Realism, relativism, constructivism, and natural kinds

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Abstract
In the light of the circumstance that there are considerable cultural differences in conceptions of illness, one might ask whether there is such a thing as a single universally valid conception of illness. The strong realist thinks so. Or more specifically, he assumes that there is a single correct explanatory theory of what we call illness, and he is a diagnostic realist in the sense that he thinks that certain diagnostic categories are naturally given (preferably the ones adopted by modern scientific medicine). This view has been challenged by constructivists (or idealists). On the strong anti-realist view, conceptions of illness can only be valid in a local sense, e.g. relative to a certain paradigm or conceptual scheme. A central part of the anti-realist complex is conceptual constructivism, i.e. the idea that our actual diagnostic categories are human inventions. However, strong anti-realists also adopt category nominalism (the idea that there are no diagnostic natural kinds), as well as the global constructivist idea that reality (qua object of knowledge), and not just our categories, is socially constructed. The latter claim is based on the assumption that there is no sharp distinction between reality (qua object of knowledge) and our conceptualizations of it, and this is what distinguishes the anti-realist from the weak realist (who thinks that this distinction can be upheld).

It is argued that even though the diagnostic realist may be right about certain diagnostic categories, it seems likely that most of our present diagnostic categories are social constructions that do not coincide with any natural kinds. This suggests that diagnostic nominalism is a rather plausible view. The possible “relativist” implications of the nominalist view are then discussed at length. First, it is argued that if relativism is formulated in terms of inconsistent beliefs, it doesn’t get any support from nominalism. However, nominalism might be taken to suggest that there may well be some beliefs that are true for people in one culture but that are neither true nor false (or even unintelligible) for people in another culture. Second, it is argued that our objects of knowledge might not be as sharply distinguished from our conceptualizations of these objects as the realist thinks, and thus that global constructivism may well be more plausible than weak realism. The reason for this is that it might make less sense than we think to say that e.g. two different diagnostic categories are alternative conceptualizations of the same underlying condition. Finally, it is claimed that even if there are no diagnostic natural kinds, this does not in any way imply that all categorizations are “equally good”. There are other kinds of kinds besides natural kinds that can ensure good or useful descriptions, e.g. “discrete kinds” and “practical kinds”. This strongly suggests that the rejection of the natural kind view does not imply that our existing diagnostic categories are arbitrary, and thus that nominalism does not have any “dangerous” relativist implications after all.

Key words: conceptual constructivism, cultural diversity, diagnostic realism, natural kinds, nominalism, realism, relativism, social constructivism.
**Introduction**

As medical anthropology and the history of medicine have shown us, there are many different conceptions of illness, conceptions that vary a lot between e.g. cultures and historical periods. Or more specifically, there are enormous differences with regard to (a) what conditions count as illnesses, i.e. where the line is drawn between the pathological and the non-pathological; (b) what diagnostic categories there are, i.e. how the area of the pathological is cut up and categorized; (c) how the different illnesses are explained; and (d) how the different illnesses identified are believed to be best treated or prevented.

In the light of this circumstance, it is worth asking whether there is such a thing as a single universally valid conception of illness, e.g. whether the modern scientific conception is correct whereas all the alternative conceptions are more or less wrong. Or does the existence of cultural diversity, instead, suggest that there are several different conceptions that are “equally correct”? This general question can be divided into several, more specific, questions, namely: (a) Is there a single correct way to draw the line between the pathological and the non-pathological? (b) Given a certain demarcation of the pathological: Is there a single universally valid set of diagnostic categories, i.e. a single correct way to cut up and categorize the pathological? (c) Given a certain demarcation of the pathological (and a certain set of diagnostic categories?): Is there a single universally valid explanatory theory of illness? Is there, in each particular case, a unique correct explanation of why certain people happen to suffer from certain illnesses?

(a) Assume that A and B, two physicians (medicine men, or the like) that belong to different cultures, disagree on whether a certain person P is ill or not, and that they both apply the criteria of their own culture correctly. P is deceitful, impulsive, aggressive, reckless, and irresponsible, and A thinks that he suffers from a mental disorder (Antisocial Personality Disorder), whereas B thinks he is simply a troublesome and disturbing character. In cases like this, is one of the parties right while the other is wrong, i.e. do questions of the form “Is P ill or not?” have determinate answers? Or can they both be right? Does it matter if P belongs to A’s or B’s culture?
(b) Assume that A (an American physician) and B (a Chinese physician) both believe that a certain Chinese woman is ill, but that they disagree on how she should be diagnosed. The patient suffers from sleep, appetite, energy, and sexual disturbances, and from psychomotor agitation, and A thinks that she suffers from Major Depressive Disorder whereas B thinks she suffers from neurasthenia. Moreover, the fact that only the so-called vegetative symptoms of clinical depression are present makes A believe that the affective symptoms (irritability and depression) have been suppressed. Or suppose that 93 percent of the patients that are diagnosed with neurasthenia by B are diagnosed as suffering from various forms of clinical depression by A. (Kleinman & Kleinman 1985, p. 436) Again, we can assume that they both apply the criteria of their own culture correctly. In cases like this, is at least one of the parties wrong, i.e. is there such a thing as a unique best diagnosis? Or can they both be right? And does it matter that the person diagnosed belongs to B’s culture, e.g. would A be more likely to be right if the person classified were from A’s culture?

One may also ask if it makes any difference whether or not depression exists as a diagnostic category in B’s culture. This question is closely related to the question whether it is in order to apply our diagnostic categories to cultures which themselves lack these concepts, e.g. to claim that one percent of the population in ancient Rome were suffering from schizophrenia, or that Socrates suffered from Asperger’s syndrome?

(c) Assume that A, B, and C disagree on how a certain condition (which we would categorize as an anxiety disorder) should be explained. A explains the condition in neurological terms, B is psychological terms, whereas C thinks that the patient has been invaded by a demon or evil spirit. In cases like this, are at least two of the parties wrong, or can two or more of the parties be right? Does it matter to which culture the patient belongs, e.g. would C be more likely to be right if the person classified were from C’s culture?

