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A THEORY OF HEALTH AND DISEASE:
THE OBJECTIVIST-SUBJECTIVIST DICHOTOMY

ABSTRACT. Competing contemporary theories of health, the reductionist (purportedly value-free) and the relativist (purportedly value-based) theories, both rest upon an understanding of value as grounded in desiring, a subjective state. Both can be classified as subjectivist theories. An alternative set of theories, those resting on an understanding of value as grounded in desirability (or goodness) of an objective goal, can be classified as objectivist theories. The ultimate goal of all living things is life, the standard by which states or functions can be measured, and thereby defined as healthy or disease states. While disease can be classified in a taxonomy of biological dysfunctions without remainder, health is a richer concept that includes not only biological values, but also moral values, both leading to the ultimate goal of human flourishing.

Key Words: axiology, function, health, objectivity, value.

INTRODUCTION

At the core of many social, political, and ethical disputes in health care lie differing conceptions of what it means to be healthy and to suffer from a disease. Labeling a condition as a disease may have positive or negative effects on bearers of the condition: when alcoholism or gambling is a disease, the alcoholic or gambler is seen sympathetically, in need of treatment, rather than as morally defective; when homosexuality is a disease, gays may be stigmatized as sick, and are presumed to be in need of treatment. Thus, alcoholics and gamblers welcome the disease label, while gays resist it. Levels of funding as well as insurability by third parties depend on the classification of various conditions as diseases, and payment for treatment is predicated on diagnostic coding. If definitions of health and disease are based on judgments of what is desirable and undesirable, on approval or disapproval, without reference to objective standards, there is considerable potential for mistreatment of

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individuals or groups. There seems good reason, therefore, to seek an objective framework, so that judgments of health and disease are removed from the subjective domain where contentious disputes leading to personal or social abuses are more likely.

In a series of seminal articles, Christopher Boorse attempted to provide such an objective framework. However, in his attempt, he severed the descriptive and evaluative dimensions of health, and, by excluding the latter, provided what James Lennox has characterized as a "reductionist" conception. Attempting to recover the evaluative dimension without slipping into a "relativist" position that gives priority to culturally and historically determined values, Lennox develops health as an objective value. To do this, he places the analysis of health within a teleologically ordered hierarchy of ends. Health is identified as the state of an organism in which subsystems successfully function to sustain the ultimate goal of the organism, life. His account is generally sound, properly giving priority to the goal of human life, and then considering of value that which contributes to that goal. However, he does not sufficiently appreciate the degree to which the goal, life, is itself susceptible to alternative descriptions which rest upon particular moral visions of human flourishing. By accounting for these I will develop an objectivist position that further nuances the insights of Lennox.

SUBJECTIVIST THEORIES

In the debates on the nature of health and disease, it has been assumed that the fundamentally relevant distinction was whether the concepts are objectively determinable on the basis of the empirical sciences or whether they depended upon subjective, culturally variable factors. However, although he does not sufficiently elaborate upon it, one finds in Lennox a basis for an alternative classification scheme that rests upon how the notion of value is conceptualized. When one turns to this alternative scheme, the opposing sides of the traditional debate — the reductionists and relativists — both turn out to be "subjectivist" with respect to values.

The pertinent axiological distinction can be clarified by considering the question posed by Socrates to Euthyphro: is a goal good (or desirable) because it is desired, or is it desired because it is good? Considering the goal good because it is desired gives priority to the desire, and allows for no standard by which to judge
the desire's appropriateness or goodness. Here value is subjectively based. The second alternative gives primacy to the goodness of the goal, the desire for it being appropriate insofar as the goal is good. In this latter case the goal, as given, provides an objective basis for the determination of value. Using this distinction, one could say that conceptualizations of health and disease which are based on the view that desiring, as a subjective state, is prior to the desirability (or goodness) of a goal can be classified as subjectivist theories, while those giving primacy to the goal can be classified as objectivist theories.

