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Reznek on Health

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RESUMEN

Los cinco libros del filósofo y psiquiatra Lawrie Reznek examinan diversos aspectos de los fundamentos de la medicina, la psiquiatría y las leyes sobre la locura. El primero defiende una definición del concepto de *condición patológica* sobre el que descansan, al menos parcialmente, todos los demás. Tal concepto puede enunciarse como una condición anormal, involuntaria, usualmente dañina para la que el tratamiento médico es a la vez necesario y apropiado. En primer lugar, argumento de forma detallada que el elemento de anomalía es redundante y que ninguno de los otros cuatro es ni necesario ni suficiente para la patología. Independientemente de esto, Reznek se equivoca también sobre la relatividad de la enfermedad y la respecto del entorno y la “dimensión política” de los juicios relativos a la enfermedad. Sus últimos tres libros emplean una versión muy simple de su análisis: que una enfermedad es un proceso anormal y dañino e involuntario sin una causa externa obvia. Además de mis objeciones previas al primero de esos elementos, argumento que su nuevo análisis tiene un nuevo defecto. Es o demasiado estricto, o demasiado amplio, dependiendo de si mantiene o descarta su tesis del proceso normal de que “reaccionar normalmente a circunstancias anormales” no puede ser patológico. Por medio de esta tesis, excluye una amplia gama de patologías que es el efecto típico de agresiones ambientales inusuales; pero si ella, convierte en un desorden mental a cualquier creencia dañina, atípica, adquirida normalmente y empíricamente no refutada. Con todo, y a pesar de que Reznek está equivocado en casi todas sus principales afirmaciones sobre el concepto de enfermedad, gran parte del contenido de sus últimos cuatro libros pueden sobre vivir a esta deficiencia.

PALABRAS CLAVE: *salud, enfermedad, patología, daño psiquiatría, psicopatología, teoría bioestadística, defensa de la locura.*

ABSTRACT

Philosopher and psychiatrist Lawrie Reznek's five books all examine various aspects of the foundations of medicine, psychiatry, and insanity law. The first defends a definition of *pathological condition* on which all the rest at least partly rely: namely, as an abnormal, involuntary, usually harmful condition for which medical treatment is both necessary and appropriate. I first argue in detail that his abnormality element is redundant, while none of the other four is either necessary or sufficient for pathologicity. Independently, Reznek is also mistaken about the environmental relativity of disease and the “political dimension” of disease judgments. His last three books employ a simpler version of his analysis: that a disease is an abnormal harmful involuntary process without obvious external cause. Besides my previous objections to the first three of these elements, I argue that his new analysis has a new defect. It is either too narrow or too

broad, depending on whether he keeps or discards his normal-process thesis that “reacting normally to abnormal circumstances” cannot be pathological. By that thesis, he excludes the vast range of pathology which is the typical effect of unusual environmental insults; but without it, he would make every harmful, atypical, typically acquired, empirically unrefuted belief a mental disorder. Still, though Reznek is wrong in nearly all his major claims about the concept of disease, a great deal of the content of his last four books can survive this deficiency.

KEYWORDS: *Health, Disease, Pathology, Harm, Psychiatry, Psychopathology, Biostatistical Theory, Insanity Defense.*

In five books, Lawrie Reznek, philosopher and psychiatrist, examines the foundations of medicine, psychiatry, and insanity law. His first book, *The Nature of Disease* (1987) [ND], is a long analysis of basic medical concepts, with two chapters at the end on individuating diseases. His second book, *The Philosophical Defence of Psychiatry* (1991) [PDP], answers opponents of a “medical paradigm” of mental illness. That paradigm includes eleven theses about the metaphysical, epistemological, and normative aspects of mental illness, one of which is a conceptual thesis about disease: that disease is a purely scientific, value-free matter of biological malfunction. Applying ideas from his first book, he finds that, except for this thesis, the medical paradigm survives the critics’ challenges unscathed. On a proper analysis of disease, the critics offer no new paradigms, only competing disease theories; to think otherwise, he argues, is to commit one of nine fallacies about the nature of disease. Reznek’s third book, *Evil or Ill?* (1997) [EI], expands one chapter of his second to clarify and justify the defense of criminal insanity, basing it on the notion of character change. In his fourth book, *Delusions and the Madness of the Masses* (2010) [DMM], Reznek argues that psychiatry has failed to realize that delusions can infect a whole community. On a proper analysis of the concept, he concludes, a long series of examples show that, in fact, most human beings are deluded, though not mentally ill. Finally, his fifth book, *Peddling Mental Disorder: The Crisis in Modern Psychiatry* (2016) [PMD], argues that the standard American psychiatric classification of mental disorders (DSM) rests on a defective symptom-based concept of disease. He finds many of its supposed disorders to be either mythical or massively overdiagnosed, as a result of rampant “disease mongering” by psychiatrists allied with the pharmaceutical industry.

Reznek treats his work as unified, often citing the first book in the others, with no indication of change of mind. Actually, there are major changes among the five books in their analyses of disease. I shall begin

(§§I-II) with a full and lengthy critique of his original analysis — more precisely, his account of pathological condition. Besides some methodological criticisms, I argue that of the five main elements in Reznek’s original definition, one must be deleted for circularity, leaving four none of which is either necessary or sufficient for a pathological condition. What is necessary and sufficient, as I have argued, is biological dysfunction,¹ which Reznek rejects on mistaken grounds. In §III, I consider new objections applying to the simpler analysis he employs in his last three books. At the end (§IV), I briefly discuss how a shift to a dysfunction analysis would affect the conclusions of Reznek’s four later books.

I. REZNEK’S ORIGINAL ANALYSIS

On the first page of *The Nature of Disease (ND)*, Reznek explains the significance of defining disease:

The classification of a condition as a disease carries many important consequences. We inform medical scientists that they should try to discover a cure for the condition. We inform benefactors that they should support such research. We direct medical care towards the condition, making it appropriate to treat the condition by medical means such as drug therapy, surgery, and so on. We inform our courts that it is inappropriate to hold people responsible for the manifestations of the condition. We set up early warning detection services aimed at detecting the condition in its early stages when it is still amenable to successful treatment. We serve notice to health insurance companies and national health services that they are liable to pay for the treatment of such a condition.²

To show how serious these issues can be, Reznek’s chapter offers a provocative collection of disputed diseases. Should an insurance company have to pay to treat stuttering? Does an eyeglass company have to get a license to treat presbyopia? Should the National Health Service pay for nicotine-laden gum to treat smoking? Was masturbation a disease requiring “horrible” (p. 4) medical or surgical treatments, such as clitoridectomy? Is homosexuality a disease justifying such treatments as electric shock or hypothalamic surgery? Should hyperactive children get Ritalin? Is alcoholism a disease that should block criminal charges of public drunkenness? Philosophy, Reznek argues, can help settle such disputes as these by clarifying “the exact boundaries of the concept of disease” (p. 1).

Except for the problem of individuating diseases, the whole rest of *ND* aims to draw the boundaries of health. Because Reznek's analysis is rich and comprehensive, I will defer criticism until I have not only stated his final analysis, but also summarized the lengthy argument by which he reaches it.

Although Reznek begins with the term 'disease', he soon notes that the most general term for "negative medical conditions" (p. 65) is 'pathological.' Pathological conditions include not just diseases, with their associated signs, symptoms, and pathologies, but also injuries, poisonings, and miscellaneous states like heat stroke and starvation (pp. 65-7). After a general discussion of taxonomic realism in and out of science, he concludes that unlike many other scientific categories, diseases share neither a real nor a nominal essence. That is, 'disease' does not refer to a natural kind; nor, in fact, can one even find qualities separating pathological conditions called "diseases" from those that are not. Pathological conditions in general also fail to be a natural kind. What one can do is to analyze the meaning of 'pathological', and to this task Reznek now turns. One hundred pages later, he concludes:

A has a pathological condition C if and only if C is an abnormal bodily/mental condition which requires medical intervention and for which medical intervention is appropriate, and which harms standard members of A's species in standard circumstances. (p. 167)

In his second and third books, Reznek states one further requirement on disease, which perhaps he would also apply to pathological conditions in general: that one cannot acquire or remove the condition by a direct act of will (*PDP*, pp. 92-3, *EI*, p. 203). In addition, in *EI* and its successors, Reznek adopts Culver and Gert's requirement [(1982), p. 72; (1997), pp. 186-90] that a disease not have a distinct sustaining cause. But this seems to be a requirement only on diseases, not pathological conditions in general (*EI*, pp. 202, 200).

How does Reznek arrive at this analysis? In broad outline, he first concludes that a condition is "pathological if and only if it has an explanatory nature that is of a type that is abnormal and that causes harm or malfunctioning" (p. 91). The normality in question is ideal rather than empirical. The norms of health "cannot be theoretical," since, as he has already argued, "there *is* no natural boundary to be discovered between normal and pathological conditions" (p. 95). Nor can they be merely statistical. Whole populations already suffer from diseases – dental caries in the

West, dyschromic spirochetosis or intestinal worms in Africa. And our whole species might be judged abnormal: for example, we might discover that we all have a slight copper poisoning that lowers our IQ by 30 points, or a nuclear war might kill everyone lacking Huntington's chorea. Instead, we choose norms of health by their "practical consequences" (p. 97).

[W]e wish to create certain priorities in dealing with all those conditions that we would be better off without. We would all be better off if we did not age, if we did not suffer from a need to sleep for 8 hours a day, if we did not synthesize uric acid and thereby be liable to gout, etc. But we are not diseased because of this – we are not diseased because we are not supermen! ... [W]e regard [dental caries] as an abnormal process because we choose to give its cure the same priority as we give to the cure of TB and multiple sclerosis. ... We regard the process of ageing as normal, because we consider that it is more important first to rid ourselves of those processes we take to be abnormal.

An important factor that will influence whether to regard some process as normal is the ability we have to treat the condition medically. We are unlikely to regard ageing as a disease, even though we would be better off without it, because we are at present unable to do anything about it. However, if we discovered a drug that enabled us to live healthy lives to 200-years-old, would we not come to view the drug as vitamin F, and regard our present ageing process as abnormal and as a vitamin-deficiency disease?³

Reznek next finds harm, not dysfunction, to be the second main element of a pathological condition. After surveying analyses of function and endorsing an etiological account, he argues that dysfunction is neither necessary nor sufficient for pathology. It is not necessary because lack of a trait with no biological function – the female orgasm, perhaps, or life itself after one's last reproductive contribution – could still be pathological, since harmful. It is not sufficient because functions can be harmful, in which case their lack is not pathological. Here Reznek's examples are functions that harm, even kill, the individual in the service of reproduction or group survival. Adults of many species must die to reproduce, such as the male praying mantis, who loses his head to ejaculate (p. 111), or the female gall-midge, whose young eat her alive (p. 121). Hypothetically, we could imagine equally painful and lethal self-destruct mechanisms favored by group selection. Lack of any of these functions would benefit the individual, and would not, Reznek thinks, be pathological. What makes an abnormality pathological is not dysfunction, but harm. After surveying various "theories of human good," he settles on a

“normativist” account of harm: “X does A some harm if and only if X makes A less able to lead a good or worthwhile life” (p. 153). For human beings, good or welfare “consists in the satisfaction of worthwhile desires and the enjoyment of worthwhile pleasures” (p. 151). But all organisms, even those with no desires or pleasures, have some sort of good or welfare defined by their flourishing (p. 135).