The strong realist position
A rather common way to respond to these questions is the strong realist position, according to which there is a single correct conception of illness and disease, namely the conception embodied by modern scientific Western medicine. There might not be a
single universally valid demarcation of the pathological, however, since there is little or no reason to believe that the concept of disease (illness, disorder, or malady) is a scientific concept that can be defined in purely factual terms (cf. e.g. Bolton 2000, Brülde 2003, DSM-IV, Culver and Gert 1982, Murphy and Woolfolk 2000a, 2000b, Nordenfelt 1995, Wakefield 1992, and many others). But given such a demarcation, the strong realist claims that there is a single correct classification, a single correct explanatory theory, and so on.

Realists do not just claim that there is a mind-independent reality (a world that exists independently of our beliefs and categories), but also that this world is (in itself) structured in a certain way, that it has a determinate inherent structure that is independent of our concepts and categories. This is normally taken to mean that

(R1) there are objective, mind-independent, “brute” facts. The world comes structured into facts, i.e. the facts are there, no matter how we represent or describe the world. This metaphysical claim is typically accompanied by the epistemological idea that we can gain knowledge of these facts, i.e. that we can somehow discover the inherent structure of reality.

Another central realist claim is (R2) the idea that theories or beliefs about the world are true to the extent that their content corresponds to the world as it really is. Whether our beliefs about the world are true or false depends on the objective facts. This suggests that every empirically meaningful statement or belief about the world is either true or false (the bivalence principle), and that every empirically meaningful question has a determinate answer.

(R1) and (R2) jointly imply (R3) that there is a single correct view of the world, i.e. that there is a single correct description of reality at each point in time, that there is a single correct explanation of every event, and so on. The part of reality that is conceptualized as pathological is no exception in this regard, e.g. in every particular case of illness, there is always a unique best explanation of the condition, regardless of how the state is conceptualized, and given a certain diagnostic system, there is always a correct
explanation of why a certain person happens to suffer from a certain illness.\footnote{Moreover, certain types of explanations can never be right, regardless of how the pathological is categorized, e.g. people never fall ill because of the evil eye or because they have been invaded by demons or evil spirits.} This implies that if there is genuine (and not merely apparent) disagreement on how a certain condition should be explained, only one of the parties can be right. It also suggests that if there is such a thing as radical disagreement in this area (disagreements that are not due to any cognitive shortcoming, and where it is impossible to determine who is right), the realist must concede that there are certain truths that are “epistemically inaccessible”, i.e. that we cannot gain knowledge about.

(R3) – the idea that there is a single correct picture of reality – may be interpreted in two different ways, however, depending on whether or not it is based on the assumption that there is a single correct conceptual system, e.g. a single correct classification of diseases.

The strong realist assumes that “essentialism” is true, i.e. that there are a substantial number of natural kinds “out there”. On the essentialist view of natural kinds, all members of natural kinds are members by virtue of sharing the same essence, where the relevant essences are normally conceived of as underlying microscopic properties rather than as observable properties. Moreover, the underlying essential properties are conceived of as the cause of perceived surface similarities. The essence plays a causal role in the members’ observable characteristics that is relatively straightforward, direct, and necessary. That is, the underlying deep-level structure or essence is associated with a number of observable properties that they explain. These properties are clustered, they occur together. This explains why “[t]he phenomenon of clustering leads to a confidence in the existence of a deep level essence, even if that essence has not yet been discovered” (Khushf 2001, p. 135).

If this ”essentialist” view is true, the world itself does not just come structured into facts, but also into categories, i.e. the world individuates itself to a considerable extent, independently of how we conceive of it. The part of the world that we categorize as illnesses (that fall under the concept of illness, disease, disorder, or malady) is no
exception is this regard, e.g. there are discrete illnesses that share the same underlying essential properties. Let us call this view diagnostic realism.

To the extent that essentialism is true (that the world is structured into natural kinds), we can conclude that there is a single correct way of classifying things, a correct conceptualization of the world. This implies that if there is genuine (and not merely apparent) disagreement on how a certain particular illness should be categorized, e.g. whether a certain condition should be classified as depression or neurasthenia, only one of the parties can be right. It also suggests that if there is such a thing as radical disagreement with regard to classification, the diagnostic realist must concede that there may well be certain true diagnostic categories that are epistemically inaccessible to us.

However, essentialism (diagnostic realism) is typically accompanied by the epistemological idea that it is possible to gain knowledge about this true taxonomy, i.e. to ”carve nature at its joints”, presumably by statistical and other scientific methods. It is, I believe, also commonly believed by diagnostic realists that the present scientific classification of different disorders is, to a considerable extent, correct. (An essentialist need not assume that all our present diagnostic categories are natural kinds, however, e.g. it may well be the case that some “folk illnesses” – diseases that are both culture- and time-bound – lack underlying essences.)

Now, if the idea that there is a single correct conceptual system is combined with (R3), we get a strong version of this claim, since if there is a single true conceptual system, there is (for this reason) also a view or description of the world that is true or correct in a pretty strong sense. On this strong version of realism, there is a single correct description of reality, period, and not just in relation to some given conceptual system or other. The weak realist accepts (R3) but rejects the idea that there is a single true conceptual system. On this view, there is one correct picture for each conceptual system, i.e. given a certain conceptual system, there is always a single correct description of the world, a view that is made true by the world itself. (We will return to this weaker form of realism below.)
It goes without saying that on the strong (essentialist) version of realism, it is (in principle) totally unproblematic to apply a correct diagnostic category to a culture which lacks this category. The claim that the incidence rate of diabetes (in our sense of the word) was the same in ancient Greece as it is in contemporary Sweden is no more problematic than the claim that the air contained as much oxygen, nitrogen and hydrogen (in our senses of these words) in ancient Greece as it does in contemporary Sweden. So, is there any reason to believe that it is (on the realist view) more problematic to apply a diagnostic category that is not correct? Suppose that diagnostic categories like Chronic Fatigue Syndrome and Antisocial Personality Disorder are not part of the correct taxonomy, i.e. that they do not denote any natural kinds. Would this make it more problematic to say that Socrates suffered from Chronic Fatigue Syndrome than that he suffered from diabetes? Not really. The important thing is not whether the category applied is true or not, but whether there is a single mind-independent world the nature of which can be sharply distinguished from our conceptualizations and descriptions of this world. If this distinction can be upheld, it makes perfectly good sense to say that the same single world can be conceptualized in radically different ways, and that this mind-independent world can function as truth-maker relative to different conceptual systems (cf. R2 above). For example, given our concept “burnout syndrome”, it may well be true that certain people who died long before the concept was introduced suffered from the syndrome in question, namely if the (present) criteria of application were actually satisfied at the time. That is, there is really no difference between the strong realist and the weak realist in this regard.