In the light of this distinction, we can now consider the traditional approaches to defining health and disease. As noted, Christopher Boorse has made the paradigm case for the reductionist conception (1975, 1976, 1977). He argues that all living beings have evolved in a long evolutionary process, in which genotype, phenotype, and environment have interacted to produce organs with particular functions that make the life of an organism possible. Health, in his view, is the functioning of any living thing in conformity with its natural design. Primary goals of evolution are survival and reproduction; therefore, a healthy organism is one which has no impairment of the functions that typify its particular species, further stratified by age and gender, with respect to survival and reproduction. Normal functioning determines health, on this view, and is statistically definable through empirical observation and measurement: health is "the readiness of each internal part to perform all its normal functions on typical occasions with at least typical efficiency" (Boorse, 1977, p. 562).

Boorse identifies value with subjective desires, then argues that while health is certainly desirable, some undesirable traits are clearly not diseases – short stature, poor coordination, lack of physical beauty, for example – and some diseases are, under some circumstances, desirable – cowpox in the middle of a smallpox epidemic, for example (Boorse, 1977, p. 545). He therefore rejects valuation as part of the notion of disease, taking a subjectivist approach to the Euthyphro question.

There is in Boorse's account a strong basis for an objectivist approach, however. The notion of goals or functional ends plays a central role in his theory, as illustrated in this passage:

Organisms are goal-directed... that is, they are disposed to adjust their behavior to environmental change in ways appropriate to a constant result, the goal. In fact,
the structure of organisms shows a means-end hierarchy with goal-directedness at every level. Individual cells are goal-directed to manufacturing certain compounds; by doing so they contribute to higher-level goals like muscle contraction; these goals contribute to overt behavior like web-spinning, nest-building, or prey-catching; overt behavior contributes to such goals as individual and species survival and reproduction. What I suggest is that the function of any part or process, for the biologist, is its ultimate contribution to certain goals at the apex of the hierarchy (Boorse, 1977, pp. 555–556).

In an objectivist approach, the hierarchy can be used as a basis for determining value, and valuation is simply the process of pursuing or maintaining the goals (or ends). This process has meaning only in the context of living things (Boorse suggests this connection in his use of the term “for the biologist”) and it can be empirically analyzed. For living beings, ends or goals have value, that is, they are values. Each of the goals of biological processes participates in a chain or a network in which each link or node supports others, serving both as a goal in itself and as a means to other goals. This means-ends process leads to the end of the chain or the hub of the network, which, for a living thing, is the life of the organism. Thus, in this biological chain or network of values, the ultimate value is life.2

On this view of value, Boorse’s means-ends hierarchy of goal-directedness might look like this: cells manufacture compounds which are of value in initiating muscular contraction, which is itself of value in setting limbs in motion, which in turn is of value to the goal of catching prey, which is of value to the survival of the animal. All the components of this chain of values lead ultimately to the life of the organism. It is this ultimate value that Lennox correctly characterizes as the objective standard against which living functions may be determined to be successful or to fail. Determining the success or failure of such functions is based on empirical facts regarding objective features of the living organism, facts which cannot be altered by desires, intentions, or attitudes (Mack, 1981, p. 294). Thus, reductionist theories are value-free, as they claim to be, only if they accept the view that desiring is prior to desirability (or goodness) of a goal in determining value. They are, in fact, reductionist by virtue of their subjectivist theory of value.

The second type of health theories, the relativist, relates health and disease to values, generally holding that characterization of conditions or states of a person as healthy or diseased requires consideration of what is desirable and undesirable, good and bad.
The facts relating to an individual’s organ function, on these theories, are insufficient for either defining the presence of health or disease, or for deciding what to do about them. Reference to some standards based on values – understood as attitudes, preferences, desires – are required. The crucial difference between reductionists and relativists is that the reductionists want to exclude, the relativists to include values, but both answer the Euthyphroic question regarding the foundation of values in the same way: desiring is antecedent to desirability.

