Normal and Abnormal: Georges Canguilhem and the Question of Mental Pathology

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Abstract: Traditionally, debates between psychiatrists and anti-psychiatrists have centered around the appropriateness of positivist models of psychological disorder. According to positivism, the cause of unusual or distressing mental states is to be found in biological abnormalities. This paper suggests that anti-psychiatry often challenges positivism by opposing accounts of social causation to those of physical, biological disease without first questioning the adequacy of positivist accounts of physical illness itself. Using the work of philosopher of medicine, Georges Canguilhem, I wish to elaborate a non-positivist account of physical disease, which can then be applied to debates in mental health to redefine the terms within which the role of biological abnormalities can be thought. Applying Canguilhem's definition of pathology, the paper argues for a conception of mental illness in which the scientific identification of biological abnormalities is useful, but not in itself sufficient. Finally, these arguments are related to recent work involving cognitive therapy approaches to voice hearing and schizophrenia.

Keywords: positivism, critical psychiatry, biology, politics, deviance, voice hearing, schizophrenia.

Thomas Szasz famously wrote that the literal meaning of *illness* consists in its reference to bodily, biological disorder (Szasz 1974). For him, the confusion and controversy surrounding definitions of mental ill-health ensue from the misidentification of a literal reference in a metaphorical one. When we speak of *mental illness*, for Szasz we do so because of the resemblance in terms of disability and suffering of the person in mental distress with that of the person whose body is diseased. Suffering and disability in physical illness are, however, only the secondary effects of a causative biological disturbance. By taking them as primary in the definition of disease[1] we mistake a feature that establishes a *resemblance* (metaphoric relation) for the mark of an *identity* (literal relation). *Mental illness* is thus precisely a metaphor that we have forgotten is metaphorical, erroneously applying the concepts and terminology of physical illness. The literal reference of *illness* is in fact always the body.[2]

The arguments of this paper begin from the thought that there is something misleading about the way the body functions in this definition of illness. This is important; in the 30 or so years since the publication of *The Myth of Mental Illness*, the voice of what was called *anti-psychiatry* or *radical psychiatry* has become less perceptible. This is no doubt in large part a result of

the successes of biological research in identifying distinct biological abnormalities concurrent with states of mental disturbance. Such a reference to the body seems to restore a literal meaning to the concept of mental illness. With mental distress ultimately reducible to biological abnormalities, the appropriateness of a medical model for psychiatric disorder seems assured, and anti-psychiatry's critiques surpassed.

It is precisely the priority of biological abnormality over suffering and disability in the concept of pathology that the present paper will challenge. It is this priority that, following philosopher of medicine Georges Canguilhem, I will identify as a *positivist* conception that ultimately proves inadequate to the definition of disease. In the sphere of mental health, *positivism* is that which understands mental disorder on the model of physical illness (the "medical model"). According to this, psychological disturbances are primarily the effects of abnormal biological structures or processes that do not occur as the direct result of the patient's meanings or beliefs about the world. This position is to be contrasted with anti-psychiatric positions (often humanist or existentialist), which posit mental disturbances as originating in meaningful relations between people. For the positivist, mental illness is ultimately reducible to physical illness and so, with increasing biological knowledge, psychiatry as a branch of medicine can become a value-free and objective endeavor in the mold of a natural science. For the anti-psychiatrist, relations of meaning are not the type of object with which medicine deals and so psychiatry can never acquire the authority of a science, nor its objective status.[3] I suggest that the positivist conception contains a number of questionable assumptions about the nature of medicine and its relation to questions of meaning and value, assumptions that are shared by critics such as Szasz in their attitudes to physical illness, even as they are refuted in their understanding of mental disorder. It is this implicit affinity with positivism that renders Szasz's critique ill equipped to hold off a positivist conception of psychological disorder once any involvement of the body in mental disturbance is revealed (Szasz, as Mathews 1995 says, explicitly excludes disorders of thought and behavior originating in brain disturbances from his critique of mental illness). By developing Georges Canguilhem's revolutionary ideas on health and sickness, I wish to argue for a conception of pathology that can include mental disturbances, while at the same time pointing to a certain ambiguity about the role of biological abnormalities in pathological phenomena. This is to argue, against the anti-psychiatrists, that it is indeed possible to have a legitimate concept of mental illness; but with them, that the notions of positivist medicine are inadequate to such a conception and confusing for psychiatry's self-understanding.

Canguilhem and the French Tradition

Although Michel Foucault's critique of psychiatry is reasonably well known in Anglo-American circles,[4] the work of one of his tutors and profound influences is perhaps less familiar. Georges Canguilhem, trained both in philosophy and in medicine, holds an important place in a tradition of French philosophy and the history of science.[5] This tradition is characterized by its conception of science as a history of discontinuities. According to this, the rationality and specificity of scientific discourse is given by its process of critical rectification of its own concepts brought by moments of crisis and innovation, which thereafter establish a science on a new epistemological footing. The norms by which a science regulates itself are historically varying and transcend themselves in periods of epistemological breaks. Now for Canguilhem, who, as Foucault says, brought the history of science down from the heights of mathematics and physics to the less deductive domain of the life sciences (Foucault 1991), this fact of normative self-transcendence curiously mirrors something essential to the object of the life sciences themselves. If science is characterized by the periodic reinvention of its own norms, this is because science is something that living beings do, and life itself, at its most irreducible, is *normative activity*. This concept of life is worth developing in more detail because it is from here that the notion of the pathological is derived.

