

## On Myths and Countermyths

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Abstract: There has never been a single set of criteria for the ascription of disease. The pathoanatomic view ascribed to Virchow and propounded by Thomas Szasz has coexisted with the patient-centered or phenomenologic view for millennia. Schizophrenia, as well as such entities as idiopathic epilepsy and migraine, may be considered a disease because it entails suffering and incapacity, albeit in the absence of any obvious lesion. The Szaszian view of disease neither appreciates the nuances of Virchow's own position nor acknowledges the fluidity of current medical nosology. (excerpted from *Arch Gen Psych* 33:139-144, 1979)

As psychiatry has moved closer to a biochemical view of schizophrenia and depression, the very notion of "mental illness" has remained controversial. The skepticism has focused particularly on schizophrenia, however. Such critics of orthodox psychiatry as Thomas Szasz, R. D. Laing, and David Cooper have claimed, in diverse ways, that schizophrenia is not a disease. Szasz, who has lucidly distinguished his own views from those of Laing, Cooper, and other such "antipsychiatrists," holds that there is "no such thing" as schizophrenia; it is "not a disease, but only the name of an alleged disease".

My intent is to explore and criticize the Szaszian position, primarily from historical and linguistic standpoints. The more explicitly philosophical problems in Szasz's position have been discussed admirably by Michael Moore. I shall point out, however, a few additional fallacies. In criticizing Szasz's notion of disease, I intend no disparagement of his views on the civil liberties of mental patients; indeed, I shall insist that the notion of mental illness entails no espousal of authoritarian methods or ideology.

### THE SZASZIAN POSITION

In one of his more recent works, Szasz argues that:

"Disease means bodily disease.... The mind (whatever it is) is not an organ or part of the body. Hence, it cannot be diseased in the same sense as the body can. When we speak of mental illness, then, we speak metaphorically."

This is essentially a recapitulation of the view Szasz has held since the publication of *The Myth of Mental Illness* in 1960. In the preface to the second edition of this work, Szasz avers that "disease or illness can affect only the body. Hence, there can be no such thing as mental illness." Psychiatric interventions, according to Szasz's view, "are directed at moral, not medical, problems." Thus, whereas "medical diagnoses are the names of genuine diseases, psychiatric diagnoses are stigmatizing labels."

Szasz does not deny that many so-called schizophrenics "often behave and speak in ways that differ from the behavior and speech of many (though by no means all) other people .... "and that this behavior may be "gravely disturbing either to the so-called schizophrenic person, or to those around him, or to all concerned." But Szasz insists that all this has nothing to do with illness: "The articulation of diverse aspirations and the resolution of the conflicts which they generate belong in the domains of ethics and politics, rhetoric and law, aggression and defense, violence and war."

I shall now examine more closely the Szaszian concept of disease. For a more detailed critique, see Roth.

## THE PATHOANATOMIC CRITERION OF DISEASE

Szasz argues in his recent book, *Schizophrenia*, that:

The claim that some people have a disease called schizophrenia... was based not on any medical authority; that it was, in other words, the result not of empirical or scientific work, but of ethical and political decision making."

The implication of this is that "real" diseases are based on "medical" discoveries and "scientific" or "empirical" investigation (however these terms are defined). Indeed, the keystone of Szasz's thesis is that an entity is a disease only if it meets certain physical criteria:

"Until the middle of the nineteenth century and beyond, illness meant a bodily disorder whose typical manifestation was an alteration of bodily structure... [a] lesion, such as a misshapen extremity, ulcerated skin, or a fracture or wound."

This "original meaning" of illness, on Szasz's view, was established by tThe great 19th-century pathologist, Rudolph Virchow; before Virchow "the concept of disease was abstract and theoretical, rather than concrete and empirical." Subsequently, because of Virchow's discoveries:

"The accepted scientific method for demonstrating.. diseases consisted, first, of identifying their morphological characteristic by post-mortem examination of organs and tissues; and second, of ascertaining, by means of systemic observations and experiments.., their origins and causes."