To a first approximation, then, pathological conditions are harmful abnormalities. But Reznek’s final analysis, as we saw above, includes amendments provoked by assorted objections. First, reference is made to species because “one species’ disease [is] another species’ adaptation” (p. 160). Malformed wings harm mainland flies, but, on a windy island, a different fly species may be better off flightless. Second, standard circumstances are included because diseases can be harmless to individuals in special environments. A victim of hemophilia or immune deficiency may be lucky enough never to encounter the danger against which he is defenseless. And, third, pathological conditions harm only standard species members, not necessarily all of them. A man set on being a jockey may welcome pituitary dwarfism; a woman who wishes no children may be glad to be infertile. Finally, for pathological conditions, medical treatment is both necessary and appropriate. It must be necessary because various harmful abnormal conditions, such as starvation or being very cold, are not considered pathological, presumably because they can be treated by nonmedical means. By contrast, hypothermia, which requires medical intervention, counts as pathological (p. 163). And medical treatment must be appropriate. If we discovered that all criminals have a specific neurologic abnormality treatable by frontal lobotomy, we might still reject such surgery, because we regarded criminal behavior as freely chosen. Then we would not consider the neurologic state pathological, medical treatment being inappropriate for it. Reznek reasserts this strong semantic link between the pathological and medical treatment in the ringing conclusion of his chapter: “Judging that some condition is a disease commits one to stamping it out. And judging that a condition is not a disease commits one to preventing its medical treatment” (p. 171).

In sum, Reznek’s analysis in *ND* and *PDP* is that condition C in a member A of species S is pathological iff it satisfies five requirements:

- (1) C is abnormal
- (2) C is harmful to standard members of S in standard circumstances
- (3) Medical treatment of C is necessary

- (4) Medical treatment of C is appropriate
- (5) A cannot acquire or remove C by direct act of will.

Moreover, all five conditions, even the last, turn out to be value judgments, on Reznek's view. A final feature of his account is his thesis that within a species, a condition can be a disease in one environment but not another. I shall argue that this environmental-relativity thesis is mistaken. As to conditions (1)-(5), I shall argue that (1) is redundant, while none of the others – neither harm, medical treatability in any sense, nor involuntariness – is necessary or sufficient for a condition to be pathological.

II. OBJECTIONS TO REZNEK'S ORIGINAL ANALYSIS

A. Normality. First, what does “abnormal” mean in clause (1)? Everyone, I think, grants that there are at least two common meanings of this term: “statistically abnormal” and “pathological.” In his first book, Reznek officially rejects the statistical meaning for clause (1). As we saw, he holds that diseases can be statistically typical, of a population (malaria) or even a whole species (copper poisoning). Unfortunately, his text, even in discussing the relation between normality and pathology, sometimes uses ‘abnormal’ in the statistical sense of “unusual.” This occurs, for example, as he argues from two hypothetical cases that abnormality is only necessary, not sufficient, for pathology. Supposing that hyperactive children, or Russian dissidents, produce “abnormally high quantities of certain neurotransmitters” and “are sensitive to a certain diet” (p. 91), Reznek says that we cannot conclude from such an abnormality that the condition is pathological without knowing that it is also involves harm or malfunction. One naturally takes his point to be that statistical abnormality does not entail pathology, and that was certainly the point of the Einstein example two pages earlier.

In fact, it has been discovered that Einstein's brain contained an abnormal number of glial cells. Supposing that this was responsible for his genius, we will not find the condition in any pathological textbook. (p. 89)

Here ‘abnormal’ must mean statistical abnormality, since only such a norm, not any evaluative kind, can be “discovered.”

On the other hand, there is a well-established medical usage – call it the “generic medical sense” – in which ‘normal’ and ‘pathological’ are con-

tradictories, *i.e.*, ‘abnormal’ is a synonym for ‘pathological.’ And Reznek himself often seems to use the term with this meaning. For example, in the second paragraph of his chapter 5 – a chapter entitled, like Canguilhem’s book, “The normal and the pathological” – he writes:

However, it is still possible that all pathological conditions share a distinctive type of nature different from normal conditions, and thereby constitute a distinct (higher-order) natural kind from normal conditions. If pathological conditions had a common type of explanatory nature not shared by normal conditions, then we could at least hope, by discovering what this general nature consisted in, to draw the line between normality and pathology in the right place. (p. 80)

Here Reznek seems to treat “normality” and “pathology” in the common medical way, as simple complements. No one speaks of drawing the line between women and bachelors, or invertebrates and deer, as would be analogous if abnormality is only one of several defining features of pathology. Many other passages are similar. But the generic medical sense of ‘abnormal’ does not fit (1) either, since it would make the definition circular: the definiendum ‘pathological’ would be one of five elements in its own definiens.⁴

What reason does Reznek offer to think that, to define the pathological, we need some third sense of ‘abnormal’ as one element? The main outlines of his section, “The nature of norms of health,” offer no support for a third sense. He discusses three different types of norms: the “empirical,” the “idealized,” and the “theoretical” (pp. 92-97). The empirical norm is just statistical normality, which he rejects because

if we define the pathological in terms of this norm, it will either be unacceptable or circular. It will be unacceptable if the norm is derived from a population that is not (by and large) pathology-free. (p. 92)

The theoretical norm fails because he has already shown that

there *is* no natural boundary to be discovered between normal and pathological conditions, and hence the norm cannot be theoretical. The only content that can be given is in terms of the *consequences* that the norm carries, that is, in its prescriptive content. (p. 95)

But that “abnormal” has prescriptive content is, of course, consistent with its simply meaning ‘pathological’ if, as Reznek holds, pathology is a prescriptive concept by virtue of the harm and treatment clauses. Nor do his two examples of “idealized” norms in action, grief and longevity,

support a third sense. He says that “we want to be the sort of people in whom it is healthy to respond to loss with grief” (p. 96), and that we would regard now-normal aging as pathological if we found a drug to cure it. “Thus,” he concludes, “a process or condition must be of a type that is abnormal in the idealized sense if it is to be pathological,” and the norm “is selected because of its practical consequences” (p. 97). But all this would, again, remain true on his own view if ‘abnormal’ and ‘pathological’ were synonyms, by virtue of the harm and treatment clauses.

Rather, the origin of Reznek’s thesis that ‘abnormal’ is only one element in the analysis of pathology seems to be his earlier discussion of five examples. He notes that Laing argues that schizophrenia is not a disease because it is “a strategy adopted to live in a unlivable situation,” hence “the product of the normal processes of strategy formation.”⁵ Likewise, Szasz argues that alcoholism is not a disease because it is just a bad habit, hence “the product of the normal processes of habit formation” (p. 90). And despite the ill effects of pregnancy, menstruation, and teething, “we do not regard them as pathological ... because we take the processes that cause them to be normal. It is only if the underlying process is abnormal that we consider the condition to be pathological”. (p. 90)

These examples may suggest a need to distinguish underlying causes from surface phenomena, what is truly pathological being the former, not the latter. But the examples do nothing to show a third sense of ‘abnormal’. Presumably, in calling strategy or habit formation normal processes, Laing and Szasz mean either that they are statistically normal, or that they are not pathological. What else would they mean? Likewise, at certain ages, teething occurs in all human beings, and menstruation and pregnancy in almost all human females, suggesting statistical normality.

Worse yet, in Reznek’s second book, his view of Laing and Szasz changes in a way that undermines his original use of them. The change fits his new view that psychiatry’s critics have no new paradigms, merely new disease theories within the medical one. It first occurs in his discussion of Eysenck’s parallel view of neurotic symptoms.

We have seen that laws of conditioning can go a long way to explain why neurotic symptoms occur. But even if a case could be made out for such a theory, we already know that if the behaviour to be explained is abnormal, then there will be an abnormality *somewhere* in the explanation. While it might be true that neurotics acquire their responses by normal processes (laws of learning), they acquire them *to a degree* which *is* abnormal, or in areas which *are* abnormal. And hence it does not follow ... that the processes

causing neurotic symptoms are normal *in all respects* ..., and the argument collapses. (*PDP*, pp. 48-9)

Here the normality is clearly statistical. That is because only in a statistical sense – not in the sense of being pathological or requiring medical treatment – can Reznek presuppose that “the behaviour to be explained is abnormal.” He does presuppose this throughout the book, using ‘abnormal behavior’ as his theory-neutral term for the phenomena under dispute between psychiatry and its critics. But in replying to critics like Szasz and Laing, one cannot, of course, presuppose that psychiatric conditions are abnormal in either of the other two senses, since both deny that such conditions are pathological or merit psychiatric treatment.

Reznek does suggest, as we saw, a third meaning for ‘abnormal’: he says its meaning is its prescriptive content. Yet that thesis is itself more evidence that his analysis needs no abnormality clause. On his view, one would think, the prescriptive content of being pathological is being harmful and needing and deserving medical treatment. But those are clauses (2)-(4), making clause (1) redundant.⁶ Reznek’s only prescriptive content of normality perhaps separable from clauses (2)-(4) is his ideas on priorities: his two-factor theory, based on severity and curability, of what harmful conditions we regard as pathological. Since this is an aspect of a clause about medical research and treatment, I discuss it in the next section, concluding that nothing about prioritizing treatment fits medical examples of normal and pathological conditions. A normality clause is also, as we said, redundant in the generic medical sense in which abnormality and pathology are the same, indeed making the definition circular. On the whole, then, the abnormality requirement looks like an error that should simply be deleted, unless it can be read as statistical abnormality.

In his first two books, Reznek firmly rejects statistical abnormality as necessary for pathology.⁷ Remarkably, in the comparable chapter of his third book, normality becomes statistical after all. Summarizing his analysis, he writes:

A disease, then, is an abnormal involuntary process without an obvious external cause that does harm. What can we say of conditions like a jealous rage or extreme terror? They are processes that the person cannot reverse by an act of will. They harm in that they impair judgement and control. They are sufficiently uncommon to be abnormal. They are also not static states; they evolve. But they have obvious external causes, and therefore are not diseases [Reznek (1997), p. 203].