**The strong anti-realist (constructivist) position**

This realist position has been challenged by people from the “anti-realist” (constructivist, or idealist) camp. On the anti-realist view, there is no such thing as a universally valid conception of illness. Instead, conceptions of illness can only be true or valid in a local or limited sense, i.e. relative to a certain culture, paradigm, conceptual scheme, linguistic community, or the like.

In its global form, social constructivism (or idealism) claims that all knowledge and all objects of knowledge are “socially constructed” (cf. e.g. Fleck 1935 and Kuhn 1970). These constructivists reject the idea that the world comes structured into facts, and that
we can gain knowledge of these alleged mind-independent facts. On this view, there is no mind-independent world, at least not a mind-independent reality that we can know anything about (or even form beliefs or theories about). As Hacking (1999) puts it, ”the world does [on this view] not come quietly wrapped up in facts. Facts are the consequences of ways in which we represent the world.” (p. 33) Or alternatively put, there is no sharp distinction between the world itself (qua object of knowledge) and our descriptions of it, which explains the Kuhnian claim that people with different conceptual systems live in ”different worlds”. The reason for this is that the world (qua object of knowledge) is a perceived world. And since all perception is taken to include an element of interpretation or conceptualization – since there is no ”bare unmediated awareness” about the world as it really is (no un-conceptualized “given”, as it were) – this “phenomenal world” (what we observe) is to a large extent determined by the paradigm, language, or culture of the observer. In short, all facts (including scientific facts) are in some sense institutional as opposed to “brute”, and even if there were such brute facts, we would not have access to them, i.e. all the structure we can conceive lies within our representations of the world (cf. also Kant’s epistemology). That is, truth is (in this particular sense) not fully determined by the world as it is, but also by our language, categories, or the like.

A central and rather indispensable part of the anti-realist conception is the idea that our actual categories (including our concept of illness and our diagnostic categories) are socially constructed, i.e. that they are properly regarded as human inventions or fabrications (category constructivism). This is a purely empirical claim that can be divided into the following three theses:

(C1) The negative idea that our actual categories do not denote any natural kinds, that they do not reflect the structure of nature. Or as Hacking puts it, our ”classifications are not determined by how the world is, but are convenient ways in which to represent it” (ibid., p. 33). For example, our present category of mental disorder is not a “natural category” that reflects the structure of the world itself, we have not discovered it through careful observation of the world “as it is”. The same thing holds for diagnostic categories like schizophrenia, diabetes, or Chronic Fatigue Syndrome.
Instead, our categories have been “brought into existence or shaped by social events, forces, history” (ibid., p. 7), e.g. by psychological, social or economic conditions. The stability of these categories (why they are maintained or kept alive) is explained in similar terms. For example, it might be argued that our present category of disorder is (in part) an outcome of “social and political struggles”, or that we need to explain the category in terms of group interests or doctor-patient interactions.  

If we add the uncontroversial idea that the relevant formative factors could well have been different, i.e. that they are contingent, we can also conclude that

our categories are contingent rather than necessary or inevitable. (This is what Hacking (1999) calls *contingentism.*) For example, categories like tuberculosis, syphilis, or diabetes (which might look “natural” or “unavoidable” to some) could well have been different, they are both contingent and (in this sense) arbitrary. And in the special case of science, contingentism claims that “a successful science did not have to develop the way it did” (ibid., p. 32).

In short, to be a social constructivist with regard to category X is to believe that ”X need not have existed, or need not be at all as it is. X, or X as it is at present, is not determined by the nature of things; it is *not inevitable.*” (ibid., p. 6)

However, some category constructivists go further than this, and make the following metaphysical claim (which we can call *category nominalism*): There are no essences or natural kinds. There is no single correct conceptual system, no uniquely correct or natural way to classify things, to cut up the world. For example, it is not just that our present actual category of illness is a contingent human invention, there is no correct or true definition of “illness”, there is no such thing as an objective universally valid distinction between the pathological and the non-pathological that can be discovered e.g. by scientific means (this is not how reality is structured). Of course, there is (on this

Note that (C1) suggests, but does not imply, (C2).

It is worth noting that category nominalism implies category constructivism, but not vice versa: It could be the case that there are natural kinds, but that these kinds are not denoted by our actual categories. Nominalism does receive some support from constructivism, however, since the latter probably is part of the best explanation of the former.
no such thing as a universally valid nosology either. If there is any such thing as an “objective reality of illness” at all, it is an undifferentiated and diffuse reality that can be conceptualized in many different ways.

Category constructivism and category nominalism are far from sufficient to make a strong anti-realist, however. As we have already seen, a strong anti-realist does not just claim that our categories (e.g. our diagnostic categories) are socially constructed, but that our objects of knowledge (e.g. the different illnesses) are constructed as well. As we have already seen, this claim is based on the assumption that there is no sharp distinction between reality (qua object of knowledge) and our conceptualizations of it. There are also other reasons for regarding parts of reality (e.g. social reality) as socially constructed, however, e.g. the fact that certain categories (including a number of diagnostic categories) are interactive concepts in Hacking’s (1999) sense, that the symptoms people get are sometimes (and in part) due to the fact that certain diagnostic categories are available in the culture in which they live. (Think of “burnout syndrome” or “posttraumatic stress disorder”.)