THE CONCEPT OF LIFE

For Canguilhem, it was essential for biology's constitution as a distinct science that it define the concept of *life* in a manner that was not merely reducible to the laws of chemistry or physics. In fact, Canguilhem, in his doctoral thesis of 1943, *The Normal and the Pathological* (1991), was attempting to negotiate a path between what were at the time the highly vocal claims of both vitalism and reductionism. *Vitalism* was the claim that life was a distinct substance, irreducible to the laws of the material world. In contrast, *reductionism* held (indeed, this is still an active position within the sciences) that life was nothing but a function of the material world and hence could be sufficiently explained within the existing concepts of chemistry and physics. According to reductionism, biology could not be a distinct science in its own right, because it was merely the application in a limited field of the concepts and laws of the higher sciences. According to vitalism, which dealt with the dubious, quasi-spiritual notion of *vital substance*, biology risked being not really a science at all. Canguilhem defined *life* between vitalism and reductionism, as polarized activity. Life is fundamentally that which is not indifferent to its environment. Rather, it is that which spontaneously valorizes facets in its environment, reacting adversely to stimuli that threaten its existence, growth, and reproduction, and favorably to those that enhance these. As such, life is that which regulates its relationship to its environment through the adoption of norms of living, that is, patterns of behavior that express an evaluative relation to an environment, that judge a phenomenon to be good or bad for the organism's survival. For Canguilhem, it is this unconscious and unteleological[6] positing of value that establishes the specificity of life. Judgments of good or bad are not relevant in chemistry or physics. In the case of disease, for example, the progress of a cancer adheres entirely to the laws of chemistry and physics, but it falls to the life sciences to establish the specific meaning and value of this for the living organism. For Canguilhem, it is only by grasping this that biology achieves the status of a science, epistemologically distinct from chemistry and physics but not falling into the trap of vitalism. As Foucault says, "in the extreme, life is what is capable of error" (1991). Life is that which may "go wrong," in the specific sense given by the spontaneous valorization that is inherent to life's activity. It is from this sense of "error" that is unique to biology and that alone establishes the epistemological distinctness of the life sciences, that the concept of pathology derives.

NORMATIVITY, NORMALITY, AND PATHOLOGY

It is in the sense of the adoption of norms through spontaneous valorization that life is a normative activity. However, for Canguilhem, *normativity* implies not just following rules as a reaction to imposed circumstances, but being able to institute new norms for oneself. Full normativity consists in the capacity to transcend established norms of life as environmental conditions change or to impose one's own norms upon an environment. This is crucial, because it is from this enlarged understanding of normativity that Canguilhem's conception of health arises. For Canguilhem, the healthy existence is that which expresses most fully life's inherent normativity: "Health is a way of tackling existence as one feels that one is not only possessor or bearer but also, if necessary, creator of value, establisher of vital norms" (1991, 201). Health as such is a creative, propulsive, and dynamic state. It is fundamentally opposed to the adoption of a way of being that is fixed or static. This entails that healthy (normative) norms must themselves be continually subject to change and revision (it is in this sense that scientific norms express an activity of life). Healthy norms are characterized by their capacity for self-transcendence. A healthy norm is therefore always provisional and transitory.

Now, if it appears that this leaves the concept of health without a specific content, this is true, and it expresses Canguilhem's most profound disagreement with positivism. For Canguilhem, the state of health is of a necessarily indeterminate nature, being inherently uncontainable within

fixed parameters. Health does not appear to us as an object of study from which we may deduce the necessary conditions for all healthy states. Indeed, *health* is revealed to us as an object of knowledge only when it fails in the fact of disease:

> in biology it is the *pathos* which conditions the *logos* because it gives it its name. It is the abnormal which arouses theoretical interest in the normal. Norms are recognized as such only when they are broken. Functions are revealed only when they fail. Life rises to the consciousness and science of itself only through maladaptation, failure and pain. (Canguilhem 1991, 208–9)

To understand the importance of this insistence on the epistemological primacy of pathology, we must examine something of the history of the concept *pathology* as it is recalled by Canguilhem, and his reformulation of it within a non-positivist framework.

In opposition to the positivist ideas of the time, Canguilhem sought to establish the originality and specificity of the pathological. Medicine was once governed by an ontological view of sickness. This expressed the view that health and disease were distinct qualities, sickness afflicting the body from an external source. In contrast to this, Greek medicine advocated a dynamic conception of illness. This understood the healthy body as existing in a harmony of forces. Disease thus emerged within the body when an attempt to generate a new equilibrium failed and unbalanced the equilibrium it sought to replace. Although contrasting on many points, these two models of sickness were united in their view of health and pathology as distinct, heterogeneous qualities. In the nineteenth century, however, a collective will to bend nature to the normative desires of man demanded that illness take on a quantitative rather than a qualitative conception. Pathological processes began to be conceived not as distinct from normal processes but as those same processes rendered dysfunctional in virtue of excess or deficiency. If sickness had no distinct being of its own but was merely a quantitative deviation from a set of constants, it was possible to convert the pathological back into the normal through knowledgeable human intervention. In this way the notion of the pathological itself began almost to disappear. To the extent that pathology existed at all, it was as a statistically abnormal state of affairs. To this day, for positivism, health consists in the maintenance of the body within a set of physiological constants expressed as statistically average within a population. Deviation from these constants can only signal disease. Canguilhem accepted that pathological states are in continuity with the norm. In other words, pathological states emerge within the body according to the same laws and determinisms as its normal functions and are indeed quantitative variations of them (the reductionist claim). He argued, however, that it is a philosophical error to assert that quantitative continuity between states implies qualitative identity:

> The continuity of the middle stages does not rule out the diversity of the extremes. (56) [As such,] One can deny that disease is a kind of violation of the organism and consider it as an event which the organism creates through some trick of its permanent functions, without denying that the trick is new. An organism's behavior can be in continuity with previous behaviors and still be another behavior. (87)

For Canguilhem, the pathological state is qualitatively different from health because it has a different value for the organism in terms of its capacity to survive and flourish. This is crucial: as we suggested above, it is life's normativity—its spontaneous valorization of its environment—that makes the 'pathological' a concept of meaning and value. Furthermore, it is this dimension of value that positivist accounts of sickness cannot account for yet can never succeed in suppressing. Behind the notions of excess and deficiency can be seen an implicitly evaluative and normative character that positivism cannot account for within its pretension to numerical neutrality. A numerical quantity is only excessive or deficient with respect to a quantity which has been previously judged to be desirable. The positivist model of health cannot succeed in ridding the concept of the pathological of its originality nor its evaluative nature, since it is life itself that first identifies a state of being as pathological through the experience of limit, suffering or obstacle. In the human sphere, Canguilhem follows biologist René Leriche in defining health as "life

lived in the silence of the organs" (Leriche, quoted in Canguilhem, 91). As Canguilhem says, "The state of health is a state of unawareness where the subject and his body are one. Conversely, the awareness of the body consists in a feeling of limits, threats, obstacles to health" (91). If a physician can anticipate illness where the 'patient' feels none, this is only because they have previously observed the same biological state in a subject complaining of illness. For Canguilhem therefore, "there is nothing in science that has not first appeared in the consciousness" (92–93). Pathology appears as an object of science only because it is first felt, qualitatively and evaluatively by ordinary men, to be a new and distinct experience. Just as biology must grasp the specificity of life, medicine must grasp the originality of disease as a problem irreducible to the concepts of science alone. Now, in fact, for Canguilhem, quantitative deviations from average norms are not necessarily pathological. There are numerous instances within medicine of statistically unusual structures or processes which do not however impair an organism's adaptation to its environment or result in the experience of suffering. By way of example Canguilhem cites yogis whose breaking of physiological norms through willful control of functions could by no means be deemed pathological. Indeed, as Darwin's theory of natural selection implies, variations from species types can prove to be more adaptive and beneficial to an organism's survival than the norm from which they deviate. If abnormal (statistically unusual) processes are always found beneath pathological (maladaptive) states, this is because according to the laws of selection, the features and quantities that are usual within a species are likely to have proved adaptive. However it is a mistake to infer from this the converse, that abnormal features are always pathological. Successful features are statistically average because successful, not successful because average. Strictly speaking, for Canguilhem, even pathological states are not abnormal, if 'abnormal' is taken to mean literally 'without norms': "Wherever there is *life* there are norms. Life is polarized activity, a dynamic polarity, and that in itself is enough to establish norms" (Canguilhem 2000, 351). Life is always normal to the extent that, as we have said above, it spontaneously seeks out or avoids stimuli that bear different values for it in its goal of the maintenance of life. This is an establishment of order, a system of values. In the extreme, any pathological state that does not lead immediately to death is still normal in that it expresses an adaptation to a situation; a way of ordering an organism's relationship to its environment such as to defer death. Indeed, not only does the pathological state still operate according to norms, but these norms must be recognized as new and original. Since the difference between pathology and health is not merely quantitative, pathological norms represent a qualitatively different relation to life and circumstances than the norms that they replace: "Disease is a positive, innovative experience in the living being and not just a fact of decrease or increase" (Canguilhem 1991, 186). To be sick "means that a man lives another life" (88). What is constitutive of pathological norms as opposed to healthy ones is that the former are characterized by a reduced capacity to tolerate change. The organism that is in a pathological state lives within a narrow margin of tolerance for its environment. A patient experiences herself as under assault from her body and from the environment. Finding that certain behaviors and environmental conditions bring a reduction in her levels of suffering, the patient tends to restrict her behavior to these norms. Variations in her environment—physical or social—are experienced not as new possibilities for action but as threats to her precariously achieved management of suffering, and efforts are made to maintain the environment at a constant level. As such, whilst the pathological state is still *normal* in the sense that it prescribes and regulates ways of being according to a spontaneous valorization, it is not *normative*, in the fullest sense that refers to the capacity for continual revision and self-transcendence. Pathological norms are characterized by their conservatism and intolerance of change. If health is variability and flexibility—normativity—then pathology is defined as the reduction of these.

To summarize, Canguilhem develops a concept of pathology, the meaning and value of

which is given by life's basic *biological* character as normative activity. Health is *normativity* (variability, acceptance of deviation) not *normality* (containment within limits, the statistically average). This then is the radical import of Canguilhem's thesis: the constancy and fixity that for the positivist tradition defined health, now define pathology. Hence it is that health has no fixed content, capable of being predicted in advance. Life is that which, being able to transcend its own normalities, is endlessly able to surprise expectations based on observations of its usual practices: "we reserve the possibility for life to go beyond the codified biological constants or invariants conventionally held as norms at a specific moment of physiological knowledge" (p. 206). Health has many more possibilities than are allowed for by the observance of statistical frequencies alone.