General paresis, for Szasz, meets these criteria, whereas schizophrenia, wherein "no neuropathological or neurochemical" abnormalities can be demonstrated, does not. But when, and if, such abnormalities can be found, "then schizophrenia, too, will be a disease."

Szasz maintains that "until the middle of the nineteenth century," illness entailed some visible deformity or bodily lesion. In fact, however, this pathoanatomic view has been merely one of many competing notions of disease, most of which date from antiquity. Indeed, a crucial dichotomy in the philosophy of medicine may be traced to the rival medical academies of Knidos and Kos, in ancient Greece. Knidos, the school of Aesculapius, recognized only the "disease"-the "separate morbid entity subservient to general rules of pathology." The more empirical school of Kos, associated with Hippocrates, emphasized that there existed only "the sick individual with his particular kind of misery." In effect, these two schools saw disease either as a specific *lesion*, or as a *phenomenon* whose character was determined by the patient's manner of presentation. It should be clear, then, that the former view did not originate with Virchow, and that the latter did not arise from a "concerted effort" by Bleuler and his cohorts to "change the criteria" of disease. The criteria of disease have *always* been in dispute, though theories have waxed and waned in popularity.

But what, precisely, did Virchow say about disease? There is no question that he assumed cellular derangements to be the *basis* of disease; it is far less clear that Virchow *identified* disease with such pathologic processes. Indeed, L. J. Rather notes that Virchow "violently rejected Rokitansky's claim that diseases were at all times open to morphologic investigation." Virchow himself wrote as follows:

"One can have the greatest respect for anatomical, morphological, and histological studies... But must one proclaim

them, therefore, the ones of exclusive significance? Many important phenomena of the body are of a purely functional kind.”

Szasz mistakenly attributes the criterion of "bodily function" to the influence of "modern psychiatry.

Virchow, of course, is best known for his maxim, *Es gibt keine Allgemein krankheiten, es gibt nur Local krankheiten*. There is no general, only local, disease. But Aschoff, Virchow's colleague, has argued that the latter wished merely to localize *lesions*, not diseases. (The distinction is between *Krankheiten* [diseases] and *die Krankheit* [disease in general]. Virchow once commented that one could localize "diseases," but "not disease." If this interpretation is correct, the lesions to which Szasz constantly appeals would be the *basis* of disease, but not necessarily the *sine qua non* of disease. Here, an intriguing difference between Szasz and Virchow emerges. Szasz argues that: "Every 'ordinary' illness that persons have, cadavers also have. A cadaver may thus be said to "have" cancer, pneumonia, or myocardial infarction." But Virchow writes that "Disease presupposes life. With the death of the cell, the disease also terminates."

This is a crucial point. For if, as Sir Clifford Allbutt concurs, "disease is a state of a living organism," it follows that when the organism dies, the disease terminates. Now, it is a rudimentary principle of pathology (as Szasz's view makes clear) that lesions persist after the death of the organism. But if lesions persist and disease terminates, disease cannot simply be the presence of lesions. (Note that Virchow claims not merely that we cannot "talk" of disease in a nonliving organism. His claim is not an *intentional* one, but an *ontological* one: disease terminates *as an entity* when the cell [or organism, as collection of cells] dies. The notion of the "intentional fallacy" will be elucidated later.) Szasz, however, has referred to the additional criterion of 'pathophysiology.' This permits Szasz to escape the bind of a purely morphologic view of disease; such a view, as Kendell notes, "had been discredited beyond redemption" by 1960--the year in which *The Myth of Mental Illness* was published.