The idea that “the same reality” can be conceptualized in different ways, none of which is correct or true, is sometimes taken to suggest that none of these conceptualizations are better than the others. This has, in turn, been taken to suggest that we should not apply our categories (including our diagnostic categories) to cultures which do not share our conceptual system. For example, we should refrain from statements like “N.N. (who lived in the 1890s) was really burnt out” or “Two percent of the Italian population in the 1940s suffered from burnout syndrome”.

Another reason that has been given for this cautious attitude is the idea that we can only understand other cultures “from within”, i.e. that our understanding of these cultures is impeded if we apply our own categories to what they believe, do, or experience. This line of reasoning can easily be applied to the medical practices of different cultures, since

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4 If a category nominalist would believe that there is an external reality that can be distinguished from our conceptualizations of it, he would be a weak realist.

5 In a constructivist context, we should not take the idea that the same reality can be conceptualized in different ways to mean that there is a single world which constitutes a common object of knowledge. That is, we have to exercise some caution here.
we can hardly understand these practices if we do not enter their conceptual scheme. (This type of reasoning can be further amplified if it is combined with a holistic conception of understanding, according to which nothing can really be understood in isolation from the whole system of which it is a part.) The argument from understanding can only be applied to illness to the extent that illnesses are proper objects of understanding, however, i.e. to the extent that they are meaningful or social phenomena, as opposed to e.g. natural phenomena. It is worth noting that this argument is closely related to the form of cultural relativism which claims that it is somehow immoral to judge the practices of other cultures, e.g. because every culture has a right to be both understood and judged on their own terms (cf. Winch 1958). And the risk of committing this wrongful act, e.g. to conceive of different medical practices as irrational (according to our standards of rationality, that is), is obviously higher if we apply our own diagnostic categories to the people who are treated by these practices.

However, the most extreme reason why we should not apply our own diagnostic categories to cultures that lack these categories is given by the type of linguistic idealist who claims that things do not really exist unless described. Maybe the conditions that we tend to identify as burnout syndromes existed before the concept was invented, but they certainly didn’t exist as burnout syndromes until they were so described. This suggests that it is either false or nonsensical to claim that N.N. (who lived in the 1890s) suffered from this syndrome (as opposed to, say, neurasthenia), or that Socrates suffered from autism.

It is not quite clear what the strong anti-realist here described would say about question (c) above, e.g. the question of whether there is a unique best explanation of particular illnesses. Suppose that A (a Western physician) and B (an African medicine man) disagree on how a certain condition (which A would diagnose as epilepsy) should be explained. A explains the condition in neurological terms, whereas B thinks that the patient has been invaded by a demon or evil spirit. In cases like this, would the strong anti-realist perhaps conclude that both parties are right? Or would he conclude that B is
right if the person classified is from the same African culture? Would he even assume that demons exist in cultures which believe in their existence?6

**Diagnostic nominalism vs. diagnostic realism (essentialism)**

So, which position is more plausible, strong realism or strong anti-realism? To make this question more manageable, I will first focus on whether it is plausible to assume that there are natural kinds in the part of reality that is covered by our concept of illness (malady, disease, or disorder). Is there any reason to believe that “the world of illness” comes structured into objective categories, e.g. that there are discrete illnesses that share the same underlying essences? Is diagnostic realism or category nominalism the more plausible view?

Now, this is a metaphysical question that is rather hard to discuss in any straight-forward way, and I will therefore restrict myself to the question whether there is any reason to believe that our *actual* diagnostic categories are natural kinds or social constructions. This move is based on the assumption that category nominalism receives considerable support from category constructivism, since the latter most probably is part of the best explanation of the former.7

Let us first note that constructivism is clearly a plausible view of our present category of illness (malady, or disorder). Consider the case of mental disorder. Our present category of mental disorder does not correspond to any natural kind, and it has (to a considerable degree) been shaped by evaluative considerations. It also seems rather plausible to assume that nominalism is true in this area. After all, it is highly unlikely that there is any naturally given category that even remotely coincides with our present

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6 Cf. Quine’s (1951) idea that conceptual schemes are tools “for predicting future experience in the light of past experience”, and that physical object are not different from the gods of Homer in this regard. As Quine puts it, “in point of epistemological footing the physical objects and the gods differ only in degree and not in kind. Both sorts of entities enter our conception only as cultural posits. The myth of physical objects is epistemologically superior to most in that it has proved more efficacious than other myths as a device for working a manageable structure into the flux of experience.” (p. 44)

7 Constructivism does not imply nominalism, however, since it could be the case that there are natural kinds, but that these kinds are not denoted by our actual categories. (See note 3 above. Another reason for believing that category constructivism does not give very strong support to category nominalism is the circumstance that we may discover the same natural kinds in many different ways (cf. argument CC1 below).
category of mental disorder, which suggests that there is no such thing as a natural kind which can correctly be labelled “mental disorder”.

So, do any of the different conditions that we categorize as diseases or illnesses have essences, do they denote natural kinds? To find out which view that is more plausible here, diagnostic realism or category constructivism, let us look at some arguments can be given for the different positions.

DR1. The perhaps strongest argument that can be given for the diagnostic realist (DR) position is the fact that due to a series of scientific discoveries, there are now a large number of diagnostic categories that are defined in pathological (morphological) or etiological terms, e.g. in terms of underlying physiological disturbances or “external” causes (like infectious agents). If it can be assumed that the relevant pathological changes or micro organisms are not just natural phenomena but also natural kinds, this seems to imply that the diagnostic categories that are defined in these terms are natural kinds as well. For example, if diabetes mellitus type 1 is morphologically defined as a disturbance in the blood glucose balance caused by a certain kind of deficiency in the beta cells of the pancreas, and if the relevant underlying disturbance is a naturally given category, then this suggests that the diagnostic category “diabetes mellitus type 1” denotes a natural kind too. In a similar way, it can be argued that categories like “malaria”, “tuberculosis”, “cancer”, “syphilis”, and “Down’s syndrome” are all names of objectively existing pathological conditions. In short (so the story goes), it seems that the diagnostic realist is right in all those cases where an underlying pathology has been identified and turned into a defining property.