Can Pathology Be Objectively Determined?

The immediate consequence of refusing the assimilation of *pathology* to biological abnormalities (in the statistical sense) is that the ascertaining of any particular phenomenon as pathological is never an objective undertaking, in the sense of something that can be determined by measurement alone. If health is normativity, not normality, then as we have said, Canguilhem's thesis allows for the possibility that biological abnormalities may prove healthy and normative. The criterion for qualifying any biological fact as pathological is not then its deviation from the normal, but its reduction of the individual's possibilities for interactions with its environment, which is felt as the experience of suffering and limit. Hence we can begin to see the subversion of what I called Szasz's positivist idea of a literal use of *illness*. It seems that for Canguilhem, suffering and incapacity are foremost in the definition of pathology, certainly of greater importance than the presence of abnormalities. Now, this begins to have an effect on the allegedly value-free status of medicine. Deviation from a statistical norm can be determined by objective measurement alone: the value of a biological feature for life's dynamic polarity cannot.

Instead, for Canguilhem, the work of ascertaining pathology falls to an evaluative sensibility conscious of the specific meaning and value of a phenomenon for the general functioning of the organism. This has a highly significant implication: biological features cannot be judged as pathological in isolation. Facts are only pathological in terms of their interactions: "There is no pathological disturbance in itself: the abnormal can be evaluated only in terms of a relationship" (1991, 188). Now, this entails that no fact of biology is pathological in an absolute sense. The same abnormality can prove restrictive and maladaptive or propulsive and creative according to the potentials and constraints of its environmental context. Canguilhem gives the example of low blood pressure, which may be pathological or not depending on altitude. Similarly, he cites a species of butterfly whose black-winged mutation is eliminated in natural environments but prospers in industrial ones. The black-winged mutation proves maladaptive in nature where its coloring stands out against the bark of trees more than the gray-winged variety, but normative in an environment where its predator, birds, are less common.

It is important to point out that there seem to be at least two senses of *environment* at work in Canguilhem's theory: the one referring to the internal physiologic environment of the organism and the other to its external situation. Clearly, what is dysfunctional about some pathologies, such as cancer, derives more from the internal environment and is less likely to vary according to external environment in the manner of the above two examples. The general principle, however, and a consequence of Canguilhem's antipositivism, is that the value of a feature is never established in isolation. Likewise, environments themselves have environments, and as such *environment* is a non-exhaustible concept. It is therefore always valid to critique positions that, like positivism, seek to limit in advance what may be taken as the context that gives any feature the identity and value that it has.

Now, if the value of a feature for an organism's survival changes according to context, the positivist goal of establishing particular levels of

functions as definitively pathological becomes impossible. Instead, "The sick person must always be judged in terms of the situation to which he is reacting and the instruments of action which the environment itself offers him . . . " (1991, 188). This judgment falls ultimately not to the scientific consciousness but to the ordinary man in his intuitive grasp of illness as suffering and obstacle. For Canguilhem, medicine can never be a science in the sense of a value-free activity. Rather, it is a technique at the crossroads of many sciences: "Clinical practice is not and will never be a science even when it uses means whose effectiveness is increasingly guaranteed scientifically" (1991, 226). Science may improve the instruments of medicine but its goals will always be given by the value judgments of *unscientific* minds.

I wish to draw two main points from the above analysis. First, if the same biological features can prove pathological under some conditions and healthy under others, then *pathology* is not located simply within the organism, but in its reciprocal relationships with its environment. As such, an understanding of disease shifts from the isolated and quantifiable bodily fact to the dynamic evaluation of relationships. Pathology is loss of normativity, and normativity is not a concept reducible to isolated biological quantities. Now, to speak in the terms with which this paper began: if no biological feature is inherently pathological, then the literal reference of even *bodily illness* is never, strictly speaking, the body. That is to say that there is something suspicious about the way in which the body is valorized, in Szasz's formulation, as the guarantor of a literal meaning for illness. The literal/metaphorical distinction seems to rest on a valorization of the body's availability for physical measurement and comparison. But if there is something reassuringly tangible about the body in Szasz's view, we must note that Canguilhem insists again and again on the insufficiency of such comparisons to the concept of disease. It is not lengths, volumes, or frequencies that give us the notion of pathology, but biological values and relationships. In other words, normativity. The clearest demonstration of this is the possibility of quantitatively identical abnormalities proving pathological or healthy according to environment. I therefore suggest that by indexing *pathology* to the *normativity* concept rather than to physical abnormalities, Canguilhem removes that facet of the illness definition that for Szasz a priori rules out the proper classification of mental states as pathologies. If a state of mind reduces an individual's capacity for innovative relations with his environment, constraining him to exist within a narrow band of possible behaviors, then this seems to fulfill Canguilhem's definition of pathology. This seems particularly clear when a mental state incapacitates an individual to such an extent that he cannot meet his basic biological needs (e.g., a depressed person who does not eat because he believes himself to be already dead). *Mental illness* would here have a correct, literal usage, given by its reference to organic normativity: and this is the same reference that makes *physical pathology* a concept of meaning and value.