Charles Culver and Bernard Gert have attempted to move beyond the objectivist/subjectivist dichotomy as traditionally understood, providing a formulation that envisions health and disease as based on preferences and aversions that are not related to individuals, groups, or cultures, but are universal, and are thereby objective (Culver and Gert, 1982). They argue that there are certain conditions, which they call “maladies”, that are viewed universally by all human beings as evil. It is not the dysfunction resulting from malady that lies at the core of understanding the nature of disease, rather it is the perceived evil of the pain and incapacity resulting from dysfunction. Every society, they claim, recognizes that certain states or conditions are evils to be avoided, though societies often disagree in the details of exactly which states should be included on the list. It is universally believed that those undesirable conditions include pain, incapacity, loss of pleasure, and death. They assert that the values critical to the determination of health and disease can be objectively determined and universally applied.

The “objectivity” of this formulation, however, requires no linkage between values and empirical observation of biological events. Rather, Culver and Gert seek evidence from sociological and historical data regarding conditions and states all people believe to be desirable or undesirable. They justify calling this procedure objective by denying that the word necessarily means “in the nature of reality” or “true of the world apart from the human mind”, but say that “a second and more important sense of something’s being objective is that there is agreement about it by all rational persons” (Culver and Gert, 1982, p. 82). I cannot fully explore the meanings of the term here, but it seems that if “objective” has any connection at all to reality, then even if everyone before William Harvey believed that the ventricular septum had pores allowing blood to move between the ventricles, this is not objective evidence that the belief was true. Similarly, the universal belief prior to the nine-
teenth century that dolphins are fish was not objective evidence that they are in fact fish. The inclusion of a condition or state under the designation health or disease by Culver and Gert’s procedure is based on analysis of intersubjective desires of large numbers of people rather than objective information about biological function. To be sure, the empirical process of ascertaining that certain preferences are held by all can be said to be objective, but the underlying valuation is based on desiring as prior to desirability. Along with the reductionists and relativists, Culver and Gert’s formulation should thus be classified among the subjectivist theories.

OBJECTIVIST THEORIES

Lennox proposes that health is a value concept based in empirical biological fact. He gives priority to the goal as the good, asserting that the standard of value against which the success (health) or failure (disease) of any biological function can be measured is the life of the organism. The concepts of health and disease are thereby both evaluative and biologically grounded, and they are so regardless of personal or cultural attitudes. His argument is coherent and persuasive, and it constitutes an important contribution to the literature on concepts of health and disease. His formulation is the paradigm objectivist case, and lays the groundwork for the classification I argue for here. His understanding of what constitutes life, however, may be too narrow to serve as the standard of health. He labels as “health” states and conditions that remain within biologically determined ranges that sustain life. By so doing, he seems to want to avoid appealing to any variable personal values; but has he succeeded in excluding all such desires and preferences from a role in health, or, as I will now argue, only those desires and preferences that are divorced from appropriate human ends?

A question may help to clarify this issue: Is survival the same thing as life, and, if not, which is the goal of a living thing? Lennox’s answer to this question is not clear. In some places, he seems to say that they are not the same, that the goal is life in a richer sense than mere survival. For example, he refers to health as “that state of affairs in which the biological activities of a specific kind of living thing are operating within the ranges which contribute to continued, uncompromised living.” (Lennox, 1995, p. 502). ‘Uncompromised’ here opens the door to a wider range of goals than
that of survival only. The same can be said of his statement that grand mal seizure is a disease when it "either impairs a person's continuing living activities or shortens the lifespan..." (Lennox, 1995, p. 504).

What exactly are "uncompromised living" and "continuing living activities" (as distinct from a shortened lifespan) for a human being? This question is answered differently for man than it is for other animals, in virtue of the fact that man possesses the faculty of reason.\(^2\) Successful living for a human being is not mere survival, it is living a flourishing human life (Rasmussen and Den Uyl, 1991, pp. 56–75). There is a special kind of goodness that is possible only for human beings: moral goodness. The morally good appears when a value is achieved through a choice made by a person. The idea of moral goodness makes possible praise and blame of human beings. Morality consists in a man acting in such a way that he achieves the goals or values that are appropriate to intelligent living as a human being.