It is doubtful whether this is a good argument, however. First, it can be questioned whether the relevant underlying pathologies or aetiologies are natural kinds. But even if we (for the sake of the argument) assume that this is the case, it might not follow that the diagnostic categories that are defined in terms of these natural kinds are themselves natural kinds. The reason for this is that there is (typically) more to an illness or disease than the presence of some underlying pathology or aetiology. Consider the case of tuberculosis, which is (by definition) caused by one of several closely related mycobacteria. The disease is not identical with the infectious agent, however, e.g. it is
also required that this entity gives rise to certain typical symptoms. This counterargument has been taken to show that there are no diagnostic natural kinds, not even in the cases where discrete kinds are caused by a single gene. (Zachar 2000) In Zachar’s view, deciding what categories to adopt is not merely a matter of discovering some inherent property that underlies all the other properties of the category. However, it is worth noting that this counterargument is based on the assumption that the relevant defining symptoms are not natural kinds as well (cf. below).

DR2. Many of our present diagnostic categories are not defined in pathological (morphological) or aetiological terms, however, but rather in terms of symptoms. This is due to the fact that science has not (at least not yet) discovered any underlying mechanism that makes any morphological or aetiological definition possible. Almost all the psychiatric categories that can be found in DSM-IV or ICD-10 belong to this “symptomatological” category, and the same thing holds for many so-called “stress-related illnesses”, like e.g. burnout syndrome, Chronic Fatigue Syndrome, or fibromyalgia. Some of these “symptomatologically based” diagnostic categories are probably limited to our particular culture, but it is also possible that some of them denote universal conditions.

Not even the most avid realist would claim that all diagnostic categories of this type denote natural kinds, however. Consider the case of anti-social personality disorder as it is defined in DSM-IV:

There is a pervasive pattern of disregard for and violation of the rights of others occurring since age 15 years, as indicated by three (or more) of the following: (1) failure to conform to social norms with respect to lawful behaviours as indicated by repeatedly performing acts that are grounds for arrest; (2) deceitfulness, as indicated by repeated lying, use of aliases, or conning others for personal profit or

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8 At this point, it is worth noting that microstructure might not be all that matters to determining the extension of chemical categories like water either. (Cf. Needham 2000, 2002.) Needham does not deny that “water” is a natural kind term, however, he merely questions the rather common idea that all essential properties are microscopic properties.

9 In this regard, they are similar to the “folk illnesses” that can be found in different cultures – like susto (in Latin America), windigo (among Canadian Indians), voodoo death, or sinking heart (in Punjab) – or in our own past – like nostalgia or neurasthenia.
pleasure; (3) impulsivity or failure to plan ahead; (4) irritability and aggressiveness, as indicated by repeated physical fights or assaults; (5) reckless disregard for safety of self or others; (6) consistent irresponsibility, as indicated by repeated failure to sustain consistent work behavior or honor financial obligations; (7) lack of remorse, as indicated by being indifferent to or rationalizing having hurt, mistreated, or stolen from another. (DSM-IV, pp. 649-650)

This allows for the possibility that two persons are diagnosed as anti-social on entirely different grounds, e.g. that one person satisfies the first three criteria whereas another person satisfies the last three. In the absence of any common underlying pathology, this suggests that anti-social personality disorder can hardly be regarded as a naturally given category. In fact, it is likely that the different members of this category share a family resemblance, i.e. that they are placed in the category for different reasons.\(^\text{10}\)

However, most diagnostic realists would probably claim that at least some symptomatologically based categories – e.g. schizophrenia or depression – denote natural kinds. The strongest argument for this view is that many of the symptoms that define categories of this kind tend to appear in clusters, and that this can be demonstrated with empirical and statistical methods. As Khushf (2001) points out (see above), “[t]he phenomenon of clustering leads to a confidence in the existence of a deep level essence, even if that essence has not yet been discovered” (p. 135).

The claim that a certain diagnostic category is a natural kind can also get some extra support from the circumstance that the condition appears to be universal, and/or that the percentage of the population that suffer from it is relatively constant over time. Circumstances like these might help establish a condition as a “real disease” (a natural rather than social phenomenon), which (in turn) makes it more plausible to regard it as a natural kind.

\(^{10}\) In this context, it is worth noting that Wittgenstein (1953) introduced the notion of family resemblances as a part of his criticism against essentialism. In the modern debate it is more common to refer to prototype categories than to family concepts (cf. e.g. Lilienfeld & Marino 1995, 1999). Prototype categories do not just lack necessary and sufficient conditions that define membership of the category, they also have fuzzy boundaries.
So, can the mere existence of a cluster provide support for the idea that the name of this cluster (or syndrome) is a natural kind term? Well, this partly depends on to what degree the constituent symptoms appear together, and how well the category is distinguished from other categories. In the case of psychiatric diagnoses, these conditions are (to put it mildly) not always satisfied to a very high degree.11

Moreover, it is important to note that the constituent symptoms (or rather, the categories used to describe these symptoms) are often socially constructed, especially in psychiatry. To see this, consider the different common-sense concepts that are used to characterize anti-social personality disorder: “failure to conform to social norms” is hardly a natural kind, and neither is “deceitfulness”, “impulsivity”, “recklessness”, “irresponsibility”, or “lack of remorse”. The same thing seems to hold for more central symptom descriptions like hallucination.12

CC1. So far, the case for category constructivism (CC) has been rather defensive. The constructivist has merely tried to counter the arguments offered by the diagnostic realist, to show that little or no support can be given for this view. However, there are also a few positive arguments in favour of the constructivist view. The by far most important line of reasoning that has been offered in favour of constructivism is the following one: For many diagnostic categories, we can tell a causal story about how the category in question has originated, a story that makes us believe that it has (to a considerable extent) been formed by different kinds of social “extra-scientific factors”. In the case of the psychiatric categories included in DSM, many entertaining stories of this kind are offered by Kutchins and Kirk (1997). Stories of this kind are also offered about morphologically defined categories, however. The most famous example of this is probably Fleck’s (1935) story about how the category of syphilis originated. Now, suppose that Fleck’s historical account is correct, i.e. that the category of syphilis has (to a considerable extent) been formed by different kinds of “extra-scientific factors”.