Again, a bit later, comparing saints and psychopaths, he says: “Since both characters are rare, the causes will also be rare, so that both characters are due to abnormal biological processes” (p. 212). Now being statistically abnormal – “uncommon” or “rare” – certainly did not suffice in Reznek’s first two books for the abnormality in clause (1), which was supposed to be prescriptive. If species-atypicality is now a necessary condition for pathology, that is an improvement, on my view, but such a major change should be announced openly.⁸ As it stands, Reznek’s account of normality is a dense, impenetrable tropical jungle of confusion, which I shall briefly revisit in §III to see if his later books shed any light therein.

B. *Environmental Relativity.* Like nearly all writers, Reznek embraces a false environmental relativity of health. He begins five paragraphs on the subject as follows:

[W]hether a process is pathological or not depends not just on its nature, but on the relation of the organism to the environment in which it lives – ‘one environment’s adaptation is another’s disease’. (p. 85)

But most of his examples are unconvincing. It is true that if mainland flies and island flies are different species, shriveled wings can be normal for the latter yet pathological for the former. The island flies’ wings would be somewhat analogous to vestigial traits, such as eyes in blind fish. But he offers no evidence that medicine judges, or should judge, sickle trait pathological only “at high altitudes” (p. 85).⁹ His pygmy-Masai example implicates two kinds of relativity, race and environment.

The pygmy people have an insensitivity to growth hormone. Let us assume that this trait enables them to hide from their prey amongst shrubs. Lacking such [an insensitivity] would be pathological among pygmies, while if the Masai were to acquire such an insensitivity in their environment, they would be classified as diseased – they are tall in order to facilitate cooling, and would probably suffer in their environment if they were short like the pygmy.¹⁰

Perhaps medicine should relativize normality to race, as it does to species, sex, and age, though I have seen no evidence of its doing so. But there is no reason to add environmental relativity as well. Then a pygmy becomes pathological by moving to live with the Masai, which is an absurd and unmedical view. The natural way to treat such examples is as

normal polymorphism. Many traits come in several varieties, often differently adapted to different environments in the species' range. But no one would say that the same trait changes from normal to pathological just because the organism moves to an environment where it will cause disease. A Masai's black skin hardly becomes pathological if he moves to a region of low sunlight, even if it leads to rickets (p. 86). Reznek is right that the trait is disadvantageous in such an environment, but wrong that it is pathological there. But there is also no reason to think that whether such a misfit between trait and current environment is pathological depends on whether its bearer was born there or moved there after birth. Rather, this whole view confuses disease with what causes disease, the pathological with the pathogenic. Maladaptation causes disease but is not necessarily itself disease.

It is false, then, that "for any genetic disorder we like, we can imagine an environment where it would *not* be pathological" (p. 86). We can imagine an environment where it would not be disadvantageous. But being neutral or even advantageous in some environment does not stop a condition from being pathological. Medicine does not regard a disease as normal merely because it is masked or compensated by a special environment. Indeed, Reznek makes this point himself about people with hemophilia or immune deficiency; it is why he requires a disease to be harmful "in standard circumstances" (p. 160). But aren't nonstandard circumstances just a different environment? Why isn't the boy with severe combined immunodeficiency syndrome perfectly normal in his sterile bubble, or hemophiliacs in an environment without sharp objects? Millions of diabetics live successfully with access to insulin, just as millions of Siberians live successfully with access to clothing, heat, and shelter. Yet diabetes remains a disease, while naked humans' propensity to freeze in Siberia is not. Reznek does not explain when we have two environments, *vs.* standard and nonstandard circumstances within a single one. Without such a distinction, his view will entail that compensated disease ceases to be disease, which is not the medical view. In any case, the whole problem vanishes once we realize that normality and pathology are not, in fact, environmentally relative at all. The health of an individual organism depends causally, but not conceptually, on its differential adaptedness to specific environments within its species' range.

As one special case of this error, Reznek makes normality and pathology falsely relative to social evaluation. He wants to hold that disfigurement, along with death, disability, and discomfort, is one ground for considering a condition pathological. To this, he says, Jonathan Barnes

objected that disease will then not be an evaluative concept, since disfiguring scars need not make one worse off. Reznek replies that your scars are only disfiguring, and so pathological, if they make you worse off. Deliberate patterned scars in Africa, or European noblemen's duelling scars, are not pathological, since the African scars are considered attractive and the European ones enhanced a nobleman's status (p. 158). This is doubly wrongheaded. First, all scars are pathological: they replace injured tissue with new tissue incapable of the same normal functions.¹¹ Second, the attitudes of one society have nothing to do with a medical judgment of pathology, in this or any other case. Any kind of pathology might be considered attractive or a mark of high status in some society. If, after a war, European veterans with missing arms or legs had enjoyed high status and women had gone wild for them, that would hardly have shown leglessness medically normal. In much of Africa today, social values demand the genital mutilation of young girls. That hardly shows that having scarred labia and no clitoris is medically normal, even if we assume that the mutilation makes the girls better off within their societies. Again, health and adaptation are two different concepts – adaptation environmentally relative, health not.¹²

C. Medical Treatment. Let us now examine Reznek's two clauses about medical treatment, as well as his two-factor theory of priorities. Clearly actual medical treatment, effective or not, is neither necessary nor sufficient for disease. Until recently in medical history, most diseases had no prospect of cure [Wootton (2006)]. The best physicians were those who rejected attempts at cure and confined themselves to observation and general supportive care. Even today the course of many diseases, such as rabies or metastatic melanoma, often cannot be improved. One can always make patients less uncomfortable by anesthesia or sedation. But, as with cold remedies, symptom suppression may prolong the disease, in which case there is literally no effective treatment. If physicians refuse all treatment of some disease D on the grounds that every known measure is harmful, that hardly deprives D of disease status. Conversely, doctors treat many normal conditions, as when they circumcise newborn boys, prescribe contraceptives or do tubal ligations, augment or reduce breasts, or remodel noses, not to mention administering obstetrical anesthesia, delivering the baby, and advising its mother on its care.¹³ Many conditions aggressively treated in the past, such as lefthandedness or masturbation, are now known not to be pathological. It is implausible to hold that masturbation was a disease in the 19th century, but ceased to be

one in the 20th. The correct view is that the 20th century discovered that some conditions believed to be pathological were not so in fact. So medical treatment does not suffice for disease either.

Now neither thesis is quite Reznek's: he holds that we should "define disease" not, like Kräupl-Taylor, "as what doctors treat," but "in terms of what doctors *ought* to treat."¹⁴ Specifically, he holds that a condition is pathological only if medical treatment of it is necessary, appropriate, and fits our priorities.

Taking the priority idea first, Reznek's two-factor theory is not well supported by his examples. Obviously, one cannot explain the normality of normal aging by our present inability "to do anything about it" (p. 97). As noted, until recently doctors could do nothing for major diseases but give general supportive care, which we can give the elderly as well. And while it is true that we would eagerly cure aging if we could, that does not suffice for pathology, or every baby boy, in 1950's America, would have been regarded as born with a genetic disease, and unwanted pregnancy would be a disease today.¹⁵ Reznek's text suggests only two other explanations for why cancer, but not aging, is a disease. One, suggested by his reference to medical research (p. 1), is the likelihood that we will find a cure, even if we do not presently have one. But, at least in 1987, there was no reason to think we were more likely to find a cure even for cancer, let alone genetic diseases, than for aging. Reznek twice mentions the disease of progeria, a syndrome of premature aging (pp. 85, 93). Did our disease judgment really rest on expecting medical science to cure progeria before normal aging, rather than on progeria's statistical abnormality? The second possible factor is the importance of a cure, but this does not fit Reznek's examples either. No one views finding a cure for tooth decay as more urgent than finding a cure for aging. It is hard, then, to see any sense in which we give the cure of dental caries, but not aging, "the same priority as we give to the cure of TB and multiple sclerosis" (p. 94). Rather, Reznek strains credulity to deny the obvious: normal aging is normal (if it is) because it is universal in our species and other organisms too.

The argument for the necessity clause, based on a single example, is unconvincing. While hypothermia, as opposed to feeling cold and stiff, may "require medical intervention" (p. 163), heat exhaustion does not; still it is listed as a disorder in medical texts and in the International Classification of Diseases (WHO 1992, T67.5). Acute mountain sickness, another well-known disorder (T70.2), is treated simply by taking the patient to a lower altitude where he can rest. Nutritional diseases such as kwashiorkor or scurvy likewise can be treated just by providing the missing nu-

trient. And every mother has treated her child's minor cuts and abrasions with first aid, which can be mere washing and bandaging.¹⁶ As in this example, so in many other pathological conditions, from colds to alcohol intoxication: the body heals itself and is best left alone to do so.

The appropriateness clause, in Reznek's text, appears in response to his view that a condition satisfying all other requirements to be pathological may still not be, if we believe some nonmedical treatment preferable. His main examples here are crime, drug addiction, and grief. To take these in reverse order, he says that

we want to be the sort of people in whom it is healthy to respond to loss with grief, and so we do not want to adopt a norm with the consequence that grieving becomes a disease, and something we should cure with drugs. (p. 96)

It is healthy to respond to physical injuries, like cuts and bruises, with pain; yet that does not make pain-relieving drugs inappropriate, unless pain is essential to healing. Healing after emotional injury means moving from one love relationship to another. If, *per impossibile*, some drug could produce the final state without the intervening suffering, it is not clear what value the suffering would have.¹⁷ As to drug addiction, Reznek writes:

Drug addictions are abnormal conditions that produce harm, but we might not wish to classify them as mental illnesses because we feel that the problem ought to be handled by the law. We might feel drug addicts are not victims of a disease, but slaves to be set free, and that the law is more likely to achieve this [Reznek (1991), pp. 164-5].

But how is it that drug law can set addicts free? To restrict availability even of medical drugs is, of course, a standard public-health measure to prevent disease. Presumably, then, Reznek means prison for drug addicts. But imprisonment, or the threat of it, can only force or motivate withdrawal. If prison is curative, it is unclear why such treatment is any less medical than involuntary psychiatric commitment. On the other hand, if prison only deters the use of drugs, without changing the desire for them, it does not treat the addiction; it only suppresses the behavior that expresses it.

Precisely on this distinction between a disease and voluntary acts expressing it rests Reznek's final view of crime. In 1987 he imagined our future discovery that "all human pursuits," including crime, "are caused by specific neurological states."

While it might be the case that we could alter this neurological state by medical means – we could subject all criminals to frontal lobotomy – it might not be considered *appropriate* to do so. We might not consider it appropriate because we feel that such behaviour is, like golfing, freely chosen, and hence not due to some disease. (pp. 166-67).