Second, we may say that in the human sphere, even the distinction between physical and mental illness is problematic once health and pathology are defined in terms of relationship to an environment. For Canguilhem, the human environment consists of phenomena of not just vital but social significance. Indeed, because humans live in a technologically constructed environment, vital norms can express social norms at the same time. Therefore, both this environment *and the human body itself* are to some extent the product of social and psychological norms:

> social norms interfere with biological laws so that the human individual is the product of a union subject to all kinds of customary and matrimonial legislative prescriptions. . . . Man is a geographical agent and geography is thoroughly penetrated by history in the form of collective technologies. (1991, 159)

For Canguilhem, even apparently biological facts such as human height (p. 159) and life span (p. 160) are "inseparably biological and social" (p. 159).

I suggest that this introduces still another level of skepticism about the adequacy of positivist models of illness. The notion of the biological that underpins the positivist claim to objectivity—the

idea of a sphere of pure "nature" transparently accessible by the quantitative methods of science—itself begins to recede as the irreducible implication of social, political, and technological norms in human biology becomes apparent. I would like now to consider the various consequences of this and other aspects of Canguilhem's thought for the status of psychiatry, in particular, for the possibility of a purely biological psychiatry.

Implications for Psychiatry

The Pathological Is Still Normal

For Canguilhem, as we have said, the pathological state is still normal in that it remains a regulation of behavior in response to vital values. Functions that have become pathological do not descend into random disorder or degeneracy. Instead they express an alternative order, which represents an attempt on the part of the organism to adapt to altered circumstances within its own internal organization or to an environment that has become hostile. A function that is pathological still manages to hold off, for a time at least, an immediate decline towards death. In this way it still expresses a norm of life. But the maintenance of life is now more precarious than it used to be and is achieved by confining the body within a narrower set of operations. The pathological norm is necessarily intolerant of infractions of its functioning. It buys the organism its continued existence but at the cost of its capacity for change and creativity: at the cost of its normativity. Now, what could it mean to consider a pathological mental phenomenon as normal in Canguilhem's sense, as still expressing a norm of life? I suggest it implies two things, both of which have, until recently, been disallowed by much psychiatric theory: that pathological mental phenomena such as psychoses can express an *order,* and that this order is created by an attempt to *make sense* of an altered relation to the world.

First, this means that unusual or distressing mental states are, strictly speaking, never *dis*orders. As Canguilhem says, paraphrasing Henri Bergson: "there is no such thing as disorder; rather, there are two orders, one of which is substituted for the other without our knowledge and to our dismay" (Canguilhem 2000, 351). This is significant in a psychiatric tradition where, for a long time, psychotic states of delusion or hallucination were deemed to be chaotic and without meaning, the manifestations of an absence of order, or the remnants of a reasoning process broken beyond functioning. Because psychotic manifestations were taken to be essentially chaotic, without internal norms, they could not themselves communicate anything of value to the clinician about the nature of the disturbance. As such, I suggest, this refusal to see psychotic states as expressing orders and meanings, relates to what Roland Littlewood and Simon Dein identify as a devaluation of the content of symptoms in diagnosis and treatment, and corresponds to a culture/biology distinction (Littlewood and Dein 2000). According to this, the content of a delusion or hallucination (to the extent that it expresses a meaning at all) merely mirrors the external themes and preoccupations of the patient's culture. Such a mirroring expresses nothing of the disturbance itself and is thereby simply a misleading envelope to be picked away in the uncovering of the formal biological cause.

Now, in contrast, applying Canguilhem's sense of the pathological normal would suggest that psychotic phenomena have their own internal norms, and that these are expressive of the *originality* of the pathological state for a subject's mode of life. As Canguilhem says, following Goldstein, pathological norms are not just diminished versions of healthy norms. They are new in quality and function, and cannot be compared "without understanding the sense and value of the pathological act for the possibilities of existence of the modified organism" (Canguilhem 2000, 86). As we have said, a fact is pathological in virtue of its modification of the individual's relationship to his environment. But this modification contains a healthy goal: that of the preservation of life, albeit in reduced circumstances.

To understand a pathological mental phenomenon as normal in this sense, is to restore a meaning and value to symptoms. It is to suggest that

psychotic phenomena—as not simply negated or diminished versions of healthy processes, but as new organizations expressing new adaptations to circumstances—can express an order that is not merely that of an external cultural backdrop, but that of the pathological form itself. Clinical attention returns to the content of delusions and hallucinations. It would become incumbent upon the mental health care practitioner to consider how even the most distressing psychological symptoms represent an adaptation to the circumstances of life; to inquire what insights symptoms offer into the novel psychological arrangement and the reasons for its occurrence. As well, it is to suggest that a symptom may be of positive value to the patient despite its negative effects, by preventing a decline into a still more debilitating state of affairs.

I suggest that cognitive therapy, which identifies the content of beliefs as at least partially causative of distress and therefore a site for therapeutic intervention, begins by treating pathological symptoms as normal in Canguilhem's sense; that is, as expressing not the absence of meaning or order, but alternative orders from those of normal (statistically common) processes.[7] In this sense, the application of Canguilhem's notion of pathology to mental health would lend theoretical support to the approach of cognitive therapy, which relates to delusions and beliefs about hallucinations as *normed* phenomena and addresses itself to adjusting these norms into more adaptive ones, that is, which do not provoke distress or constrain the individual to within highly limited modes of functioning.