11 The “validation method” that has been used to decide what diagnoses that should be included in or excluded from DSM is entertainingly described in Kutchins & Kirk 1997. A more technical account is given in Kirk & Kutchins 1992.
12 As we have already seen, there is a more general problem here, viz. whether the terms in which the relevant diagnoses are defined are natural kinds. That is, the question is not just whether the relevant symptom descriptions include natural kind terms, but also
Does this imply that syphilis is not a natural kind, as Fleck himself thinks? The realist may well dispute this, e.g. by referring to the positivist distinction between contexts of discovery and contexts of justification. Or more specifically, he might argue that natural kinds can be discovered in many different ways, and that it is far from decisive in what way a certain category has been arrived at when it comes to determine whether the category is a natural kind or not. The constructivist counter-move would most probably be to dispute that the context of discovery can be distinguished from the context of justification in the way the realist believes.

CC2. Another way in which a constructivist can try to strengthen her position is to argue that at least certain illnesses are more appropriately regarded as socio-cultural phenomena than as natural phenomena. For example, if it can be demonstrated that certain symptoms or illnesses are “means of communication” or “ways of coping with overwhelming living conditions” (cf. e.g. Johannisson 1994), then it is rather likely that the diagnostic categories that denote these illnesses do not denote any natural kinds. This argument is based on the assumption that it is far more reasonable to be a constructivist or idealist (e.g. to claim that there is no sharp distinction between reality and our descriptions of it) as far as social reality is concerned. Global constructivists like Kuhn or Fleck seem to think that the natural world (qua object of knowledge) is “just as constructed”, however.

To sum up, the diagnostic realist may be right about certain diagnostic categories (e.g. some of the morphologically or aetiologically defined ones), but it seems likely that most of our present diagnostic categories are social constructions that do not coincide with any natural kinds. So, even though no general conclusion might be possible, it seems that the constructivist is a more plausible position than diagnostic realism, and that this gives some support to category nominalism as well.

whether the relevant pathological changes (in the case of morphological diagnoses) come in naturally given categories.
Some further questions

Regardless of whether this conclusion is correct, it is of interest to find out what implications the nominalist view has. If we assume that diagnostic nominalism is correct, this gives rise to at least three further questions, namely:

(i) What, if any, relativist implications follow from the nominalist view? For example, does category nominalism imply that two inconsistent beliefs can both be true (epistemically flawless, or the like)?

(ii) Category nominalism is not compatible with strong realism, but this does not mean that it implies full-fledged global constructivism, since the idea that there is no such thing as the single most valid diagnostic conceptualization is also consistent with weak realism. This gives rise to the question which of these two views that is more plausible, weak realism or global constructivism. This is really a question of whether or not there is an (external) “reality of illness” that can be sharply distinguished from our conceptualizations of this reality. A key issue here is whether it is unproblematic and meaningful to say that e.g. two different diagnostic categories are alternative conceptualizations of the same underlying condition.

(iii) If there are no diagnostic natural kinds, does this in any way imply that all the different conceptualizations of “the world of illness” are equally good (or incommensurable), or can it still be argued that some categorizations are better than others? Is it anything we have a reason to worry about, e.g. does category nominalism suggest that it is arbitrary how “the world” is categorized?

Does conceptual nominalism imply relativism?

According to conceptual nominalism, there is no such thing as a true conceptual system. As we have already seen, this idea does not constitute any fundamental threat to realism as such, since it may well be combined with (R3), in which case we get a weak version of (R3), viz. the idea that given a certain conceptual system, there is always a single correct description of the world, a view that is (moreover) made true by the world itself. For example, given our concept ”burnout syndrome”, it may well be objectively true
that certain people who died long before the concept was introduced suffered from the syndrome in question, viz. if they satisfied the (present) criteria of application.

As we have already seen, what makes this weak realist view realist is that “the world as it is” is sharply distinguished from our conceptualizations and descriptions of it, and that it therefore makes sense to say that the same single world can be conceptualized in radically different ways (and that the same single world can function as truth-maker relative to different conceptual systems; cf. R2 above). If this distinction cannot be upheld, i.e. if the world (qua object of knowledge) is, instead, dependent on our conceptualizations on it, then this form of realism has to be replaced with a Kuhnian type of idealism, according to which people with (radically) different conceptual systems live in ”different worlds”. That is, if the nominalist view is not combined with (R1), but with the view that the world (qua object of knowledge) is partly determined by our conceptualizations of it (and that our experience is determined by our concepts, and so on), then we get global social constructivism (or linguistic idealism).

In short, conceptual nominalism implies that either weak realism or idealism (constructivism with regard to reality rather than just categories) is correct. So, does any of these two views have any relativist implications?

Both views are of course relativist in a trivial sense, since they both suggest that all true statements or beliefs are true in relation to some conceptual system or other. As we have seen, this is something that a realist can accept, at least as long as the world that determines the truth values of our beliefs is mind-independent rather than mind-dependent (i.e. partly determined by our conceptual system).