That this means the neural state is not pathological is still Reznek's view in 1991, where 'evil' and 'ill' are mutually exclusive (*PDP*, pp. 211-13). In 1997, however, he changes his mind:

The fact that deviant behaviour is caused by a disease in no way undermines the fact that such individuals are evil. A person can be both evil and ill, and moreover, can be evil in part because he is ill. (*EI*, p. 222)

That is because, “[w]hile the process predisposing to the criminal act is involuntary, it does not follow that the criminal act itself is involuntary, and it is only this that allows the disease of crime to excuse” (*EI*, p. 205). Thus, in his view, pedophiles or sadists may have a mental illness, yet be guilty of crimes for voluntary acts the illness helps to cause. Here criminal law is the appropriate treatment, even though the underlying condition is pathological, contrary to clause (4).¹⁸ Since Reznek does not, in fact, mention either clause (3) or (4) in his last three books, I judge that he has abandoned both.

In any case, two grave objections to defining pathology via any appeal to medical treatment emerge from Reznek's own text. First, what is medical treatment? To avoid circularity, Reznek proposes an enumerative definition.

It will be circular to define disease in terms of what requires medical intervention if medical intervention is defined in terms of what is needed to combat disease. However, we can define medical intervention purely enumeratively without reference to the notion of disease – in terms of pharmacological and surgical interventions.¹⁹

Now drugs and surgery are far from the only tools even of traditional physicians, who also mechanically manipulate bones and joints, apply splints, insert catheters, prescribe diet or exercise, and so on. In any case, there is no reason to expect any list to exhaust all possible types of medical treatment. Medicine can always find new treatment modalities, such as ultrasound or gene splicing. In his second book, the thesis that rival views of mental illness all fit the medical paradigm forces Reznek to a

much broader view of medical treatment. He maintains that psychiatric conditions are genuine illnesses, even if they turn out to be best treated by psychoanalysis (neuroses), behavior therapy (phobias), or cognitive therapy (depression). He even concedes that cognitive therapy is education, but agrees with Kendell that “there are many diseases that can be treated or prevented by education” (*PDP*, p. 49) – e.g., scurvy.

It seems clear that Reznek has abandoned his claim that medical treatment can be defined enumeratively, so circularity still threatens. Note, too, that the other natural way to define medical treatment – which Reznek does not propose – also fails: namely, to define it as treatment by physicians. First, who is a physician? Not even all current American practitioners normally called physicians have M.D.’s; some are osteopaths. The M.D. degree is a specific contemporary credential lacked by many of the most famous doctors of history, from Hippocrates to the 13th century.²⁰ Moreover, no matter who is a physician, there is no reason why even human pathological conditions must be best treated by physicians. Dentists treat tooth and gum diseases, podiatrists foot diseases, clinical psychologists emotional disorders, and nurses treat all manner of pathology, often without physicians’ supervision. And, in principle, new health professions can always be created, just as new types of medical treatment can. On the whole, it seems perverse to try to define health in terms of the health professions, rather than the other way around. Whatever makes a condition pathological, surely it is not being best treated by one of a list of types of therapy or therapist.

The second problem with requiring medical treatability for disease is that it implies that most plants and animals have no diseases. As noted below, biologists apply concepts of disease and pathology across the whole biological realm. But only a few species of animal receive medical treatment by veterinarians, and a few species of plants by plant pathologists. Again, Reznek’s second book makes the point for us perfectly. Against Sedgwick, he notes that

it is not the case that the disease status of conditions for all organisms is relative to *human* interest. Man has no interest in (the survival of) desert grass, but this does not imply that desert grass cannot be diseased. ... [W]hen there was a population explosion of the rabbits introduced to Australia, they became a pest. The problem was solved by introducing the myxoma virus into the population to decimate the rabbits The rabbits were still diseased in spite of the fact that we had no interest in their survival. Desert grass and pestilent rabbits can have infectious diseases (even

though we have no interest in their survival) because the infection does *them* harm.²¹

This is admirably clear, correct – and inconsistent with Reznick’s analysis. What he stresses here is that we do not think medical treatment “appropriate for” diseases of desert grass and pestilential rabbits, or that physicians “ought to treat” them. Nothing about medical treatment is necessary for wild grass and rabbits to be diseased. Rather, they would have had diseases even if human beings, with their medical institutions, had never existed at all. For Reznick, that is because the other elements of his analysis, including harm, suffice. Thus, even if one could give a noncircular definition of medical treatment or physicians, Reznick is right to abandon his two clauses on medical treatment completely.

D. Harm. After deciding that either harm or dysfunction is an element of pathology, Reznick spends four chapters arguing that harm is the right choice (pp. 98-171). His case against dysfunction I have answered elsewhere [(1997), pp. 90-4, 125-7]. It rests on two kinds of examples, harmful functions and beneficial nonfunctions. Harmful functions include lethal reproductive processes in lower organisms: the octopus (p. 103), the praying mantis (p. 111), the gall-midge (p. 121). Like Goosens, Reznick imagines similar processes affecting us, as well as self-destruct functions created by group selection, of which aging may be one. He finds it implausible to call a condition blocking such functions pathological. But, as to reproduction, pregnancy, birth, and child care already impose heavy risks and costs on human parents. Yet Reznick concedes their normality (p. 90), and infertility is pathological in medical works. The female octopus’s optic gland, which makes her starve in guarding her eggs, is only a more extreme version of human parents’ normal sacrifices. Perhaps removing it makes the octopus’s life nine times longer after egg-laying, but castrating human males lengthens their lives, too.²² Moreover, Reznick’s own implicit view is even more implausible: that many whole species’ actual reproductive mechanism is pathological. His point is that the above functions are harmful, so their blockage is beneficial and cannot be pathology. But then the functions themselves are pathological on Reznick’s own account, if lower organisms can have pathology at all. That is, they satisfy all the elements of Reznick’s original analysis except the clauses on medical treatment, which we have just seen him abandon. The octopus’s optic gland, besides being harmful, is certainly involuntary, and its statistical normality does not

stop its being pathological, by the doctrine of his first two books that “a whole species can be ill” (*PDP*, p. 163). Could any view be less biological than that a species’ reproductive system is a universal genetic disease?

As for beneficial nonfunctions, there is no need to call their blockage pathological if one stops linking pathology to medical treatment. Only an ultraconservative medical ethics rejects all medical treatment of nonpathology.²³ If curing an infection restores women’s orgasms, or filtering copper raises everyone’s IQ without cost, naturally one should do so, even if it is not curing any disease.

One could, of course, cite both harm and dysfunction as elements in a definition. To avoid all my criticisms so far, Reznek could simply adopt Wakefield’s view [(1992), (1999a,b)] of pathology as harmful dysfunction. Now, however, I shall argue against requiring harm for pathology, for three reasons that affect Wakefield and Reznek equally.²⁴

1. *Nonsentient organisms.* The first objection is that there is no such thing as harm to plants and lower animals (PLA, for short), since nonsentient beings have no interests.

To begin with, it is clear that biologists apply concepts of disease and health across the whole spectrum of life. Summaries of evolution or ecology often include generalizations about disease, using that term or related ones like ‘pathology’ or ‘pathogen’. Entire journals are devoted to diseases of plants and of invertebrate animals. Furthermore, all species description presupposes a concept of normality, since obviously damaged specimens, like Kass’s half-eaten butterfly [(1975), pp. 13-4] are ignored, not counted as polymorphs. Since I have argued this point in detail [(2014), pp. 696-9], I will not belabor it here.

To his credit, as we saw, Reznek grants that disease concepts apply to nonsentient organisms, like desert grass. How, then, can they be harmed? In his chapter on harm, Reznek surveys and rejects naturalist accounts of harm in terms of normal functioning, pleasure, and desire satisfaction. Human good, he concludes, is ineluctably normative: it consists in living a “good or worthwhile life” (*ND*, p. 150), and specifically in “the satisfaction of worthwhile desires and the enjoyment of worthwhile pleasures” (p. 151). This account seems doubly inapplicable to PLA. First, PLA have no desires or pleasures at all. Second, the normative contrast between lives that are or are not worthwhile makes no sense for PLA. What kind of life for an amoeba or dandelion is just not worth living? Reznek replies to this problem as follows:

[A]lthough plants might not have interests (because they cannot have worthwhile desires and pleasures), we can also give an account of disease in plants or animals in terms of the notion of being made worse off. All organisms have a good or well-being which can either be promoted or impaired. And because of this all organisms can be made worse off. In our case our good or well-being is understood in terms of the satisfaction of our (normative) interests, but this need not be the case for organisms that do not have interests. (p. 165)

At first sight, this view seems to make ‘disease’ ambiguous between human beings and other organisms, while biomedical usage offers no evidence of such ambiguity. But Reznick apparently means that well-being is a single concept, distinct from interest but coextensive with it for organisms with interests.

Although I find this view puzzling, my main criticism is that nonsentient organisms like plants and protozoa do not, in fact, have a good or well-being. This Aristotelian idea owes much of its recent revival to von Wright, whom Reznick cites [von Wright (1963), p. 45] for the thesis that it is precisely living beings that have a good. But this view is wrong. There is no evaluative sense in which paramecia and peonies, but not clarinets or computers, can be better or worse off. In either group, items can be physically destroyed, in whole or in part, and partial destruction can make the parts unable to perform their functions. It is true that only organisms, not artifacts, can be killed, but that is little help since not all diseases are fatal. The basic error is to think that life itself is a good thing for a nonsentient organism. Rather, killing a dandelion is bad for it only in the same way that destroying a robot is bad for the robot. Following Sommerhoff [(1950), (1959)], I have said that the key concept in both cases is goal-directedness: organisms’ flourishing, of which Reznick speaks, is just their successful pursuit of inherent goals. But any goal-directed artifact can flourish in the same way, especially if its design includes a growth program. Cyberpet owners feel concern for the welfare of their robotic dog or cat; the same confused sentimentality makes us think a dandelion better off alive. But Singer (1994), p. 200, Sumner (1996), and others are right: only sentient organisms, like real dogs and cats, have a welfare. So insofar as harm is injury to welfare, nonsentient organisms are immune to harm. More generally, no notion of health that applies to all organisms can be a normative one. To the extent that all organisms are healthy in the same sense, human health, like plant health, must be value-free.

