

# Medicine without Cure?: A Cluster Analysis of the Nature of Medicine

THADDEUS METZ\*

*University of Johannesburg, Johannesburg, South Africa*

\*Address correspondence to: Thaddeus Metz, PhD, Philosophy Department, University of Johannesburg, B-Ring 7, APK Campus, P.O. Box 524, Auckland Park 2006, South Africa.

E-mail: [tmetz@uj.ac.za](mailto:tmetz@uj.ac.za)

*In his article “Prediction, Understanding, and Medicine,” Alex Broadbent argues that the nature of medicine is determined by its competences, that is, which things it can do well. He argues that although medicine cannot cure well, it can do a good job of enabling people not only to understand states of the human organism and of what has caused them, but also to predict future states of it. From this, Broadbent concludes that medicine is (at least in part) essentially a practice of understanding and predicting, not curing. In reply to this bold position, I mount two major criticisms. First, I maintain that the reasons Broadbent gives for doubting that medicine can cure provide comparable reason for doubting that medicine can provide an understanding; roughly, the best explanation of why medicine cannot reliably cure is that we still lack much understanding of health and disease. Second, I object to the claim that a practice is medical only if it facilitates understanding and prediction. Although Broadbent has brought to light certain desirable purposes of medicine that are underappreciated, my conclusion is that he has not yet provided enough reason to think that understanding and prediction are essential to it. Instead of supposing that medicine has an essence, in fact, I suggest that its nature is best understood in terms of a property cluster.*

**Keywords:** *cure, medicine, prediction, treatment, understanding*

## I. WHAT IS MEDICINE?

In his article “Prediction, Understanding, and Medicine,” published elsewhere in this *Journal*, Alex Broadbent seeks to answer the question of what

medicine is. The question is simple in terms of its form, and, prior to reading Broadbent's article, one might have thought that it is easy to answer: medicine is essentially the project of curing (in the sense of mitigating harms of) injuries and illnesses.

However, Broadbent provides strong reason to doubt this tempting answer, which he calls the "curative thesis," largely insofar as medicine has historically done a poor job of curing but has remained medicine all the same. Medicine has existed despite not being able to cure much, according to Broadbent, since it is instead (at least in part) essentially a practice that reliably enables us to understand poor health and to predict what will happen in light of it. This is a fascinating position that raises important philosophical questions about what medicine can and cannot do and about whether to understand its nature in light of such in/abilities.

In this brief critical discussion of Broadbent's article, I first maintain that the reasons he gives for doubting that medicine can cure indicate comparable reason for doubting that medicine can provide an understanding. Basically, I contend that the best explanation of why medicine cannot reliably cure is that we still lack much understanding of the chemical, biological, and psychological facts that ground health and disease. Second, I provide a purportedly "knockdown" counterexample to the claim that a practice is medical only if it facilitates understanding and prediction.

Although I contend that it is too narrow to deem understanding and prediction to be essential to medicine, I am not inclined to return to the view that cure is essential to it, precisely because of what I think is Broadbent's sound criticism of it. I am therefore led to suggest that medicine's nature might be such as not to have an essence, in the sense of a set of necessary and sufficient conditions, but rather to be a practice characterized by a cluster of particular practices, no single one of which is necessary for it to count as "medicine."

## II. BROADBENT'S POSITION ON THE NATURE OF MEDICINE

As I read Broadbent's article, it advances three key premises in support of the conclusion, "A person who cannot cure may still earn a living as a doctor provided that person can show that he understands the malady, if not in full, then at least much better than the layperson. But, a person who apparently lacks understanding of sickness is no kind of medical expert" (Broadbent, 2018, 303). To defend the claim that cure is not essential to medicine but that understanding and prediction are, Broadbent maintains that medicine's nature is determined by its competences, that medicine is not competent to cure, and that medicine is competent to understand and to predict. Consider each of these claims in turn.

First off, Broadbent contends that the nature of medicine is best understood not merely in terms of the aims of the parties practising it. As he

sensibly notes, intending to improve people's health and acting in light of that intention, for example, is hardly sufficient to qualify as engaging in medicine, since then "even my most misguided and uneducated effort to improve someone's health would qualify me as a doctor" (Broadbent, 2018, 290). Waving what one thinks is a magic wand to heal the sick would count as medicine, if certain purposes were sufficient to define medicine.

Instead, Broadbent maintains that a promising angle by which to understand the nature of medicine is in terms of what it can do. He says, "If we want to understand what medicine is, we must understand what distinguishes professionals from well-meaning laypersons, as well as quacks, idiots, and lunatics: we must understand the *core medical competence*" (Broadbent, 2018, 290). Competence is the ability to produce particular outcomes reliably, something one could exhibit regardless of one's intentions. Even if one's aims were purely selfish, say, wanting to maximize the amount of money in one's bank account, one could count as a medical professional if one acted in ways that tended to produce certain (presumably, desirable) results.