There are therefore two kinds of values, biological values, which pertain to all living things, and moral values, which pertain to rational beings who have the ability to choose. Like all values, moral values are part of a chain or web of ends that are at the same time means to other ends, which have as their ultimate goal the organism's life – in the case of human beings, a fulfilled life, intelligently lived.

Moral values, including virtues – e.g., rationality, justice, and honesty – and generic goods or needs – e.g., financial, educational, physical (health-related), sexual, psychological – are common to all human beings, and are required for their flourishing; they are objectively discoverable. Yet, each person requires them to a different degree. The amount of time and effort that should go into pursuing each of the goods is different for every person, and can only be determined by individual judgment. No one can make these judgments for another; there are no a priori recipes. For example, while physical well-being, financial security, and friendships are needed by all human beings to flourish, the good of one person who is athletically inclined may best be achieved by expenditure of much time and effort on a soccer field, while the good of another who is a builder may be best served by expenditure of correspondingly great time and effort on securing a strong financial position and establishing a web of business friendships. Finding the best balance in the use of all his resources to satisfy myriad needs is the task for
each person in light of his own individual potentialities, talents, and circumstances. This task is achieved through the exercise of practical reason, or prudence (phronesis); it is among the most difficult of human endeavors, and, because of its critical importance, was considered by the ancients to be the first of the virtues (Den Uyl, 1991).

Moral valuation is therefore individualized and pluralistic, but is not subjective because it is not grounded on desires and preferences that are independent of human ends; rather, it is objective because it is grounded on empirical facts (in the medical sphere, those supplied by medical science) and reason.

For human beings, the use of intelligence in pursuing and using values is a central requirement of morality. One of the many values the flourishing life requires is health, so for human beings, unlike other forms of life, morality in the form of choices made intelligently or unintelligently plays an important role in pursuing and attaining health. Thus, health can be pursued through the deliberate development of habits that support it; that is, through the development of wellness, which can thereby be considered to be a virtue that contributes to a successful human life.

Perhaps, then, in parallel with the distinction between biological values and moral values, a distinction can be drawn between biological health and moral health: the first is concerned with well-functioning of the physical body that leads to survival, the second with well-functioning of dispositions, attitudes, and desires that lead, together with a healthy body, to human flourishing. Under this construction, not all desires and preferences are excluded from a role in health (as Lennox seems to propose), only those that are divorced from or antecedent to the goodness of their goals.

There is objective biological grounding for the moral value of wellness in the empirical measurement of its structural and physiological correlates, from the molecular, subcellular level to the functioning of the organism as a whole. Thus, the connection Lennox has established between value (the life of a living thing) and empirical biology is valid not only for values shared by all living things, but also for moral values (particularly the virtue of wellness) possessed only by human beings. Wellness as a habit of healthful choices may help to avert diseases and premature death, and it may also maintain physical fitness at a level consistent with the particular needs of the individual. These fitness levels can be both chosen and objectively measured.
The practice of medicine is mostly concerned with biological health, but not exclusively. Moral values related to health — proper diet, programmatic exercise, accurate and sparing use of medications, avoidance of harmful agents like tobacco and excessive alcohol or of harmful activities like driving too fast — are also part of the sphere of interest of medicine. The practice of the virtue of wellness moves bodily function toward the good of uncompromised living, and because of this, is both an end in itself and an integral part or contributor to flourishing of the individual. An additional feature of health as the goal of a habit of healthful choices is the presence of vigor, fitness, and sense of well-being that are the pleasurable outcomes of a healthy life.

SURVIVAL, FLOURISHING, AND PERSONAL VALUES

I have asked the question, is the survival of a living thing its goal or is the life of a living thing its goal, or are these the same? The inclusion of moral values leads us to answer that the goal of a living thing is not mere survival, but is the life appropriate to that particular kind of being. Morality, which is central to what it means to be human and to live a human life, must be part of the valuation that serves as the standard for human health.