Nevertheless, many more recent writers endorse some sort of welfare for nonsentient organisms, so let us see whether their ideas can help Reznek's case. Such writers fall into two main groups.²⁵ One is the line of "neo-Aristotelian" ethicists besides von Wright, including Geach (1956), Anscombe (1958), Hursthouse (1999), Foot (2001), Thomson (2001), Nussbaum (2006), and Thompson (2008). Such writers generally conceive the good of an organism to be its flourishing as a good member of its kind, which, in turn, is usually explained in terms of natural functioning. For example, Hursthouse judges goodness in an organism by how well its parts and behavior serve, in the ways typical of its species, the natural ends of "(1) its individual survival, (2) the continuance of its species, (3) its characteristic freedom from pain and characteristic enjoyment," and, for social animals, "(4) the good functioning of its social group" (1999), p. 202. A second group of writers are environmental ethicists. In a typical and influential account, Varner explains interests as follows:

An individual A has an interest in X if and only if (1) A actually desires X, (2) A would desire X if A were adequately informed and impartial across phases of A's life, or (3) X would fulfill some biological function of some organs or subsystem of A²⁶

Since Varner's combination of three kinds of welfare theory is, unlike Reznek's, a disjunction, it lets nonsentient organisms have interests under disjunct (3).²⁷

For several reasons, however, it is hard to see how these discussions help Reznek's account of health. In the first place, the neo-Aristotelians' target idea seems at least closely related, and more likely identical, to that of health.²⁸ The idea of a "good specimen" of an organism X sounds like negative health, the absence of pathology, while "flourishing" suggests an extra flavor of positive health. But if their target idea just is health, to use it to support one element (harm) of an analysis of disease makes the analysis circular, just as we saw with the generic medical sense of Reznek's element of abnormality. One cannot explain health in terms of welfare, and then explain welfare in terms of health. In the second place, nearly all these writers explicitly describe the well-being of nonsentient organisms via biological functions. Varner does so in his clause (3), while Hursthouse's (1) and (2) – her two goals applicable to lower organisms – amount to one popular analysis of biological functions as contributions to individual survival and reproduction (plus a confusion of individual reproduction with species survival). Dussault believes that harm to nonsentient organisms must inevitably be analyzed as

biological dysfunction [(202x), p. 12]. But Reznek, as we saw, firmly rejects dysfunction as a component of disease, because of his examples of biological functions harmful to the individual, such as mantis or octopus reproduction.²⁹ In any case, to define harm to nonsentient organisms via biological functions would make Reznek's analysis (after he drops the medical-treatment clauses) very similar to mine, while putting Wakefield's harm clause in danger of redundancy. So Dussault's conclusion seems fair:

... [P]roponents of harm-requiring accounts of disorder seem to face a dilemma. They can either adopt a partly biofunction-based account of harm whose plausibility is questionable in the first place, and which, against the spirit of their accounts, makes part-dysfunction sufficient for disorder. Or alternatively, they can adopt a sentience-based account of harm ..., and implausibly make their account of disorder inapplicable to nonsentient organisms. [(202x), p. 15].

Let us now pass to the second and third problems with requiring harm for pathology: two broad classes of pathology that seem devoid of harm even in human beings.

2. *Essential pathology*.³⁰ Pathology is essential when it is metaphysically necessary to one's identity: that is, one has it in any possible world where one exists at all, anyone without it being a different individual. Kripke, in *Naming and Necessity*, argues that various features of our origin are essential. A strong view is that our entire genome, including the basis of any genetic disease, is essential. A weaker view is that although one could not have arisen from a different egg or sperm, either gamete could have had a different genome – for example, if radiation had caused a mutant allele. Many people, however, seem to believe that at least gross changes in an embryo's genome, such as chromosome count, change its identity. If so, then the trisomy of Down's or Klinefelter's syndrome and the monosomy of Turner's are essential to their bearers. In that case, they cannot harm them, because of what Feinberg (1988) called “the counterfactual element in harming.” To be harmed is to be made worse off than one otherwise would be; but without this pathology one would not have existed at all. Some writers take a broader view: existence is harmful if its net utility is negative. Even on this view, however, Down's and Turner's syndromes are not harmful unless they make life not worth living, which is implausible.

One can, of course, distinguish the genetic defect (*e.g.*, trisomy 21) from its phenotypic results (*e.g.*, mental retardation). If the latter are avoidable, one might propose that only they are the harmful disease. That is not, however, the usual medical view. Medicine views the trisomy itself as the basic pathology, like the abnormal alleles in phenylketonuria. In that disorder, too, dietary restriction can prevent mental retardation despite the alleles, but medicine views this situation as compensated pathology.

3. *Contrasentient pathology.* A second possible type of harmless pathology is pathology inconsistent with sentience, which I will call *contrasentient*.³¹ If a human embryo, fetus, or baby could never have been conscious, as in anencephaly and other CNS defects, it is no more capable of harm than the lower organisms discussed earlier. As far as sentience is concerned, such a fetus might as well be headless; do we really wish to say a headless body would be better off with a head? (Which head?) One is rather inclined to say there was never a determinate person there to be harmed or benefited. Still, unlike essential pathology, there is at least a single organism here that one might think worse off nonsentient. Nearly everyone agrees that a sentient being can be harmed by losing its sentience, as in irreversible coma or death. Does it follow that a nonsentient being can be benefited by becoming sentient, in which case to block this change is harm? Again, Singer's negative answer may reflect a philosophical majority:

[T]he fact that the embryo could become a person does not mean that the embryo is now capable of being harmed. The embryo does not have, and never has had, any wants or desires, so we cannot harm it by doing something contrary to its desires. Nor can we cause it to suffer. In other words the embryo is not, now, the kind of being that can be harmed, any more than the egg is before fertilization. [(1994), p. 200]

If Singer is right, then contrasentient pathology is not harmful to its bearer, and indeed blocks the very possibility of harm. Anencephaly can, of course, harm the baby's parents. But writers like Reznek and Wakefield who make harm a necessary condition of pathology do not count harm to others, nor, I think, should they. It is not an attractive view that one can improve a patient's health by changing him so as benefit others. A's death may benefit B, C, and D, but we need no utilitarian calculation to know that A's health is not improved by dying.³²

E. Involuntariness. We have now rejected all of Reznek's original five elements but the last: involuntariness. Reznek states that we have

“no control” over a genuine disease (*EI*, p. 203), in the sense that we cannot acquire or remove it by “direct” act of will (*PDP*, p. 92, *EI*, pp. 202-3). For pathological conditions in general, this is clearly wrong. It is easy to acquire a pathological condition by direct act of will: just scratch your arm, bite your lip, or eat some appleseeds, foxglove, or wolfsbane.³³ Other pathological conditions can be cured by direct acts of will over time, as when nicotine addiction goes away after smokers quit. Admittedly, it is hard to find pathological conditions that can be both acquired and cured at will. But perhaps some people’s reputed ability, using yoga or biofeedback, to stop their heartbeat would qualify. Cardiac arrest is surely pathological if anything is, especially if carried to the point of unconsciousness.

As I mentioned earlier, Reznek may mean this clause to apply only to diseases, not to all pathological conditions. But if so, it is hard to see its importance, since he concludes that there is no clear difference between diseases and all other pathological conditions (*ND*, p. 73).

F. Methodology. Two final problems concern, not any specific element in Reznek’s analysis, but his overall semantic framework.

1. *Medicine misunderstands ‘pathology’.* From chapter 1 onward, *PDP* is organized around “the medical paradigm” of psychiatry, constituted by eleven theses:

- T1 The *Causal Thesis*: A sub-class of abnormal behaviour is caused by disease.
- T2 The *Conceptual Thesis*: A disease is a process causing a biological malfunction.
- T3 The *Demarcation Thesis*: A mental illness is a process causing a malfunction predominantly of some higher mental function.
- T4 The *Universality Thesis*: Diseases are not culture- or time-bound.
- T5 The *Identification Thesis*: Scientific methodology enables us to identify diseases.
- T6 The *Epistemological Thesis*: Scientific methodology enables us to discover the causes and cures for these diseases.
- T7 The *Teleological Thesis*: Psychiatry’s goal is the prevention and treatment of mental disease.

- T8 The *Entitlement Thesis*: Having a disease entitles a patient to enter the sick role.
- T9 The *Neutrality Thesis*: Besides the values implicit in the goal of preventing and treating disease, psychiatry is neutral between any ethical or political position.
- T10 The *Responsibility Thesis*: Having one's behaviour caused by a mental illness in a certain way excuses one from responsibility.
- T11 The *Guardianship Thesis*: Having a serious mental illness entitles the psychiatrist to act against the patient's will. (*PDP*, p. 12)

Nearly all these theses, Reznek concludes, “survive all challenges intact” (p. 233). The main exception is the conceptual thesis T2, which contradicts his own analysis of disease.³⁴ At first sight, to include T2 in the medical paradigm is to concede that a dysfunction-requiring analysis like mine is correct. Reznek, however, believes that medicine misunderstands the pathological! What sense can be made of this claim? ‘Pathological’ is a technical term of scientific medicine, not a lay term. One can easily see how medicine could have false empirical theories of disease – e.g., if it believed that all diseases are bacterial infections. And if ‘disease’ or ‘pathology’ were a natural-kind term, medicine could have false beliefs about the kind, as in the tiger case (*ND*, p. 52). But Reznek holds that these are not natural-kind terms. Apparently, his thesis is that physicians have a false semantic belief about their own term ‘pathological’.

His case for this claim, however, shows a disturbing preference for hypothetical over actual disease judgments. Perhaps, after reflection, most physicians would agree – though I doubt it – that all male praying mantises and all female octopuses and gall-midges have a pathological reproductive mechanism. Perhaps they would agree that aging will be a disease as soon as we find an easy cure, and that any human trait, such as the lack of wings or the need for sleep, is pathological if we elect to prioritize its cure. But presumably they should not agree if Reznek's view fails to fit their actual disease judgments. Medicine has had ample chances to declare foreskins, tonsils, and unwanted fertility or pregnancy pathological, yet it has resolutely refused to do so. Actual, not predicted hypothetical, usage is the best evidence of meaning. Thus, I would apply to Reznek his own words against Szasz:

If Szasz persists in arguing that it is part of the meaning of disease that there can only be bodily diseases, he is operating with a different concept

of disease. He is free to do so, but he will not be speaking the same language as the rest of us. All he will be saying is that mental illnesses are not *szasz* diseases, and there is nothing controversial about this! Anybody is free to invent their own language with special meanings for their terms.³⁵

Similarly, I submit that it is not medicine, but Reznek, who fails to grasp the concept of pathogenicity. A species' basic functional design is always normal, not pathological. That is what biomedical normality is.