Which (desirable) results can a medical professional, or at least the general practice of medicine, produce? Not cures, according to Broadbent. Recounting the history of Western medicine, Broadbent notes that, for most of it, cures have been rare, even when allowing for a weak sense of "cure" as including palliative treatments (2018, 291). And, yet, there was indeed medicine all that time. The point is strong.

What medicine was reliably doing all that time in the absence of much curing was, according to Broadbent, providing understanding and enabling prediction. With respect to understanding, one counts as doing something medical insofar as one can inform someone of such things as the nature of illness and what is happening to his mind or body. Broadbent cleverly further suggests of a medical professional imparting understanding of an illness to a patient, "Perhaps she can also explain why she cannot cure it: one can explain why one cannot do something, as when a physicist explains why she cannot build a rocket that travels at light speed" (2018, 296).

Broadbent calls understanding a "theoretical" competence of medicine and prediction a "practical" one. The distinction is questionable, particularly given that one of Broadbent's own central illustrations of understanding is prediction. "The doctor recognises the disease and gives you a detailed explanation of what is going on. She regrets that she can do nothing but tells you that in three days it will turn green and then fall off two days after that . . . What makes this a competent medical opinion? The fact that the doctor *understands what is going on*" (Broadbent, 2018, 296).

However, any putative difference between the theoretical and the practical is not really important in relation to the aim of providing a replacement for the curative thesis. The key question is whether understanding and prediction are indeed core medical competences and, if so, whether that means

something is medical only if it displays such competences. In the following sections, I argue against both claims.

### III. WHY UNDERSTANDING IS NOT A CORE MEDICAL COMPETENCE

When most philosophers use the word “understanding,” they mean it as a success term, in the sense that it logically implies that the relevant beliefs are true. If one appears to understand something, but it turns out that one’s beliefs were quite false, then it is natural to say that one “misunderstood,” not that one “understood but poorly” or the like. Given this sense of the term, it is implausible to contend that medicine has existed despite the absence of cure and because of the presence of understanding.

For all we can tell, for most of the history of medicine, humanity has lacked plausible explanations of the causes and nature of disease. More bluntly, in the twenty-first century, we have every reason to believe those explanations to have been false. Focusing on the West, consider that for many centuries most thought that disease is a function of “humors” that are out of balance. Some believed that certain diseases associated with the plague were caused by a “miasma.” Some have contended that disease is caused by an invisible or spiritual agent meted out as a punishment to us for having misbehaved. There is no net evidence of the existence of humors, miasma, or gods, or, at best, if there is, they do not figure into the best explanation of the overwhelming majority of diseases.

In short, it is only recently that Western medicine has truly grasped some of the chemical, biological, and psychological facts that ground disease. And yet, there has been Western medicine for much longer. By the logic of Broadbent’s argument against the curative thesis, then, understanding is likewise not a core competence of medicine.

Indeed, one plausible explanation of our inability to cure has been our inability to understand. It is likely *because* we have not had accurate explanations of the causes and nature of diseases that we have done such a poor job of curing them.

Broadbent might be tempted to reply by weakening the notion of understanding. He could suggest that it need not provide an *accurate* explanation, merely an explanation that is *justified* in the context or that *serves a pragmatic function* such as providing some psychological comfort.

However, it is not clear that Broadbent can make this move and retain his powerful objection to the notion that medicine should be defined merely in terms of people’s aims. Recall that he did not want his well-intentioned but “most misguided and uneducated effort to improve someone’s health” to be sufficient to count him as a “doctor” (Broadbent, 2018, 290). By analogy, he should not want a most misguided and uneducated explanation of someone’s health to be sufficient for that.

Another potential problem with weakening the notion of understanding to allow for untrue explanations is that doing so might be incompatible with the concept of a core competence. Medicine is not going to be plausibly defined in terms of just *anything* it can reliably do. After all, the practice of medicine can reliably produce CO<sub>2</sub>, just like any practice in which human beings inhale and exhale. It is also not enough to suggest that the practice of medicine has *unique* outputs, for only the practice of medicine produces medical waste such as used syringes, pus-filled bandages, torn-out sutures, and the like. (Those tempted to bite the bullet here should consider that medicine would surely continue to exist if medical waste suddenly vanished into thin air upon being generated.) When defining a core medical competence, it seems that there has to be *something good* about the outcomes, and false explanations might not be good enough.

#### IV. WHY NEITHER UNDERSTANDING NOR PREDICTION IS ESSENTIAL TO MEDICINE

Even if my analysis in the previous section were correct such that understanding is not a core medical competence, for all I have said so far, prediction might be one, as might be the production of a merely justified or useful (but false) explanation of disease. In this section, I provide a powerful objection to this hypothesis.

One strategy would be to suggest that the absence of understanding suggests the absence of the ability to predict. As Broadbent notes, “a central piece of evidence for understanding is predictive ability” (2018, 302). Where there is understanding, there is prediction, and vice versa, often enough. If we have lacked understanding, then we have probably not been able to predict very well, either. And yet, we have had medicine.