But the notion of pathophysiology is not a simple one, depending, as it does, on disordered function. As Kendell points out:

“There is no single set pattern of either structure of function .... Even in health, human beings and their constituent tissues and organs vary considerably in size, shape, chemical composition and functional efficiency”

Indeed, contrary to what Szasz seems to believe about his "basic and rigorous" definition of disease, the notion of pathophysiology proves to be not an *empirical* but a *statistical* term. One does not "observe" pathophysiology as one observes a rock; one merely observes physiochemical processes that may or may not be "pathological," depending on one's statistical norm. L. S. King has expressed this well:

I recall a very precise young physician who asked me what our laboratory considered the normal hemoglobin value....when I answered, "Twelve to sixteen grams, more or less," he was puzzled.... He wanted to know how, if my norm was so broad and vague, he could possibly tell whether a patient suffered from anemia, or [from] how much anemia. [ agreed that he had quite a problem on his hands...”

...Szasz has argued that Kraepelin and Bleuler were not medical scientists, but “psychiatric conquistadors.” Together, they helped to "invent" schizophrenia. Virchow, on the other hand, was a medical scientist who "established" the cellular basis of disease. The two vocabularies differ strikingly in their evaluative content. Kraepelin Taylor tells us that Virchow's "prestige and influence ensured that the term 'disease' acquired a new and narrower sense.” Prestige and influence? One wants to ask why Virchow should not be considered a pathologic conquistador who made a concerted effort to undermine the original Hippocratic notion of disease. This interpretation is at least as plausible (or implausible) as Szasz's.

...I will summarize this section as follows. First, there has never been a single set of criteria for the ascription of disease; the pathoanatomic view has coexisted with the patient-centered (phenomenologic) view since the time of Hippocrates. Virchow did not "establish" that pathoanatomic lesions are the *sine qua non* of disease; he seems to have regarded such lesions as the *basis* for any particular disease but regarded disease itself as something over and above mere lesions. For Virchow (contra Szasz), disease terminates when life terminates. Szasz's additional criterion of “pathophysiologic” change is not a well-defined empirical criterion but a broad statistical construct.

## FALLACIES IN THE SZASZIAN POSITION

I shall discuss here not the syllogistic fallacies of formal logic, but the "informal" fallacies of rhetoric. These generally appear in the "paradoxes" Szasz uses to criticize the language of orthodox psychiatry.

*Ignoratio elenchi* is the fallacy of supposing a point proved or disproved by an argument proving or disproving something not at issue. Let us consider Szasz's claim that "the only illness a cadaver surely cannot 'have' is mental illness"; this is so because "bodily illness is something the patient *has*, whereas mental illness is really something he is or does."

I have already disputed the notion that cadavers can have diseases. We do not speak of "healthy" corpses--how, then, can we speak of "sick" ones? Naturally, corpses may have *lesions*, but--as Virchow would agree--the death of the organism means the end of the *disease*.

There is another point to be made, concerning the antithesis Szasz sets up between "having" and "being" or "doing." One can *have* a disease precisely because of the things one *is* or *is not*, *can* or *cannot do*. Indeed, we shall insist that both "organic" and "functional" diseases are often ascribed on this basis, not necessarily on the finding of a lesion.

Let us consider the things one "is" and "does" when one is said to "have" migraine. The patient *is* in pain. He *goes* to the physician and *describes* this pain as left-sided cranial pain, preceded by flashing lights. When the pain comes on, the patient is apparently *unable to talk, walk, or move*. It disappears after an hour or two. The physician diagnoses "migraine" and prescribes a mixture of ergotamine tartrate and caffeine (Cafergot).

The diagnosis is based on what the patient is and does, or is not and cannot do--not on the finding of a lesion or even a pathophysiologic change... migraine is practically never *ascribed* on the basis of laboratory investigation or demonstration of a lesion; rather, it is ascribed on the basis of the patient's claims.... Later it will be seen that this is true of numerous "medical" diseases. Szasz falls into a form of *ignoratio elenchi* when he supposes he has proved that bodily illness is something one "has," by appealing to the presence of lesions: one does, indeed, "have" bodily illness, but not necessarily because one has a demonstrable lesion. Similarly, Szasz thinks he has demonstrated the essential difference between bodily and mental illness by showing that the latter is ascribed on the basis of what one is and does; indeed, that is how mental illness is ascribed--the point is not at issue--but bodily illness is often ascribed in the same way.