2. *Political semantics.* A recurrent theme in the first three books is the "political dimension" of the concept of disease. This idea involves at least two distinct claims. One is that in choosing what is a disease, we choose "what sort of people we ought to be." That is partly because, for Reznek, harm, one element of pathology, depends on what lives are worthwhile. One example of such a judgment is the value of grief (*ND*, pp. 96, 166; *PDP*, pp. 166-7). Although this is not a common political issue, Marxism is. The reason Soviet psychiatry was wrong to diagnose political dissidents as mentally ill, Reznek says, is that political dissidence "is due to normal processes" and is not harmful (*PDP*, p. 171). But he views both these judgments as value judgments, so he feels the need to reply to Kendell's complaint about normativism. Kendell wrote:

[T]o accept Sedgwick's argument that the attribution of disease, mental or physical, is fundamentally a social value judgment ... would mean that we could never maintain on medical grounds that x or y *were*, or were not, diseases. We could only argue on social grounds that they *ought*, or ought not, to be *regarded* as diseases. ... [W]e could not criticize Russian psychiatrists for incarcerating sane political dissidents in their beastly asylums [on medical grounds]: they would be perfectly entitled to regard political dissent as a mental illness if, as is probably the case, most of their fellow-citizens disapproved of political dissenters and it happened to be more convenient to deal with them as patients than as criminals. (We could still, as laymen, criticize them on humanitarian or political grounds, but not as doctors on medical grounds.)³⁶

Reznek replies that "Kendell assumes here that Normativism commits us to Relativism" (p. 168), and proceeds to show that it does not. Though his critique of cultural relativism about values is sound, he then concludes:

Even if disease judgments are normative, this does not mean we cannot oppose the Russian psychiatrists. Just as we are prepared to defend our

value-judgment that Hitler was an evil man, so we are similarly prepared to defend our value-judgment that political dissidence is not a disease.³⁷

Reznek does not notice that he has not answered Kendall's last point: we are left with no medical basis for criticizing Soviet psychiatry. We can defend our value-judgment that Hitler was an evil man, but not on specifically medical grounds.

The Soviet example raises a further issue which becomes acute in two of Reznek's other examples, balding and race prejudice. Reznek says that a dissident's psychology does not "do the individual any harm" (*ND*, p. 171); in reality, in a totalitarian state, it is often fatal. Less dramatically, Reznek's remarks on male balding raise the same point. He says that even if men are better off having hair because women prefer it, we still might not consider balding pathological because "we do not want to be the sort of people that are concerned with such trivia, and regard ourselves as even better off as beings who are not worried by such matters" (p. 166). Now hair may be trivial; but attracting women is not. As long as actual women have the preference, heterosexual men are, in fact, worse off bald, even if ideal women would not care. The race example is parallel:

[W]hile it might be true that a black man would be better off white in a racist society, we conclude that we would all be better off as beings who are not governed by prejudice. ... And so we conclude that being black is not a pathological condition. (p. 166)

Note how these views seem to depart from Reznek's actual analysis, especially his thesis of environmental relativity. In the actual environment, bald men are harmed by baldness and blacks by blackness. How could it be relevant to whether baldness or blackness is pathological in a real society that everyone would be better off in an ideal society, where different attitudes erase the disadvantage?

Reznek's concern is that "we do not want to be the sort of people who would classify such a condition as a disease" (*PDP*, p. 165). In these examples, to call the condition a disease perpetuates the bad attitudes in question. Thus, one of the "practical consequences" (p. 94) that should determine what we call a disease is the social effects of so doing. That is the political dimension's second aspect, which reaches a climax in Reznek's discussion of homosexuality in *PDP*.

We can clarify matters by supposing that homosexuality is the result of some childhood endocrine abnormality or the failure of the foetal hypothalamus to differentiate. Let us also imagine a drug that can treat this, thereby pre-

venting homosexuality. Would we prescribe the drug? *I* would, because heterosexuals are better off in being able to have their own children. ...

But judging heterosexuals are better off does not mean that homosexuality is a disease. This is because in judging that a condition is a disease, we have to make a political judgment. We have to ask not only what sort of people it is worthwhile being, but also what sort of society we ought to create. A society where we stigmatize homosexuals is cruel and divisive. While there are conditions like AIDS that are diseases in spite of the stigma involved, they would still cause major suffering and disability without any stigma. The same is not true of homosexuality – most suffering comes from the label. Most homosexuals would choose to remain the way they are even if there was an effective ‘treatment’ – homosexuality is more like a choice than an illness, and it would be unjust to stigmatize a choice. Therefore I conclude that homosexuality is not a disease.³⁸

How do these two paragraphs fit Reznek’s account of disease? According to his first paragraph, homosexuality is intrinsically harmful, and medical treatment to prevent it would be appropriate.³⁹ According to the second paragraph, it is still not pathological. Why? Because there would be bad results from saying so! This view is, perhaps, superficially consistent with his analysis, insofar as he is claiming that homosexuality is not abnormal in his own special sense. But that special sense makes pathology a strange concept, even among normative ones. We do not say that a bad person must be good if calling him bad would have poor consequences. Admittedly, there is a sort of analogy in law. Legislatures, sometimes even courts, do decide whether a legal category should apply partly according to the practical effects of so holding. Not all causes-in-fact are legal causes, not all harm is legally compensable harm in tort law, and so on. Still, this analogy seems to fail. At most, it would show that the institutional consequences of applying some institution’s term can rightly affect its scope. But Reznek already has the institutional consequences of medical classification – medical treatment – in his definition of disease. Now he wants to include social ones as well.

In the other cases, it was already unclear why to call a socially disadvantageous condition pathological is to endorse the bad attitudes that make it so. Here, one basic disadvantage does not result from social attitudes at all. With flying colors, homosexuality passes all of Reznek’s requirements 2-5 for a pathological condition; yet we must still not call it one for fear of social “stigma.” Why, one might ask, should psychiatry not instead educate the public as to what its terms mean, rather than let-

ting public reaction determine their meaning? Actually, however, public reaction to a term cannot determine its meaning in this way. On Reznek's official analysis, disease status justifies no stigma. So it is as though he wants application of the term 'disease' to be determined not just by what it really means, but also by what people wrongly think it means. But no term has such a two-level semantics. In holding that a condition is P if (i) it has five properties and (ii) saying so doesn't have bad social effects, Reznek abandons coherent semantic theory, leaving 'pathological' with no meaning at all.

This strange doctrine is a minor detail in *PDP*, affecting only the status of homosexuality. But it is important in *EI*, since Reznek uses it to solve a major problem for his view. That is "the paradox of evil" (*EI*, pp. 7, 239 ff): since psychopaths look diseased on his analysis, they should be entitled to the insanity defense.

[I]f we classify psychopathy as a disease, those with the disorder are seen as undergoing a character change, making them into evil characters. This means that they will be eligible for the excuse of character change. We seem to have arrived at the paradox of evil – those who are the embodiment of evil in that they care nothing for others turn out to have an excuse, and are not evil at all. (*EI*, pp. 241-2)

To solve this problem, Reznek repeats his line on homosexuality in *PDP*, and then writes:

For a similar reason, we should hesitate to classify psychopathy as a disease. ... Even if a disease is an abnormal involuntary process without an obvious external cause that produces harm, we are not forced to classify every such process as a disease. When the cost of doing so outweighs the benefits, we are entitled to decide not to classify it as pathological. I believe that, at the present time, the costs of classifying psychopathy as a disease are greater than the benefits. There is no cure in sight, and such offenders are better dealt with by the penal system. (*EI*, p. 243)

Again, this is nonsense. If psychopathy is disease by the best analysis of disease, and disease-caused character change is a moral excuse (*EI*, pp. 238, 240-1), then psychopaths are excused. True premises do not become false just because admitting their truth is socially disruptive. Rather, Reznek's second type of political semantics is a fairy tale, invented solely to evade counterexamples to his analysis.

III. REZNEK'S LATER ANALYSIS

As my last quotation shows, by Reznek's third book (*EI*) he had already simplified his analysis of disease to this: an abnormal harmful involuntary process without obvious external cause (*EI*, p. 243). Thus, at least two major elements of his original view have vanished. There is now no mention of medical treatment – already inconsistent, as we saw, with diseased wild grass (*PDP*, p. 100). Nor do we hear any more of a mysterious third sense of normality beyond statistical and medical. (Actually, his two most recent books also make no mention of the involuntariness element; but I will assume he still intends that one.) Finally, in *DMM* and *PMD* his treatment of organism-environment relations changes slightly. His new formula is that a disease is an “abnormal underlying process that [in most cases] harms the individual.”⁴⁰ This new emphasis on an “underlying process” reflects the idea, which we encountered above in §II.A, that “reacting normally to abnormal circumstances” is not a disorder (*PMD*, pp. 114, 205). Let us call this the *normal-process thesis*. For example, Reznek now holds that phobias are not pathological, since they result from “normal mechanisms of learning” in traumatic environments (like the one in which Freud's Little Hans saw an accident with a horse), rather than from any “abnormal underlying process.”⁴¹ He similarly judges nonpathological some other claimed mental disorders, such as reactive depressions, including grief, and schoolboys' ADHD (*PMD*, pp. 112-3, 117, 171).

Regarding normality, Reznek regrettably continues his lifelong habit of switching between statistical and medical concepts without warning. At some points, he clearly means medical normality, that is, nonpathologicity. For example:

We want our disease classification first and foremost to be a guide to treatment. The whole *raison d'être* of our classifying conditions into normal conditions on the one hand and diseases on the other is that we want to know when to intervene to help a person. (*DMM*, pp. 89-90)

Likewise, he seems to use ‘abnormal’ and ‘pathological’ interchangeably here:

A psychiatric label is valid if it picks out some unique underlying abnormality shared by patients with the diagnosis. ... What validity *means* is to pick out a unique underlying disease process. ... For psychiatric disorders,

then, a valid diagnosis is one that picks out patients that share a unique underlying pathological process. (*PMD*, p. 72)

As we noted, if ‘abnormal’ is a synonym for ‘pathological’, it cannot be one element in its own analysis.

As in all his books, however, Reznek also often uses ‘abnormal’ in a purely statistical sense. Repeating his Einstein example, he concludes:

Discovering that some condition has some underlying brain abnormality does not help us in deciding whether it is a mental disorder. This is because we decide what conditions are disorders not on the basis of their underlying nature, but on the basis of what sort of consequences they have. (*DMM*, p. xxii)

Thus, he says, neither Einstein’s extra glial cells, nor male homosexuals’ supposedly much smaller INAH-3 nucleus in their pre-optic medial hypothalamus, is a disorder, since genius is beneficial and homosexuality is not harmful.⁴² If ‘abnormal’ here meant ‘pathological’, of course an “underlying brain abnormality” would settle the question. Similarly, he assumes that whatever “we all have” is normal. Apropos of “behaviour addictions” like pathological gambling, he writes: “Since we all have passions that give us pleasure, this is normal and should not be considered to be a disorder” (*PMD*, p. 67).

There are also passages where Reznek seems to alternate statistical and medical normality. In his argument that the DSM-IV exception to major depression for bereavement was too narrow, he says: “We know that a loss of a relationship, or a job, normally leads to intense sadness” (*PMD*, p. 118). This normality must be statistical; if it were medical, the argument would be openly circular. Yet a mere three sentences later, he writes:

“[D]epression” in this context is so common as to suggest it is probably normal and best not regarded as a mental disorder. ... [T]he high prevalence suggests quite strongly that this is a normal reaction and not a mental disorder.