Abnormal Phenomena Are Not Necessarily Pathological

In much anti-psychiatric theory, psychiatry comes under attack for stigmatizing—behind the pretext of an objective and neutral medical terminology—behaviors or experiences that a society finds unacceptable. As I have suggested, such a criticism often depends on refusing the medical validity of psychiatry's concepts by denying that mental disturbances are among the type of phenomena to which *illness* properly refers. A consequence of this critique can then be that the concept of mental pathology is itself lost, and with it, the ability to identify particular mental states as being less desirable than others in anything other than a judgment of pure subjective violence.

Now, it is certainly not the case that all criticisms of the moralizing tendency in psychiatry lead to such a relativism.[8] But it is in the context of such a possibility that I suggest an advantage of applying Canguilhem's thesis to mental health is its retention of the notion of pathology in a manner relatively independent of social normativization (we will have to elaborate on this *relatively* in the next section). For Canguilhem, the antonym of *pathological* is not *normal* but *normative*. By defining pathology as the absence, not of the *normal* (the statistically frequent), but the *normative*, he establishes illness on the grounds of reduced capacity rather than social deviancy. Canguilhem is himself not a relativist, because the value in the name of which one speaks of pathology is not a cultural one, radically contingent with respect to the organism itself and expressive merely of social or ideological needs, but a biological one. As Monica Greco (1998) emphasizes in her excellent paper, the concept of the pathological comes from the teleology that is immanent to life at the level of the organism itself. As such, Canguilhem wants to preclude an erroneous assimilation of this to a teleology of social organization. Organic health is not to be confused with social conformity. As such, states and behaviors that are unusual or felt to be in contradiction with the desired goals of a society will not for this reason alone come under the category of pathological, because they may still prove normative in the sense derived from the goals of organic life. Certain categories of personality disorders, for example, Antisocial Personality Disorder (APA 1994) may describe behaviors (e.g., aggressiveness, lack of empathy and concern for others) that, although felt to be antisocial by the population at large, continue to provide innovative and flexible modes of existence for the individual who displays them.[9] Reference to Canguilhem's conception of the pathological would here contribute to skepticism about the status of such a category as the term for a

medical disorder (although other Personality Disorder categories, such as Obsessive Compulsive, with its characteristic intolerance of change, would seem to be the very definition of *pathology* in Canguilhem's terms). Likewise, experiences that are outside the norm—in the sense of the range of mental phenomena experienced by the majority of a population—are not, by virtue of this fact alone, pathological. I suggest therefore that psychotic phenomena cannot be said to be pathological merely because they are additions to reality as it is experienced by most people. To qualify them thus it must be possible to show that they are causative of distress or reduce the possibilities of an individual's adaptation to his environment.

By applying Canguilhem's thesis in this way, we would go further than many attacks on the moralizing nature of psychiatry by suggesting that even when deviant or anomalous behaviors correspond to distinct biological abnormalities, these still are not sufficient to establish such behaviors as *illnesses*. It would not, for example, be possible to show that an undesirable behavior is indeed an illness (and not just a stigmatized behavior) by demonstrating a causal connection with unusual brain structures or processes. Such a demonstration needs to establish that this feature impacts negatively upon the individual's normativity, not merely that it is excessive or deficient with respect to a statistical norm and/or influences a behavior felt to be antisocial. To the extent that, for Canguilhem, *normal* does continue to function as an antonym of *pathological*, all states are normal that enable the individual to exist creatively and flexibly within her environment, and this includes those structures or processes that are statistically anomalous.

Pathology Can Never Be Established Objectively

We have said, following Canguilhem, that no fact can be established as pathological by objective means alone. This is because biological abnormalities are not pathological absolutely—by themselves—but always in relation to their environment. Determining a feature as pathological therefore requires more than mere quantitative measurement and comparison with statistical norms: it requires a qualitative awareness that is sensitive to the vital values (of survival, reproduction, normativity, etc.) expressed in an organism's specific and varying relationships with this environment. Now, in the sphere of human psychological health, I would go further than this: the determination of mental pathology requires not only a vital sensibility but a social one as well.

This implies that even when an individual has distinctly anomalous genetic or biochemical features, the value of these for the individual's health is never established objectively. This is because the pathological value of an abnormality is a product both of the features of the abnormality and the conditions of its environment. Now, crucially, in the sphere of human pathology, this environment is a political, technological, and social as well as vital one. Indeed, as Canguilhem says, even vital norms are, for the human being, to some extent also social. We could say then, that for the human being, the pathological value of even a biological feature is never just biological.

Such a claim could mean many things. It could mean that certain biological pathological features are the products of human activities: conditions produced in reaction to synthetic toxins, for example, or genetic conditions that arise in part as products of matrimonial practices or population movements (Canguilhem's sense of social practices being reflected in vital phenomena). Or it could mean that the extent to which an abnormality disables an individual depends on whether a society utilizes its available resources to accommodate or ameliorate a particular condition or whether it chooses to continue to structure its physical environment in such a way that excludes individuals with particular conditions.[10]

I suggest that in the sphere of human psychological pathologies, both of these arguments may be relevant. It may be that certain psychotic phenomena are the products, at least in part, of distinct biological changes or abnormalities, but that their pathological value is never solely biological. It is necessary to distinguish between the fact of an abnormality and the pathology, and this is precisely what Canguilhem enables us to

do. I suggested in the previous section that psychotic phenomena may not be inherently pathological; that is, inherently distressing or reductive of an individual's possibilities for relating to the world. Indeed, the voice hearers' user movement and some recent psychiatric commentators offer examples of apparently nonpathological voice hearing, where auditory hallucinations are not causative of distress and can even be valued by individuals as comforting or helpful, providing encouragement or offering new insights and reflections (Romme et al. 1998, 1992). It seems possible to regard these experiences as normative, in Canguilhem's terms, and therefore healthy. This begs the question, to the extent that, clearly, psychotic phenomena are however frequently experienced as pathological in both the above senses, from where does the pathological quality arise?