...I shall call the third fallacy in Szasz's thesis the 'exclusionist' fallacy. This entails the supposition that when two phenomena differ radically in our everyday understanding, one cannot reasonably apply the same method to alter or ameliorate them. The phenomena, on some level, are thought to "exclude" one another. To illustrate this fallacy, let us consider the following passage by Szasz:

"We may be dissatisfied with television for two quite different reasons: because our set does not work, or because we dislike the program we are receiving. Similarly, we may be dissatisfied with ourselves for two quite different reasons: because our body does not work (organic illness), or because we dislike our conduct (mental illness). How silly, wasteful, and destructive it would be if we tried to eliminate cigarette commercials from television by having TV repairmen work on our sets. How much more silly, wasteful, and destructive to try to eliminate phobias, obsessions, and delusions... by having psychiatrists work on our brains (with drugs, electroshock, and lobotomy)."

On its face, this argument seems convincing. But let us suppose a situation in which only one TV channel is broadcasting cigarette commercials. It would surely not be absurd (though perhaps impractical) to have a TV repairman work on the set's receiver so that it could no longer pick up the station's frequency. (A similar kind of "jamming," after all, is used with some success by those who "dislike the program" they or their captives are receiving). But now, let us suppose that hallucinations and delusions are caused by an excess of dopamine in the brain--a thesis Szasz has never refuted. It would not be absurd, or silly, or wasteful to ameliorate these symptoms with dopamine antagonists.

Note the following analogy that Szasz has constructed: bad commercial is to damaged TV as bad conduct is to damaged body. We are meant to acknowledge that damaged televisions cannot be responsible for "bad" (annoying) commercials. And; offhand, one may think that a damaged body cannot be responsible for bad (violent, antisocial, psychotic) behavior. But Szasz has never *proved* this; it merely follows from the way his analogy is constructed. (An equivalent construction is found in the preface to the second edition of *The Myth of Mental Illness*.) And there would seem to be a good deal of evidence that a damaged *brain* can be responsible for bad behavior, such as in the violent drunk, the paranoid amphetamine abuser, and the hallucinating LSD user. Szasz's fallacy, of course, lies in supposing

that two phenomena that differ radically in our ordinary language and understanding--bodily (brain) dysfunction and unacceptable behavior--cannot be ameliorated by one and the same intervention. Anyone who has administered naloxone hydrochloride (Narcan) to a delirious [opiate] abuser knows the emptiness of this fallacy.

## CURRENT CONCEPTS OF DISEASE AND MENTAL ILLNESS

L. S. King has spoken frankly of "the confusion surrounding the notion of disease," [while] Henschert has admitted that "to explain what is meant by disease in a few words is not so easy as one might think." Henschert makes the further point that, "One can have a strong sense of not feeling well although not even the most searching examination can detect any disturbance; it is not necessarily a case of an imaginary illness." But in light of Szasz's insistence on pathoanatomic and pathophysiologic criteria, one wants to know *why* this is not a case of an imaginary illness. Henschert is not making the trivial point that we are technologically incapable of "finding" such lesions. Rather, he construes disease as essentially 'a failure of adaptability.' This, of course, harkens back to the Hippocratic concept of disease as centering around the uniquely "sick person." Scadding, arguing along similar lines, holds that diseased persons are those at a "biological disadvantage." This concept has been analyzed, by Kendell into the following two components: *reduced fertility* and *higher mortality*. Kendell, in fact, has adduced evidence that schizophrenia fits these criteria.