This normality must be medical; otherwise it would be proved, not suggested, by the statistical data. Finally, in many passages it is hard to tell whether statistical or medical normality is meant. In the last chapter of *DMM*, Reznek summarizes *Homo demens*:

We arrive, then, at a paradoxical conclusion. The whole world is mad, with irrationality pervasive throughout the normal population. The failure of reason seems to characterize normality, and no person seems free of delusional ideas. Mentally ill patients are even more irrational than most, but probably not by much. We all seem to have succumbed to the sleep of reason⁴³

Because medical normality – nonpathogenicity – cannot be an element in its own analysis, and because Reznek’s last four books never mention the third sense of normality alleged in his first, I will assume that, as we concluded in II.A, ‘abnormality’ in his current analysis is purely statistical. Such statistical normality must, of course, be further specified: we need a reference class within which conditions are to be typical or atypical. To fit medical disease judgments, what is typical must be relative to at least to species⁴⁴ (lest our inability to fly be pathological), sex (lest men’s inability to gestate a baby be pathological), and age (lest a one-year-old’s inability to walk be pathological). We must also make normality relative to occasion (blood clotting is normal after a wound, but not without one), including environment (eyes must let us see in light, not in the dark) and the organism’s activity (a heart rate of 150 is normal during exercise, but not at rest). As the last example illustrates, in each case we must also explain what the normal range of a continuous variable is. As Kingma [(2010), pp. 243-50] has noted, all these elements are included in my analysis of health and disease [(1977), (1987), (1997), (2014)].

Unfortunately, on this statistical understanding of normality, Reznek makes a spectacular error: his normal-process thesis, which denies that typical reactions to atypical environments can be pathological (*PMD*, pp. 114, 205). For that is just what lots of diseases and other pathological conditions are.⁴⁵ Suppose that as Andrew is out for a walk, a large tree limb falls on his leg, breaking his fibula. Or Barbara eats a meal of deathcap mushrooms (*Amanita phalloides*), causing her liver and kidneys to fail. Or Calvin breathes in air full of *Yersinia pestis*, and a few days later displays the symptoms of pneumonic plague. The broken bone, liver damage, and pneumonia are, in the reference class, typical effects of these atypical environmental factors. In each case the “underlying process” – walking, eating, breathing – is as normal, *i.e.*, typical, as can be.⁴⁶

Can Reznek avoid such counterexamples simply by abandoning this normal-process doctrine, that a typical reaction to an atypical environment is not pathological? That is, could he say that a disease is just a harmful atypical involuntary condition? No. Such an analysis includes clearly nonpathological conditions as well as some pathological ones.

Consider unwanted pregnancy, which is statistically abnormal since most women are not pregnant and most pregnant women want their babies.

Or suppose Barbara ate the deathcaps because her husband, who wishes her dead, told her that they are delicious and nutritious. Her belief that they are safe to eat is a harmful atypical condition, but it is not a mental disorder – just a dangerous false belief, typically acquired from an unusual environment. Perhaps Reznek might say that Barbara’s belief is voluntary, since she could change it just by looking in a mushroom reference book.⁴⁷ So, to avoid the issue of voluntariness, suppose instead that Barbara’s mother taught her that some other weird food – pine resin, say – is healthful, and it is harmful, but no one yet has any evidence of its harmfulness. Why is Barbara’s unusual harmful belief not a mental disorder? For exactly the reason Reznek himself elsewhere states. Regarding people who acquire a fundamentalist religion by normal childhood education, he says they are deluded but not “mentally ill.” Why? Because such a person has “no *malfunction* of his critical or reasoning faculties,” in either childhood (*DMM*, p. 108, italics added) or, by implication, adulthood (*DMM*, p. 112). But that is exactly why liver failure from eating deathcaps is pathological, while the belief that leads to the fatal meal is not: the liver failure involves internal part-dysfunction, while a dangerous false belief, innocently acquired, does not.

Thus, Reznek is impaled on a dilemma. With the normal-process doctrine, his analysis of disease is far too narrow, since it excludes all the familiar examples of pathology that is the typical reaction to unusual environmental insults.⁴⁸ But without that doctrine, his analysis is far too broad, since it includes, for example, every harmful, atypical, typically acquired, empirically unrefuted belief as pathological. I suspect that any measures Reznek can take to avoid such counterexamples will amount simply to adding a part-function clause, at least on non-selectionist analyses of biological function like mine. His analysis will then become similar to either Wakefield’s or mine, depending on whether he keeps the harm clause or drops it.

It remains to mention one final defect in Reznek’s last book: his belief that a genuine mental disorder must be a brain disease. He implies that a true mental disorder must be due to “underlying biological disease” (*PMD*, p. 10), and that it represents “something wrong with our brains” (p. 11): an “underlying brain abnormality” (p. 210). This looks like a familiar mistake in the philosophy of mind. If we are materialists about mind, we must grant that every individual state of mental disorder is located somewhere in the patient’s body, presumably in the brain. But

that does not mean that its type must be definable in neurological, rather than psychological, terms.⁴⁹ The computer analogy makes this clear [Boorse (1976), p. 68; Wakefield (2017), p. 57]. If a properly connected specific computer cannot access some website, that is of course due to some physical configuration of its parts. But our description of the fault will be in machine-language terms, not in terms of any physical damage to its circuits, such as corrosion or a broken switch. Different computers with the same fault, even of the same make and model, will have wildly different micro-electronic instantiations of the fault, sharing only a very complex structure defined in programming terms. Similarly, different tokens of the same mental disorder may share only a complex structure bearing no resemblance to familiar structures of diseases of other organs. The brain can have unique disease types all its own. So, if DSM writers, beginning with DSM-III, have, as Reznick claims, assumed that genuine mental disorders must be “chemical imbalances in the brain,”⁵⁰ so much the worse for DSM. Still, Reznick’s main criticism of DSM diagnoses remains. They are indeed “provisional” (*PMD*, p. 210): on a correct view, any genuine disease must involve internal part-dysfunction. It is just that such dysfunction may be psychological, not physiological.

IV. CONCLUSION

We have seen many problems with Reznick’s analysis of the normal-pathological distinction. In original form, it included a phantom third sense of normality, no need for which was ever shown, nor any remotely clear account of it given. The analysis made pathology falsely relative to environment, including social values. It wrongly linked pathology analytically to medical treatment, which it also could not adequately define. Both this link and the harm requirement made plants and lower animals incapable of disease, contrary not only to biologists, but also to Reznick himself. Finally, his belief in the infinite pragmatic malleability of normality made him politicize it into total semantic incoherence. As for the simpler analysis of his last three books, as stated it leaves no room for the innumerable pathological conditions that are typical results of environmental insults. Yet with or without the normal-process doctrine, Reznick has no concept of internal injury by which to distinguish atypical involuntary harms that are pathological from those that are not.

In short, I have argued that Reznick is wrong in nearly all his major theses about the concepts of health and disease. Nevertheless, much of the rest of his work is either independent of his health analyses or could

survive their revision.⁵¹ In *ND*, my criticisms leave untouched the material on whether disease or pathology is a natural kind, on whether disease has a nominal essence, and on disease taxonomy. In *PDP*, none of his empirical criticism of rival “paradigms of mental illness” is affected. Moreover, most of the nine conceptual fallacies with which he charges theorists remain fallacies on, for example, my or Wakefield’s account.⁵² The main change in *PDP* is that, if dysfunction is required for disease, not all diverse “paradigms of mental illness” will be alternate disease theories; for writers like Szasz and Laing, psychosis does not seem to involve any dysfunction. Nearly all of *EI* is unaffected, including what Reznek calls the book’s “major task”: defense of the “novel excuse” of character change, best illustrated by mental illness (p. 11). Indeed, in *EI* his prior analyses of disease and pathology are more of a burden to him than a benefit.⁵³

As for Reznek’s last two books, as they stand, their arguments depend heavily on his untenable normal-process thesis. But their main conclusions may still be defensible on a proper view of disease. In *DMM*, a switch to a dysfunction-based view would not hurt, and might help, his main goal: to revise our concept of delusions and demonstrate their prevalence and danger. Nothing in my or Wakefield’s analysis blocks Reznek’s conclusion that while all or nearly all of the population is deluded, delusion is not in itself mental illness.⁵⁴ The former claim depends on a theory of delusion, not an analysis of disease. Reznek’s analytic errors have the worst effect on his argument in *PMD* that the current DSM has spawned an epidemic of disease-mongering and unnecessary drug treatment. As noted, his normal-process doctrine makes it far too easy for him to attack much of the DSM classification as non-diseases. Still, with a dysfunction requirement, he could instead attack diagnostic categories on the grounds that they rest on no good evidence of physiological or psychological dysfunction. And his empirical summary of drug companies’ influence on classification, and the prevalence of new mental disorders treated by their products, is unaffected. Thus, without going so far as to endorse Reznek’s most exciting conclusions, I note that a great deal of his work is undamaged by my criticisms in this paper, which touch only his analyses of health*.

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NOTES

¹ More precisely, on my view pathologicity is statistically subnormal part-functional ability, relative to species, sex, and age. See Boorse (1977), (1987), (1997), (2014).

² *ND*, 1. Parenthetical references in §§I-II of my text are to this book unless otherwise indicated.

³ *ND*, pp. 94,97. Reznek cites the longevity-drug example to Margolis (1976).

⁴ This is a problem of analysis or definition, not logic. A strict equivalence $[A \cdot (B \cdot C \cdot D \cdot E)] \Leftrightarrow A$ can, of course, be true, precisely when A entails $B \cdot C \cdot D \cdot E$.

⁵ The first quotation is from Laing (1967), p. 78; the second from *ND*, p. 90. As we shall see in §III, this normal-process doctrine becomes central to Reznek’s analysis in his last two books, though briefly denied in his second.

⁶ This point is made by Nordenfelt (2001), p. 40. My current section §II.A can be viewed as an expansion of Nordenfelt’s discussion.

⁷ *ND* we have discussed already. In *PDP*, when summarizing his analysis, he reiterates that “a disease cannot be understood in terms of a statistical abnormality because we can accept that a whole species can be ill” (*PDP*, p. 163).

⁸ Instead, in introducing the abnormality element in *EI*, p. 202, Reznek merely cites his first book, without noting its differing view.

⁹ For my discussion of this example, see Boorse (1997), pp. 87-90.

¹⁰ *ND*, p. 85. In the second sentence I have changed ‘sensitivity’ to ‘insensitivity’, since the former is an obvious slip.

¹¹ More accurately, it is the gap in normal skin that is pathological, not the scar that fills it; the scar itself is a normal response to the injury. This point does not affect the example.