Now, I suggest that the theory and practice of cognitive therapy for psychosis is instructive in this regard. Cognitive therapy locates much of the distress of hearing voices not in the fact of hallucination itself but in the content of the hallucinations and beliefs about their origins. Its therapeutic goal is the adjustment of beliefs about hallucinations so as to reduce their distress and their negative, disabling effects on the patient's life. Now, the fact that the pathological value of hallucinations can be diminished or even removed by the adjustment of beliefs about them suggests to me the correctness of Canguilhem's thesis. The pathological value of hallucinations seems here to pertain not absolutely in the fact or form of an anomalous experience, but in the relationships that experience enables between the individual and her environment. When an experience, however abnormal, empowers an individual to deal with her environment (a voice offering encouragement, for example) it is not felt by the subject to be pathological (Romme et al. 1998). Indeed, in Canguilhem's terms it may be considered normative and healthy. Romme and colleagues found that differences in the pathological value of voice hearing "were predominantly related to the content, emotional quality, and locus of control of the voices" (1998). If these can be adjusted by cognitive intervention, I suggest it is because they are all things that are contributed to by a person's culture and not the irrevocable destinies of biology. The nature of an individual's beliefs about her hallucinations will to a great extent depend on the cultural beliefs of a society, its interpretations for such experiences, and its willingness to accept and accommodate them. Such a suggestion is borne out by evidence as to the cultural variability in interpretations of apparently psychotic experiences. An individual experiencing voice hearing or delusions in a community where, for example, spiritual interpretations of such phenomena are commonly accepted, is less likely to find such experiences distressing or debilitating. We return therefore to Littlewood and Dein's suggestion that the content, and therefore, the cultural aspect, of psychotic phenomena can be considered as causative and not merely incidental to a pathology.

Such a consideration has an impact on claims about the biological basis of disorders such as schizophrenia, in a time when this pathology is in some quarters conjectured to be wholly genetic (McGuffin et al. 1994). Canguilhem's ideas may take us further than many anti-psychiatric critiques, by obliging us to question the role of biological abnormalities when they do seem to be present. Even when causative of unusual phenomena, biological abnormalities may not in themselves be sufficient to establish the presence of a pathology. Such a thought issues back in the role of culture in mental illness just when it might be thought to have been eliminated. The question, in essence, is "what is it that is genetic—the phenomenon or the pathology?" The concept of schizophrenia is broader than the phenomenon of hearing voices. As the concept of a *pathology* it includes a range of experiences, such as feelings of depression, persecution. and so on, that could be explained as the nonintrinsic, nonbiological, social, or cultural effects of an anomalous and devalued experience. If what is pathological about a psychotic experience is determined at least partially by the cultural context of available interpretations for such experiences, it seems difficult to maintain that the ensuing pathology is purely biological. The pathology *schizophrenia* would perhaps stand on two legs, the one biological/genetic, determining a brain structure

unusually conducive to psychotic phenomena and the other cultural, constraining the possibilities for the lived experience of such phenomena toward a pathological outcome. Both legs might be needed for the resulting syndrome schizophrenia. As such, cultural interpretations of mental distress need not be antagonistic to biological research. But biological theories cannot assume cultural interpretations to have been surpassed. The concept *schizophrenia* could never fall simply within the domain of a biological science. This does not mean that it is not a medical concept; it means that (following Canguilhem, and perhaps going a little further) we have had to expand the definition of the *medical* to signify an evaluative activity attentive to human cultural and political norms.

I say *political* because norms of life are unintelligible except as the relation of an organism to its environment. As such, whether a particular behavior proves normative or reductive in a social environment that is structured according to political and ideological ends may always to some extent depend on the kind of conformity with these values that an individual's behavior exhibits. Such a possibility appears to bring into question all that we have said about the independence of the *pathology* concept from judgments of social deviance. Indeed, despite Canguilhem's explicit intention to keep health normativization and social normativization apart, there is a problem for this distinction in the form of a situation where social conformity would appear to maximize biological advantage, and where conversely, deviance would indeed prove less healthy. To some extent, the possibility of a conflation of the goal of health with social adaptedness is precipitated by the use of the term *normativity* itself. I suggest it is only the fullest sense of *normativity* that prevents such a conflation. An individual who is only able to act in accordance with societal norms is only apparently healthy because he has renounced that capacity to institute other norms that is inscribed in full normativity as the openness to being transcended (see Greco 1998 for a broader discussion of this). Here, although particular behaviors may alter in line with changing societal demands, the norm of following whatever is socially prescribed is itself not open to change. I therefore suggest that although the distinction between health normativization and social normativization can be defended at this fullest concept of health, there may be zones that fall short of this where some sort of accommodation to societal norms can indeed yield short-term health benefits (the apparent health of social adaptedness is at least more healthy than a state in which basic biological needs are not being met). I suggest also, that this is commonly the zone in which psychiatric choices are posed.