It is not clear from his discussion whether Lennox would agree with this formulation. There is evidence, cited above, that he might agree. In the latter part of his essay, though, he seems to assert that mere survival is the criterion of health: “The fundamental alternative faced by living things, then, is life or death, and the standard by which one judges whether a biological function is appropriate is, therefore, life” (Lennox, 1995, p. 506). Yet, some biological functions are unrelated to survival, while highly relevant to a flourishing life.

How will a theory measuring health by survival describe biological dysfunctions, even severe ones, that are not lethal? What of the infertile 30 year old woman who wants to bear a child? Reproductive disorders may have an important bearing on personal happiness, but have no relation to survival of the individual organism, though perhaps to that of the species. What of the 70-year-old woman who has suffered from a life-long skin condition that has produced scaling, thickened skin on her face and arms, is unresponsive to medication, and distorts her appearance sufficiently to
have driven her to a reclusive life for decades. Her condition affects only social contact and friendships; it is not life-threatening, so is it not a disease? Lennox surely wants to include such conditions as diseases, because they are outside the range of ‘uncompromised living’. He is not clear, however, about the role of survival-independent moral values – like rearing children and developing friendships – in defining health.

Moral values, the virtues and goods required for a flourishing life, are universal and objectively discoverable, but the exact weighing of these values to achieve fulfillment for a particular person is highly individualized (Rasmussen and Den Uyl, 1991, pp. 32–57). Personal values, as I use the term, are not subjective, but are values that have been assigned a weight, explicitly or implicitly, by an individual in the light of that individual’s particular specification of human flourishing. They have two distinct roles in the context of health: they, in part, define health because well-functioning can be realized along different pathways and at different levels (while there is much in common, the health of an Olympic athlete is not the same as that of a professor of philosophy); and they rank health among the many other goods that compete for personal resources as the individual pursues a flourishing life (the effort and time spent by the athlete and the philosopher in pursuing health may be vastly different).

Disease can be understood as a biologically based value concept, much as Lennox has done; in fact, this is the framework within which physicians are trained and in which they actually care for patients. This framework also underlies both private (insurance companies, hospitals) and public (health-related law) policy development. If the goal of medicine is defeating disease and relieving suffering, then the disease concept would adequately encompass all of medical practice. But the goal of medicine is broader, in my view: it includes the restoration of health. What physicians, nurses, and others actually do in caring for patients is far more complex and comprehensive than curing disease and assuring the continuation of biological life. Caring effectively for patients requires consideration of their health-related personal values and behaviors: failure to pursue values related to wellness – those concerning nutrition, exercise, avoiding tobacco and excessive alcohol, for example – may actually cause disease. Restoration of health may depend, therefore, upon educating a patient and encouraging alteration of personal values, often a critical component of treatment.
In my view, health should be understood as the condition of a living thing whose biological functions are operating in a way that promotes uncompromised living, holding the organism’s flourishing life as the standard. On this view, one may speak of body parts, down to cells and subcellular organelles, as being healthy or not, but the idea of health fundamentally applies to the whole person (Whitbeck, 1981). This understanding of health accepts Lennox’s view of health as an objective value by the measure of survival of the organism, but goes beyond it to a richer standard, one that includes, for human beings, both impersonal (biological) and personal (moral) values. The standard of flourishing is not as sharply demarcated as that of survival, but, still, this view does not lapse into subjectivism: the foundation on which judgments of flourishing rest is composed of objective information about structure and function, supplied by the science of medicine. The judgments themselves are not subjective because the relevant information can be ignored or misused; desires and attitudes may be inappropriate, leading away from rather than toward flourishing. Stated in another way, the objectivity of values is not determined by science; rather, it is determined by the rational use of objective information supplied by science. Thus, both Lennox’s view of health and that offered here belong in the objectivist group of health theories.

