alter the fact that

the meaningfulness of the RCTs themselves presupposes the existence of psyche-to-soma causation. That is, psychosomatic phenomena are at one and the same time both accepted and disregarded. I find this is odd.

However, for several reasons it is not easy to study psychosomatic phenomena; and some of these reasons are philosophical. Philosophy has so far not managed to reach a consensus about either how to define the essence of psychic phenomena or how to understand causation; in particular, not psyche-to-soma causation (which in contemporary analytic philosophy is discussed under the label 'mental causation'). Surely, the search for causal relations can always start with a search for correlations, but as long as it is unclear what constitutes a psychic phenomenon, even presumed psyche-soma correlations can be questioned. This does not mean that I am of the opinion that medical researchers who want to study psychosomatic phenomena have to await philosophical developments made by pure philosophers; it means only that such researchers should realize that their hypotheses are not philosophically innocent.

It would, I guess, involve quite a change in medical research if all hitherto assumed placebo effects should become regarded as being either mere statistical illusions or due to spontaneous purely biomedical curing. And, let it be noted, the remarkable helicobacter pylori success story in relation to peptic ulcer cannot be regarded as having finally settled the question of the existence of psychosomatic phenomena. In fact, the effect of antibiotic treatments of peptic ulcer was studied by means of RCTs with their psychosomatic notion of placebo effects. It is one thing to show that one specific assumed kind of psychosomatic phenomenon was an illusion, quite another to show that there can be no kinds of such phenomena at all.

Let me now turn to the other medical-philosophical problem that I find important: the interpretation of medical singular probability statements. This problem is, as far as I can see, even more neglected than that of psychosomatic phenomena.

Both laymen and psychiatrists speak of certain persons as having a 'suicidal tendency'. Sometimes the judgment is given the form of a vague probability statement, for instance: 'there is a probability of about 1/6 that Joe will commit suicide'. Such a probability statement is not about how probable it is that the speaker *knows* that Joe will commit suicide, i.e., it is not an 'epistemic-subjective' probability statement. But neither is it at first sight about a relative frequency in the world (a 'frequency-objective' probability statement). At least formally, the statement is only about Joe and a property he has, a tendency to commit suicide and the probability of its realization; it can be called a 'singular-objective' probability statement. To my mind, many medical people do not care to hold these three kinds of probability statements distinct, and I think there are some practical reasons behind this lack, but these can in the theoretical context at hand be disregarded. In what follows I will put epistemic-subjective probability statements aside, and focus only on the distinction between frequency-objective and singular-objective probability statements.

In contemporary philosophy it is very common to regard tendencies as ontologically impossible entities, and I have got the impression that something similar is true in medical research. On such a presupposition, first appearances notwithstanding, the statement 'there is a probability of about 1/6 that Joe will commit suicide' is *not* about a tendency Joe has, but about a relative frequency in a population or set to which Joe can be ascribed membership. No doubt, many singular probability statements have to be interpreted as being no more than short-hands for statements about a relative frequency. For instance, the *formally* singular-objective statement 'the probability that *this* lot will be a winning lot is 1/6' is only short-hand for the frequency-objective statement 'the relative frequency of winning lots in this lottery is 1/6'. Let me use a thought experiment in order to show what such an interpretation of tendency statements would imply.

Assume a certain community where the relative frequency of suicides in the community as a whole is 1/6000, but that for people more than fifty years old it is 1/4000 and for males 1/5000. This means that for a male person over fifty (call him Joe), all the three following statements are true when they are interpreted as short-hands for relative frequencies of suicides among (a) citizens in general, (b) citizens older than 50, and (c) male citizens:

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- (a) 'the probability that Joe will commit suicide is 1/6000'
- (b) 'the probability that Joe will commit suicide is 1/4000'
- (c) 'the probability that Joe will commit suicide is 1/5000'.

But Joe cannot have all these three probabilities as real singular-objective tendencies; this would be like weighing 70, 80, and 75 kg simultaneously. At a certain moment, a suicidal tendency can have only one specific strength and probability to be realized. If, as positivism and much other contemporary ontological thinking claim, all non-epistemic singular probability statements whatsoever have to be short-hands for relative frequencies, then, really, psychiatrists ought to stop talking about suicidal tendencies. But there is another philosophical possibility, one that I think should be seriously explored: to take the psychiatrists' spontaneous notion of 'tendency' at its face value and claim that, literally, there are tendencies in the world. Furthermore, if humans can truly be ascribed tendencies, then many medical singular 'risk-of-getting-disease' judgments may be interpreted as being about tendencies, too.

Think of the statement 'the risk that Joe will get the disease D is 1/3'. Even if this formally singular probability statement is as a short-hand for a relative frequency statement true, as a substantial tendency statement it may be completely false; and false in two different ways. On the one hand, Joe may have no tendency or propensity at all to get the disease D; he is simply for some reason immune to D. On the other hand, he may have a tendency towards the disease that is so strong that sooner or later he will inevitably get it. But, third, the statement may be true *both* as a short-hand frequency-objective statement *and* as a singular-objective tendency statement. If so, then Joe is bearer of a real propensity/tendency and an accompanying risk to get disease D, but for some reasons there is only a probability of 1/3 that the propensity/tendency will become realized.

Hopefully, this last answer of mine can shed light also on my answer to question two: there is an important overlap between medicine and philosophy.