Neither biological disadvantage nor failure in adaptability requires any reference to *lesions* or *altered chemistry*--though, in fact, these may underlie the problem. The term *pathology* arises from the root word "pathos"; originally, this referred to "passion" or "suffering." In his preoccupation with lesions, the physician would best be reminded that medical science began as a response to such suffering, what King aptly calls "the realm of pain, discomfort, and death." Indeed, "... it seems likely that the concept of disease originated as an explanation for the onset of suffering and incapacity in the absence of obvious injury." [emphasis mine]. Maurice Natanson concurs:

"Prior to the problems of establishing the etiological basis of a disease entity, there is the problem of uncovering the phenomenal character of the disease in question... disease entities are human realities expressed in the life activities of fellow men. Disease [is originally recognized] not by experts, but by ordinary men."

If disease arose to explain suffering and incapacity *in the absence of obvious injury*, one has trouble with Szasz's contention that illness has traditionally meant 'a visible deformity...or lesion' such as 'a misshapen extremity, ulcerated skin, or a fracture or wound.' But even if illness once meant what Szasz says it did, it no longer does. In the first place, our notion of disease is not value-independent; it often reflects very general ideas about "good" health, good looks, and good living.

An example of a medical diagnosis that partakes of such evaluation is obesity. There is no uniform definition of this term nor are there consistent histopathologic or pathophysiologic changes in obese persons. (Compare what Craddock writes in *Obesity and Its Management*: "In the majority of patients, most metabolic differences between obese and normal people are ones of degree only, and are due to adaptation to an abnormal intake of food.") Albrink admits that obesity "cannot be separated from nonobesity on a frequency distribution curve," and that it can be defined only as "adiposity in excess of that consistent with good health." But what is good health? Living to 60? to 70? Despite these problems of definition and the intrusion of societal values, one would certainly hesitate before deploring "the myth of obesity."

But Szasz might legitimately protest at this point. It is true, he might say, that some medical diagnoses are as fuzzy and value-centered as that of mental illness, but that does not touch the essential argument, namely, that one must demonstrate histopathologic or pathophysiologic change to have disease.

Well, in the end, such a definition becomes not a scientific statement but a rhetorical call to action. One may *wish* that disease were so defined, and one may *advocate* such a definition. But, as was said of J. M. Keynes' theory of probability, Szasz's definition of disease remains a "vestal virgin" in the harsh world of medical realities.

Consider the diagnoses of migraine, idiopathic epilepsy, Gilles de la Tourette syndrome, and dystonia musculorum deformans. None of these "diseases"--and they are regarded as such outside the psychiatric profession--is associated with consistent histopathologic or pathophysiologic changes. None meets Szasz's criteria for the ascription of disease. So where does that leave us? With the myth of migraine? Do we withhold phenytoin (Dilantin) from epileptics because they have no "disease"? (Although epilepsy can often be correlated with EEG changes, there is no consistent EEG pattern associated with epilepsy. See J. Laidlaw and A. Richens', *A Textbook of Epilepsy*.) Szasz has held, as a general principle, that "there can be no treatment without illness." Yet he recognizes that "medical

intervention" occurs in the absence of illness; e.g., in cases of abortion or vasectomy. What Szasz has not recognized is the need for *active treatment* of such "non-diseases" as epilepsy, migraine, and--I would suggest--schizophrenia. To advocate this is surely not to abandon the principles of informed consent and contractual therapy--two cornerstones of Szasz's ethos. It is merely to point out the utter impracticality of a strictly Virchovian notion of disease.

L. S. King, a clinical pathologist, correctly perceives that disease is ultimately "an arbitrary designation." It is not a matter of finding lesions but of making complex existential decisions: "We carve out whatever disease patterns we wish, in whatever way we desire." Nevertheless, there is an abiding process of selection that "filters out" some diseases and retains others: "A [disease] pattern has reasonable stability only when its criteria are sharp, its elements cohere, and its utility in clarifying experience remains high."

Schizophrenia, to be sure, needs refinement in all these respects. Yet it remains a useful term in describing a unique kind of "suffering and incapacity in the absence of obvious injury." To those who suffer with that elusive entity called mental illness, and who voluntarily seek treatment for it, we owe an open-minded and aggressive concern.

Professors Thomas Szasz and Sir Martin Roth gave suggestions on the manuscript.

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