However, rather than flesh out this angle, my main strategy is to provide a counterexample to the idea that understanding (of any sort) and prediction are essential to medicine. Consider the following thought experiment. Suppose that an oracle exists. When I consult it, a piece of paper magically appears in my hand accurately indicating the nature of a given person’s disease. Furthermore, when I touch the oracle, it confers on me the power to heal that disease with the mere touch of my hand. Also, imagine that the oracle does these things 100% of the time.

In this thought experiment, I do not acquire any understanding of the disease. I do learn its name, but often enough the name is in Latin and I do not know what it means. I cannot provide any sort of true, plausible, or comforting explanation about how the disease arose and what it does to the mind or body. Furthermore, I do not acquire any ability to predict what will happen if the disease is left untreated.

And yet, I could easily get hired at the hospital of my choice throughout the world. To be sure, I would not really count as a *doctor* or medical *expert*, but that is not the point. The point is to address the question that Broadbent posed at the start of his article, namely, “What is medicine?” (2018, 289), and the way he answers it: “We cannot say that medicine is the healing art” (290) and instead, “It seems to me that medicine is an intellectual endeavor” (296). I submit that I would be practising medicine (not law, not engineering), were I to engage with the oracle and act in light of its deliverances, despite the absence of any capacity to understand disease or to predict its course.

I think a reply worth considering on Broadbent’s behalf would be to narrow down the question he wants to answer. Asking what medicine is (period) invites a consideration of remote possible worlds in search of an essence, an invariant nature. However, asking what medicine is in this world would mean that the oracle thought experiment is irrelevant.

The trick for Broadbent will be to define sharply and to motivate the more narrow sort of enquiry. Surely, *some* merely possible worlds pertain to a philosophical enquiry into medicine’s nature, for philosophy of medicine is not medical sociology. How to know those worlds are ones in which the oracle thought experiment is or is not relevant?

## V. A CLUSTER HYPOTHESIS ABOUT THE NATURE OF MEDICINE

The thought experiment from the previous section *suggests* that the curative thesis, or something like it, is true. It appears to indicate that medicine is defined by the ability to cure. However, I believe that Broadbent’s main objection to the curative thesis is sound; we have had medicine for a long while despite the inability to cure. I conclude this article by suggesting one strategy by which to put the various pieces of data about medicine’s nature together.

Here are the key pieces, in the order discussed in this article. Merely intending to cure is not sufficient to be practising medicine. Being able to cure is not necessary to be practising medicine. Understanding and predicting are at least jointly sufficient to be practising medicine. Understanding and predicting are not both necessary to be practising medicine. Identifying maladies and curing them reliably are at least jointly sufficient to be practising medicine.

This mix of judgments suggests the idea that medicine lacks an essence in the sense of not having a set of necessary conditions that obtain in all possible worlds in which medicine exists. This does not mean that medicine is not distinct from other practices or is “indefinable” in postmodern fashion. It rather means that what makes something medical is to exemplify one or more of a cluster of related properties to certain degrees. Roughly, the more



one is disposed to cure others, to identify their illnesses and injuries, to understand them, and to predict what will happen in light of them on various interventions, the more one is practising medicine.

Alternately, one is practising medicine if one is curing, identifying, understanding, predicting, and perhaps engaging in other health-related behaviors to some satisfactory degree. On the one hand, this could, and would normally, mean displaying all or most of these behaviors to some decent extent. On the other hand, it could mean “maxing out” along just one dimension, as per the oracle thought experiment.

In closing, I have read Broadbent’s “Prediction, Understanding, and Medicine” as advancing the bold, interesting view that medicine has an essence constituted by its core competencies, among which are understanding disease and predicting what will happen in light of it, but not curing it, in any broad sense of that term. Although I have accepted Broadbent’s negative rationale, that curing is not essential to medicine (or at least is not a core competence of it), I have balked at his positive alternative, that understanding and prediction are. One strategy for questioning his position has taken the form of “partners in guilt,” maintaining that, if we have not been able to cure well, then we probably have also not been able to understand (or predict) well. Another strategy has been to advance a thought experiment in which a person cures reliably in the absence of understanding and prediction and to suggest that such a person would be doing something medical. Ending things on a more constructive note, I proposed an alternate way to understand medicine’s nature. Specifically, I suggested that one way to unify these various judgments about the nature of medicine is to propose a cluster analysis of it, according to which one is practising medicine if one exemplifies enough of a certain number of health-related properties.

Even if Broadbent has not yet provided enough reason to think that understanding and prediction are essential to medicine, he has done the field some real good by having brought to light these desirable purposes and (occasional, even if not invariant) competences of medicine. If I am right, they are recurrent features of medicine, even central to it, that, despite not being necessary conditions of it, merit further reflection than they have received up to now by philosophers of medicine and related scholars.

#### REFERENCE

- Broadbent, A. 2018. Prediction, understanding, and medicine. *Journal of Medicine and Philosophy* 43(3):289–305.