If we disregard this trivial point, it seems (at least on the face of it) that none of the two views has any interesting relativist implications. The reason for this is that relativism is almost always formulated in terms of inconsistency (cf. e.g. Bergström 1990 and Wright 2001), and that none of the two views seems to imply that two inconsistent beliefs can both be true (epistemically flawless, or the like). Consider the case of idealism (or global social constructivism). Idealists like Kuhn and Fleck clearly recognize that there is objective truth given a certain paradigm. Paradigms partly determine (or constitute) the
world \textit{(qua object of knowledge)}, but within each “world” there is objective truth and falsehood. However, this does not in any way imply that the same belief that is true in relation to one paradigm can be false in relation to another paradigm, or that there are genuine disagreements where both parties are right. The reason for this is that people who have adopted different paradigms cannot really disagree about \emph{the same thing}, e.g. since theories that belong to different paradigms are not really about \emph{the same world}. In short, there are no situations where one person P1 believes that p and where another person P2 believes that not-p, and where both are right (cognitively flawless, or the like). If P1 and P2 belong to the same paradigm, on the one hand, then there is objective truth, and only one of the parties can be right. And if P1 and P2 belong to different paradigms, on the other hand, they cannot really have inconsistent beliefs, since these beliefs are not really about the same thing (since different paradigms are constituted by incommensurable conceptual systems).

To conclude, if the relativist view is formulated in terms of inconsistent beliefs, it cannot follow from the nominalist idea that there are alternative conceptual frameworks, none of which is more true than the others. But is this all that can be said? I suspect (but it is just a suspicion) that it is not. Doesn’t the nominalist idea that it is (somehow) ”arbitrary” how the world is conceptualized have any interesting relativistic implications at all? Does it constitute no threat at all to the realist conception of things?

The answer to these questions may of course be “no”, which would (in that case) probably be due to the idea that (radically) different conceptual systems are incommensurable – e.g. that different diagnostic systems cannot translated into each other, or that it would be impossible to construct a new conceptual system within which different diagnostic systems can be represented or compared – which would (in turn) suggest that genuine disagreements between people with different conceptual systems are impossible. (In which case this alleged incommensurability should perhaps be more closely investigated.)

But suppose that conceptual nominalism actually has interesting relativistic implications. In that case, how should this relativism be formulated? Here are a few (unsatisfactory?) possibilities: (1) The idea that some beliefs that are true for people in
one culture are neither true nor false (they might not even be intelligible) for people in another culture. (This might, by the way, constitute yet another reason why it might be problematic to apply our categories to foreign cultures.) (2) Can it be fruitful to somehow appeal or refer to the so-called methodological relativism here, or is it a “non-starter”? On this view, there is no universally valid best method (e.g. culture-transcendent objective criteria or standards) that we can use to decide which of two competing (inconsistent) theories or interpretations that is most justified.

**Weak realism vs. reality constructivism. The notion of the same underlying reality**

Let us now look at which view is more plausible, weak realism or global constructivism. And how do we decide which view is correct? A possible angle here is to focus on the following difference between the two views: To the weak realist, it is unproblematic and meaningful to say that e.g. depression and neurasthenia are two alternative conceptualizations of the same underlying objective condition. The constructivist rejects this idea, and claims instead that reality cannot be sharply distinguished from our conceptualizations of it in this manner.

Consider the circumstance that 93 percent of the Chinese patients that are diagnosed with neurasthenia by their own physicians are diagnosed as suffering from various forms of clinical depression by American psychiatrists (Kleinman & Kleinman 1985, p. 436). How should we interpret this circumstance, e.g. does it mean that neurasthenia is depression? On Kleinman and Kleinman’s own weak realist view, neurasthenia and depression can be understood as “distinctive cultural construals of the same psychobiological state” (p. 438). That is, they do not just reject the strong realist view (which suggests that depression is underdiagnosed in China), but also the constructivist idea that “the controversy is solely one of opposing cultural construals”. In their own terms, their own view (weak realism) differs from constructivism in that it assumes that “there is some psychobiological reality, some perduring perturbation of human nature, associated with substantial distress that is being labelled differently in the two societies.

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13 At least, this is what they say. But at the same time, they suggest that the Chinese patients suppress some of the symptoms of depression, namely the affective ones (see above). But isn’t this really to suggest that our category is better, maybe even correct? This sounds like strong realism to me.
The labels are not creating out of nothing the difficult social reality patients face, though they are organizing that exigent reality in different (sometimes greatly different) ways” (p. 438).

What makes this view realist is the assumption that there is some underlying (“unconstructed” and mind-independent) “psychobiological reality” that is the same in both cases, and what makes this realist view weak is the assumption that this reality can be categorized in different ways, none of which can be regarded as the single correct way.

Another example of this type of realist reasoning can be found in Nordenfelt & Nyström 1986, when they discuss how the meaning of the term “diabetes” has changed from ancient Greece until today. Nordenfelt and Nyström point out that the syndrome described by Aretaeus more than two thousand years ago did not merely have the same name, but that it also reminds us so much of what we think of as symptoms of diabetes that we tend to regard it as a description of the same disease. However, we have to consider that diabetes is no longer defined in terms of symptoms, but morphologically, which strongly suggests that a modern physician and Aretaeus are not really talking about the same thing. So, how do the two concepts differ from each other? On Nordenfelt and Nyström’s view, the difference between the modern concept and the classical concept is that the former is more exclusive (narrow) whereas the latter is more inclusive. To suggest that the extensions of the two concepts can be compared in this simple manner is exactly the type of realist view that the constructivist would reject.14

Now, it can be argued that this weak realist view is not as plausible as it may seem. For example, what kind of state do Kleinman and Kleinman have in mind when they suggest that neurasthenia and depression can be understood as different “construals” of the same “psychobiological state”? There are several possibilities here. It is most likely that they have a common set of symptoms in mind, but the alleged neutral state to which they refer may also be a common underlying (preferably neurophysiological) pathology.