A NOTE ON POLICY IMPLICATIONS

The expansion of Lennox’s account of health to include both biological and personal values has important implications for both the practice of medicine and the construction of health policy. Because personal values, expressed in behaviors and choices in life-style, to a large extent are actually determinative of healthy and unhealthy conditions, it follows that, to at least that extent, people are responsible for creating their own health. Moreover, the pluralism of rankings of health among the many goods needed for a flourishing life requires that individuals be free to allocate their own resources among those many goods, according to their own visions of the good life. Neither a flourishing life nor a healthy one can be given to an individual; each human being is necessarily and unavoidably responsible for creating his own character and life. (Rasmussen and Den Uyl, 1991, p. 66) Paternalism by physicians in not allowing patients to choose among alternative treatments, by
health care organizations in not informing clients of restrictions on resource availability, or by governments in legislating particular expenditure levels or benefit packages is fundamentally wrong. It is wrong because it enforces a particular view of health, deprives the individual of the liberty essential to pursuing his own vision of a good life, and mistakenly excuses the individual from responsibility for his own health, inappropriately placing it on others. The conditions under which the state may interfere with the pursuit of personal values must be narrowly limited to intercession only in those actions which interfere with others in pursuing their own values. These important implications require further development, which space does not allow here.6

We began by noting potential abuses of groups and individuals under private and public health policy when health and disease are defined subjectively, based on attitudes of approval and disapproval. Under an objectivist system, definitions are factually based, so the potential for abuses is minimized, albeit not entirely eliminated. If there is a biological substrate for alcoholism, gambling, and homosexuality, then they are diseases which are potentially treatable (though an affected individual may prefer to keep the disorder), regardless of a group’s aversion or desire for the label. If there is no such substrate, then those behaviors are moral choices that are open to praise or blame, but lie nevertheless within the sphere of personal actions protected from outside interference, the sphere required for an individual’s pursuit – successful or unsuccessful – of human flourishing.7

NOTES

1 Specifically, Socrates posits: "The point is... whether the pious or holy is loved by the gods because it is holy, or holy because it is beloved of the gods....A thing is not seen because it is visible, but, conversely, is visible because it is seen; nor is a thing led because it is in the state of being led, or carried because it is in the state of being carried, but the converse of this....Any state of action or passion implies previous action or passion. It does not become because it is becoming, but it is in a state of becoming because it becomes; neither does it suffer because it is in a state of suffering, but it is in a state of suffering because it suffers....The state of being loved follows the act of being loved, and not the act the state....And what do you say of piety, Euthyphro: is not piety loved because it is holy, not holy because it is loved? Yes." (Plato, Euthyphro, 9–10).

2 Rasmussen and Den Uyl put the issue in this way: "The process of pursuing and maintaining ends is required by the fact that a living thing could not exist as
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a living thing if this process did not occur. Pursuing and maintaining ends is an essential feature of life which results from its conditional nature" (Rasmussen and Den Uyl, 1991, p. 45).

I recognize that this is not an uncontroversial claim, but do not defend it here because the answer to the question of whether certain animals may have moral claims or may even exhibit moral goodness does not affect the thesis of the discussion.

As examples, courage and justice are moral values (virtues) that are required by everyone to live well; they are individualized as personal values that are weighed differently in the life of a soldier and of a judge.

I cannot fully develop this theme here, but it has been estimated that 50% of all premature deaths in this country are related to or caused by external risk factors (McGinnis and Foege, 1995). Tobacco and alcohol use, diet and activity patterns are the largest categories. Most of these factors arise from personal choices and habits. The cited study looked only at deaths, but these factors may play an even bigger role in morbidity.

For a detailed discussion of individual freedom and responsibility in the social context, see Rasmussen and Den Uyl (1991), especially chapters 3 and 4.

This critique has benefitted greatly from the invaluable comments, suggestions, and guidance of Douglas R. Rasmussen, Douglas J. Den Uyl, and George Khushf. I am grateful for the perceptive comments of Martin Ferimutter and Richard Nunan.

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