¹² In his third book, Reznek changes his line on disfigurement: “Many African tribes deliberately inflict pathological scar tissue or keloids on their bodies because they like the result. To us, such changes are disfigurements, and we therefore classify the conditions causing them as diseases” (*EI*, p. 202). This new approach – to base our pathology judgment on our own ideals of beauty – avoids the environmental-relativity fallacy. It still perversely rejects the real reason scars are pathology in medical thought, namely, that they are an imperfect repair of injured tissue.

¹³ A list of medically normal conditions treated by physicians is in Boorse (2016), pp. 150-151, as well as a historical discussion of two primeval examples: Hippocratic contraception and Victorian obstetrical anesthesia (pp. 163-70).

¹⁴ *PDP* 165, citing Kräupl-Taylor (1979). The attribution is not quite accurate.

¹⁵ Not pregnancy itself, but unwanted pregnancy – a combined physical and mental state – fits all Reznek’s tests for a pathological condition. But it is never listed as one in medical texts or reference works.

¹⁶ Here one might recall the first of the successes that earned Ambroise Paré the title “father of modern surgery”: to notice that battlefield wounds were better treated by simple cleaning than with boiling oil, of which he had temporarily run short.

¹⁷ Thus I disagree with Reznek’s statement: “Even if there were a drug that could cure us of our grief, we would not want to take it” (*PDP*, p. 167).

My point here does not, however, depend on the analogy between physical and mental injury. It is sometimes argued, as by Engel (1961), that since bereavement is an emotional injury, even uncomplicated grief includes something pathological. But this is not the view of mainstream psychiatry.

¹⁸ At p. 260, Reznek reiterates the point – “Even if we judge that crime is a disease, this does not imply we should adopt a treatment approach to it” – and applies it to drug addiction in the next sentence.

¹⁹ (1987), p. 163. At the outset Reznek had added “and so on” (1), but to do so reinstates the circularity problem.

²⁰ According to Wootton (2006), p. 50, the first medical degree was awarded in 1268.

²¹ *PDP*, pp. 99-100, citing the myxomatosis example to Dubos (1965), p. 186. Even in his first book, Reznek imagined a plant counterpart to the octopus case, implying that plants can have diseases (*ND*, p. 165). For an actual article on disease in wild grass, see Newsham *et al.* (1995).

²² Hamilton and Mestler (1969) found eunuchs living an average of 13.5 years longer than their normal counterparts. Sex kills.

²³ This point seems independent of the current harm/dysfunction issue. Reznek calls pregnancy, menstruation, and teething normal (90), and presumably the same holds for childbirth. Hence, he must accept medical treatment of some normal conditions, contrary to his statement earlier quoted, or denounce standard pain relief for these conditions.

²⁴ For a careful discussion of disease and harm, see Feit (2017), who, like me, concludes that there is no harm requirement for disease. See also McGivern and Sorial (2017); Muckler and Taylor (2020), and Wakefield and Conrad’s reply (2020); and, on harm to nonsentient organisms, Dussault (202x).

²⁵ What follows is only a broad-brush summary. I lack space to discuss differences among the writers in each group, or the exact relations that neo-Aristotelians see among welfare, flourishing, health, and function. Helpful surveys of this literature include, for the neo-Aristotelians, Lutz (2018), pp. 10-13, Rice (2015), pp. 381-4, and Odenbaugh (2017), pp. 1033-37. For the environ-

mental ethicists, McShane (2019), Dussault (2018), and Varner's own chapter 3 (1998) are excellent introductions to the issues.

²⁶ (1998), p. 68. Varner retracted this account, however, in a later publication (2003), pp. 415-16.

²⁷ Reznec combines three elements nondisjunctively, in saying that welfare consists in "the satisfaction of worthwhile desires and the enjoyment of worthwhile pleasures" (p. 151).

²⁸ For nonhuman animals, Hursthouse explicitly says our evaluations "are all concerned with good *xs* as *healthy* specimens of their kind" (p. 206, italics original), and Thomson agrees as to plants and lower animals (2001), pp. 56-7: "What is good for a plant is obviously what conduces to its health" (p. 56).

²⁹ Both Hursthouse and Nussbaum discuss a similar example: mother birds' risking their lives to distract predators from their nests. Hursthouse holds that a bird that fails to do this is thereby defective, even if not doing it promotes her own survival (1999), p. 204. Nussbaum, while cautioning that an animal's species-typical behavior may run contrary to its good (2006), pp. 366-7, agrees that "altruistic sacrifice for kin" can be part of that good (p. 345).

³⁰ I owe my awareness of this idea to my colleague Mark Greene (2013). See also Feit (2017), pp. 378-80, and, for one recent skeptical discussion of origin essentialism, Cooper (2015).

³¹ I thank Roy Sorensen for both this idea and the anencephaly example; the term is my own.

³² Of course, one could avoid such results by giving the patient's own welfare, if it exists, absolute priority. But such a view seems messy and unmotivated by any principle other than to preserve the harm requirement against counterexample.

³³ "States are under the direct control of the will if they can be induced without the mediation of any artificial devices" (*PDP*, p. 92). Fingernails and teeth are not artificial devices, nor are toxic plants.

³⁴ Because "values and not facts" determine disease, the neutrality thesis is also false and the teleological thesis needs revision (*PDP*, pp. 233-4).

³⁵ *PDP*, p. 73; cf. also his remarks on taxonomic semantics at *ND*, p. 51. I grant that my analysis, too, suggests that medicine misclassifies two types of condition, purely structural abnormalities and species-typical diseases (1977), pp. 565-8. But these are tiny errors I am alleging, compared to Reznec's view that medicine has overlooked the fact that many species' basic reproductive system is pathological.

³⁶ Kendell (1976), p. 508, quoted by Reznec, *ND*, p. 168. The bracketed insertion, by Reznec, lends force to my criticism.

³⁷ *ND*, p. 171. Cf. also *ND*, pp. 211, 213; *PDP*, p. 162.

³⁸ *PDP*, p. 169. For Nordenfelt's criticism of this political test and its application to homosexuality, see Nordenfelt (2001), pp. 40-44.

³⁹ There is, of course, no question here of forced treatment of adult homosexuals, since involuntary treatment of competent patients is never "appropriate." See *PDP*, pp. 162, 218.

⁴⁰ *PMD*, p. 80. See also *PMD*, p. 60. That a disease need only be harmful in most cases is argued at *DMM*, pp. xxvi, 111.

⁴¹ *PMD*, p. 65. This view is contrary to his earlier remarks, quoted above, about Eysenck on neurosis (*PDP*, pp. 48-9), as Reznek seems to acknowledge (*PMD*, p. 59, n. 1).

⁴² *Ibid.* This judgment on homosexuality is, of course, the opposite of Reznek's earlier view (*PDP*, p. 169).

⁴³ *DMM*, p. 188. In non-paradoxical terms, as I understand Reznek's thesis, it is that the whole human population is deluded, but delusion does not entail mental illness. So the average person is deluded, but not psychotic. *Cf.* note 54 below.

⁴⁴ Thus I assume Reznek has now abandoned his first two books' claims that whole species can be diseased, as in his examples of vitamin F, praying mantises, and gall-midges.

⁴⁵ This objection was made to my analysis by Nordenfelt (1987), p. 30 and Kingma (2010), among others. For a reply, see Hausman (2011) and Boorse (2014).

⁴⁶ And so, on the mental side, there is no reason, contrary to Reznek, why a phobia or reactive depression, including grief upon bereavement, cannot be a mental injury, hence pathological. The very name "post-traumatic stress disorder" implies the existence of a mental injury.

⁴⁷ This would not, however, fit what Reznek says about psychotics. Assume Barbara loves her husband and is sure that he cannot wish her dead. She may then "fiercely" (*DMM*, p. 128) maintain her belief despite all the evidence in books, which Reznek considers normal. Then her ability to eliminate her belief by a "direct act of will" (*PDP*, p. 92) is no greater than, on Reznek's view, psychotics' is. (If the psychotics could do so, then, given the involuntariness clause, he could not call them mentally ill, as he does.)

⁴⁸ Note that, as always, it would not help Reznek's normal-process doctrine (that "reacting normally to abnormal circumstances" (*PMD*, p. 114) is not a disorder) to say that the first normality is medical normality. That would make the doctrine a triviality: that being in unusual circumstances is not a disorder, which is entailed simply by the fact that a disorder must be an internal state.

⁴⁹ For a summary of philosophical discussion of this distinction, see <https://plato.stanford.edu/entries/multiple-realizability/> On its application to mental disorder, see Wakefield (2017).

⁵⁰ *PMD*, p. 209. Reznek says the "biological" nature of mental disorders was, in particular, a firm belief of Robert Spitzer, who led the DSM-III revision (*PMD*, pp. 103, 104).

⁵¹ In my view, if Reznek retains the harm clause, the nearest defensible relative of his position is Wakefield's (1992), (1999a,b) – perhaps supplemented by the thesis (implicit in Engelhardt (1984) and explicit in Hesslow (1993)) that medicine should abandon the normal-pathological distinction altogether.

⁵² Still fallacious, at least in some form, are what he calls the essentialist (*PDP*, p. 29), continuum (p. 32), naturalistic (p. 37), superman (pp. 33-4), dualist (p. 73), organic (p. 79), and treatment (p. 51) fallacies. Nonfallacious are the mal-function fallacy (p. 84) and, for me, the objective fallacy (p. 89).

⁵³ A change to my analysis of pathology as statistically subnormal part-functional ability, relative to species, sex and age, would block Reznek's saint-sinner argument (p. 212) that disease status cannot determine responsibility. But his next paragraph has a different argument that suffices. His answer to the case of "prejudice disorder" (pp. 207-8) purports to use his involuntariness clause, but is unconvincing. Conversely, a biological-dysfunction analysis would make it far easier to answer Kendell, p. 204, Wootton, pp. 298-99, and other critics of psychiatry or of the insanity defense, and to explain why psychiatric "ultimate-issue" testimony is inappropriate (pp. 220-1).

⁵⁴ As I understand it, Reznek's view is that fundamentalist religion acquired in childhood is no mental illness, but such religion acquired in adulthood is (*DMM*, p. 108), and likewise "secular epidemics of madness" (p. 112), such as the belief in satanic ritual abuse, alien abduction, recovered memories of sex abuse, and 9/11 conspiracies. I am unclear why stable permanent delusions, like belief in the paranormal, do not come out pathological by his reasoning. At any rate, on my analysis, the vast majority of mankind cannot be mentally ill in exactly the same way, which fits Reznek's claims.

Incidentally, by "fundamentalism," Reznek means any religious belief that takes scriptures literally (*DMM*, pp. 93, 194). By this definition, it is fundamentalist to believe that a certain man, Jesus, was the son of God and was resurrected after his crucifixion (p. 94). But then it seems a fundamentalist Christian is simply a Christian. "Metaphorical" Christianity (*DMM*, p. 179) is no Christianity at all, and similarly for Judaism and Islam.

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