14 In fact, what Nordenfelt and Nyström have to say may also be interpreted as a type of strong realism, given the additional assumption that we have (due to scientific progress) now discovered the true nature of diabetes, and that Aretaeus (due to his ignorance of the true underlying pathology) included too much in his category.
In any case, it is highly unlikely that the “perduring perturbation of human nature” (or “exigent reality”) to which they refer is some kind of unnameable Ding-an-sich (if this were the case, we could never know whether neurasthenia and depression actually refer to the same state). Instead, the underlying reality they have in mind is most probably something that can be perceived, named, and described, i.e. a possible object of knowledge. It is doubtful whether this reality can be perceived and described in a culturally neutral way, however. In particular, it seems unlikely that there is any culturally neutral way in which the constituent symptoms can be described, partly because the categories used to describe these symptoms are often more or less vague common-sense concepts (like energy and sexual disturbances, agitation, or irritability). Moreover, it might be argued that these concepts must be understood in relation to the whole system of common-sense concepts of which they are parts, which (in turn) suggests that concepts that are embedded in different cultural contexts are (in some sense) incommensurable.\footnote{Many philosophers (e.g. Winch (1958), Davidson (1974), and others) have pointed out that understanding has a holistic character. For example, we cannot really understand other people’s beliefs or actions (e.g. the beliefs and practices of a foreign culture) in isolation, since their meaning is determined by their place of the system of which they are a part. According to Winch, this circumstance strongly suggests that we cannot meaningfully say that a certain belief or practice in a certain culture is of the same type as a certain belief or practice in another culture.}

For example, Johannisson (200x) points out that descriptions of today’s Chronic Fatigue Syndrome is strikingly similar to the descriptions given of Neurasthenia a hundred years ago, and that this makes many people believe that Chronic Fatigue Syndrome is simply a new name for an old condition (i.e. that the two categories are extensionally equivalent, that the two labels denote the same condition). In her own view, this is not a plausible assumption, however. The two “illnesses” are embedded in different historical contexts, and the idea that one can find “absolute similarities” between the two conditions is (for this reason) wrong. On this view, diseases are (at least in some sense) historical phenomena, and can (as such) never be reduced to historically neutral phenomena, no matter how striking the similarities might seem. If this is correct, it also makes little sense to suggest that modern concept of diabetes is more inclusive than the classical concept of diabetes.
It is worth noting that this issue has rather straight-forward implications for the question whether it is in order to apply our categories to foreign cultures or remote historical periods. The reason for this is that we can only meaningfully apply our category X to a condition that is categorized as Y in another culture if we can compare the two categories extensionally, i.e. if X and Y are conceptualizations of the same underlying reality. This means that if the weak realist is right, it is in principle unproblematic to apply our diagnostic categories to foreign cultures, e.g. it makes perfectly good sense to say that the incidence rate of diabetes was higher in ancient Greece than it is in contemporary Sweden. If the constructivist is right, on the other hand, i.e. if there is no such thing as a common “underlying” reality that can be sharply distinguished from our conceptualizations of this alleged reality, then it is not really in order to apply our diagnostic categories other cultures. For example, to apply our concept “burnout syndrome” to people who existed long before the concept was first introduced has to be regarded as a distortion or misrepresentation of “reality”.

**Does conceptual nominalism imply that all conceptualizations are “equally good”?**

Let us now turn to our final question, namely whether diagnostic nominalism implies that it is arbitrary how “the world of illness” is categorized, or whether it still can be argued that some categorizations are better than others.

If there are no natural kinds, there is no such thing as *the* correct diagnostic system. This does not imply that our all diagnostic categories are arbitrary, however. An interesting example of non-natural kinds that are neither artificial nor arbitrary is what Haslam (2002) calls “discrete kinds”. Like natural kinds, these kinds are discrete categories that reflect objectively discoverable discontinuities in nature, but in contrast with natural kinds, discrete kinds are not grounded in defining or causally determining essential properties. According to Haslam, melancholia is a good example of a discrete kind in psychiatry.17

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16 But not necessarily the same *condition*.

17 On Haslam’s (2002) view, discrete kinds are not the only non-natural kinds that denote naturally occurring discontinuities, there are also what he calls “fuzzy kinds”. In contrast with discrete kinds, fuzzy kinds do not have sharp boundaries, however. Instead, the latent discontinuity is graded, and there are intermediate cases, where it is hard to determine whether something is category member or non-member. Haslam offers
Another example of a non-natural kind that is not arbitrary (but for a different reason) is the “practical kind” (cf. Haslam 2002). A “practical kind” is arbitrary in the sense that the conceptual boundary does not reflect any objective underlying discontinuities, i.e. it is clearly an artificial type of category. Instead of carving underlying discontinuities, practical kinds draw “objectively arbitrary” lines on continua. Moreover, the placement of these conceptual boundaries is (in the case of practical kinds) always determined by practical considerations: a practical kind is defined as a category because of its practical usefulness. This means that even though practical kinds are arbitrary “in principle”, they are not arbitrary “in practice”. According to Haslam, depression is a good example of a practical kind in psychiatry.18

To conclude, there are other kinds of kinds than natural kinds that can ensure good or useful descriptions, e.g. there may well be discrete categories that reflect objectively discoverable discontinuities in nature, but which are not based on essences, and “practical kinds” whose boundaries are drawn on pragmatic grounds are quite common. This strongly suggests the rejection of the natural kind view does not imply that our existing diagnostic categories are arbitrary, and thus that it does not have any “dangerous” relativist implications after all.

References

Borderline Personality as an example of a fuzzy kind in psychiatry. Zachar (2002) questions the idea that fuzzy and discrete kinds are objective categories that reflect mind-independent discontinuities, however. Instead, he suggests that the distinguishing feature of these categories is that mathematical models can be used to identify the boundaries.18 It is worth noting that this notion of practical kind is more inclusive than the one adopted by Zachar (2000). According to Zachar, all kinds are practical in the sense that internal structure alone does not determine category membership, i.e. external or relational criteria are involved as well. Moreover, all practical kinds have at least some practical utility (reflect human interests, e.g. they enable more or less useful predictions), but they are not necessarily defined as a category because of its practical utility.