As such, any therapeutic intervention into the pathological norms of psychiatric symptoms is a political act, because it is one that refers an individual's norms of life to the norms of a society. It may be, for example, that a kind of normativity is procured for an individual in a culture that is intolerant of aberrant experiences by reducing psychotic symptoms through medication. However, it may be that this in turn reduces the possible normativity of such an experience, or that the side effects of medication (although apparently normalizing the individual) may reduce his normativity more than did the original phenomenon. My point is that these decisions do not and will never fall within the remit of medicine as it is conceived in a positivist model of value-free scientificity. Psychiatrists and their patients have to make choices about the relative health gains of different forms of social actions, and no account of the organic, genetic etiology of psychiatric illness can remove this political dimension. But as Canguilhem suggests in his essay "What is psychology?" (1980), for as long as psychology is governed by the positivist exclusion of philosophical concerns from its self-definition, it will be unable to consider the question of the values and interests according to which it intervenes in deviant norms. For Canguilhem, physiologic, biological health is without fixed content. Health in general is normativity, avoidance of rigidity: the ability to transcend norms, to confound expectations. I suggest that this is true more particularly of human psychological health. There are more possibilities for healthy psychological existence than are contained within a single epistemological framework. As such,

there is always a certain madness about the project of legislating madness. To make such a claim is not to deny the efficacy of psychiatric knowledge but to insist on its necessary provisionality. We could say that life's inherent normativity requires an epistemological normativity on the part of the sciences of life. Psychiatric concepts are healthy, not when they strive to be definitive, but when they are open to their own usurpation by new norms. This is to introduce an ethical dimension to the question. The law of psychiatry must be open to adjustment by the law of the Other, the patient whose singular existence at the intersections of personal, societal, and organic norms may always surprise and confound theoretical expectations. Psychiatry may be an irreducibly political practice: it must also be an ethical one.

CONCLUSION

I have suggested that if positivism, following Canguilhem's arguments, provides an inadequate conception of *physical illness,* it is certainly insufficient as a description of mental dysfunctions, even when these can be seen to involve biological abnormalities. This does not mean, however, that we cannot have a concept of mental illness. Indeed, by correcting positivism's investment in abnormalities as inherently indicative of disease, we open the concept of pathology to a more relational and contextual understanding, thereby allowing the possible inclusion of mental disorders into its remit. This notion of pathology is anchored by its reference to the concept of normativity, a concept that goes some way to preventing the abuse of the term *illness* in the stigmatizing of deviant behaviors. However, because *pathology* now refers to the relationship of an individual to their environment, and a social and political one at that, psychiatric intervention into pathological norms cannot help but be a political and moral practice.

NOTES

1. For the purpose of this paper, *disease* will be used in its broader sense, as that which is interchangeable with *illness* or *pathology*. This is consistent with Canguilhem's use of the term.

2. For an expanded discussion of the literal and metaphorical meanings of *illness* in Szasz and others, see Mathews 1995.

3. See Bracken 1995 for further discussion.

4. *Madness and Civilization* (1967). See also Foucault's *The Birth of the Clinic* (1973) for a broader study of the birth of modern medicine since the 18th century.

5. Along with Foucault, another figure in this tradition is Gaston Bachelard, who originated the notion of the epistemological break, and from whom Canguilhem inherited his profound disagreement with positivist conceptions of science. See, among others, Bachelard's *The New Scientific Spirit* (1934).

6. It is important to stress that this valorization and adoption of norms must not be confused with a conscious evaluation. Neither is the goal of life—its survival and reproduction—a conscious or deliberate purpose. Canguilhem uses these terms to define life at the level of the organism—that is, the level of the most basic functioning constitutive of life. Although human existence has its own specificity, for Canguilhem it is still characterizable by these basic facts of the organism. This is why terminology suggesting both the unconscious organism and a phenomenology of sickness may be used in relation to human pathology in this paper.

7. See for example, Kingdon Turkington, and John's review of recent investigations into the efficacy of cognitive therapy for schizophrenic delusions. Their conclusion that "delusions and hallucinations . . . can be amenable to reasoning approaches" follows upon evidence that "what . . . patients were saying had meaning to them even when they were thought disordered . . . delusions represent events of personal significance with a basis in historical reality" (1994, 584). If delusions and hallucinations can be affected by reasoning approaches it is because they themselves have a sort of reason. For similar investigations into cognitive therapy approaches for schizophrenia, see Bentall Haddock, and Slade(1994) and Alford and Correia (1994).

8. Szasz himself continued to consider certain mental states as disorders; however, he attributed their status as dysfunctions to social and political causes.

9. It has been suggested that many successful business people conform to the criteria for this category of personality disorder, but only those individuals in social contexts where such behavior is not condoned are diagnosed as having disorders. It seems to be a confirmation of Canguilhem's thesis that no fact is pathologic in itself; the same behaviors can prove maladaptive (pathologic) or adaptive (healthy) according to their environment (although the extent of the healthiness of a feature is diminished by the existence of foreseeable variations of its environment in which it could not be adaptive).

10. This would seem to provide a link between Canguilhem's work on pathology and debates around social and medical models of disability within the disability movement.

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