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Looping effects and the expanding concept of mental disorder

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Summary

The concept of 'looping effects' helps to clarify how psychiatric conditions are moving targets. As professional understandings of mental disorders change, people shape their behaviour, experience and self-understanding in response. By this means, evolving concepts of mental disorder, carried by language, make up new kinds of person. The superordinate concept of 'mental disorder' is also a moving target. This article develops an account of the concept's semantic alterations, proposing that it has progressively expanded horizontally to encompass qualitatively new forms of distress and disability, and also vertically to encompass quantitatively less severe phenomena. Changes in the concept of mental disorder in successive editions of the Diagnostic and Statistical Manual of Mental Disorders are examined to show that its meaning has not so much looped as spread in an ever-expanding vortex. Possible looping effects of this conceptual creep are discussed.

Key words

Classification • DSM • Diagnostic inflation • Looping effects • Mental disorder

Introduction

In a series of influential papers, the philosopher Ian Hacking demonstrated that the concepts of the social and behavioural sciences refuse to sit still. Established concepts evolve, new concepts emerge and the set of ideas and labels with which people can name and understand their experience constantly shifts. Human kinds – Hacking's [1] term for "kinds of people, their behaviour, their condition, kinds of action, kinds of temperament or tendency, kinds of emotion, and kinds of experience" (pp. 351-2) – are moving targets.

If Hacking had stopped at the claim that human kind concepts are mobile, his work would not go beyond historical truism. More important by far is his argument that the restlessness of these concepts has real and reciprocal social effects. Changing concepts of human kinds do not simply slide frictionlessly over an unchanging social reality, capturing it more or less well at different historical moments, but they alter that reality through what Hacking [2] calls 'looping effects'. People come to recognise themselves and others in new concepts and labels, and this recognition brings new kinds of person into being through a process that Hacking calls "dynamic nominalism".

The claim of dynamic nominalism is not that there was a kind of person who came increasingly to be recognised by bureaucrats or by students of human nature, but rather that a kind of person came into being at the same time as the kind itself was being invented. In some cases, that is, our classifications and our classes conspire to emerge hand in hand, each egging the other on [3].

Hacking's historical investigations of human kinds clarify how this process of kind-making unfolds. His work has the merit of bypassing abstract arguments over realism versus nominalism and essentialism *versus* constructionism [4], focusing our attention instead on the processes through which changing ideas change people, and how changed people necessitate further changes in ideas. In the realm of psychopathology, Hacking's studies show how the discourse of the mental health professions bears on the experience, behaviour and self-understanding of the people these professions address. Because psychiatry's human kind concepts are carried by language, looping effects of the sort analysed by Hacking reveal a fundamental way in which language influences how psychopathology is framed, theorised, experienced and treated.

The moving targets that Hacking's published analyses address include such 'human kinds' as child abuse and refugees, but he is best known for his examinations of specific psychiatric conditions such as multiple personality and autism. In this article, I pursue a larger target: the concept of mental disorder itself. Just as ideas about particular disorders have evolved and created new clinical realities in the process, the superordinate concept of disorder itself has undergone substantial changes. The same evolutionary developments that may be observed in individual species of psychiatric misery might also be seen in the

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broader family of psychiatric conditions, considered as a set. The concept of mental disorder itself might change, and its changes might trigger looping effects.

My analysis is in many ways preliminary, and it has more to say about changes in the concept of disorder than about the changes in people or society that these conceptual shifts have brought about. It is also confined to a particular framework of understanding what 'mental disorder' means, albeit the highly influential framework embodied by the Diagnostic and Statistical Manuals (DSM) of the American Psychiatric Association [5-10]. Nevertheless, my analysis of what I call 'conceptual creep' in the DSM's evolving definition of mental disorder has the virtue of resting on a systematic analysis and a new way of thinking about the forms of conceptual change, to which I now turn.

Conceptual change

Change in the meaning of concepts could be understood and assessed in several ways. In the present analysis, I focus on alteration in the semantic 'extension' of concepts; that is, the range of phenomena to which they apply. For my purposes, the fine detail of how the concept of mental disorder has been theorised and formulated is less important than the extent of the concept's reach. My primary concern is whether the concept has expanded or contracted its semantic range over time; whether it encompasses a larger or smaller variety of human experience and identifies a greater or lesser proportion of humanity as disordered.

In examining the shifting extension of the concept of mental disorder, I distinguish two ways in which that extension might change. One form of conceptual change, which I dub 'vertical', occurs when a concept's meaning becomes either more or less stringently defined. Such a change could occur though a modification in the threshold for identifying a phenomenon or through the tightening or relaxation of criteria for defining it. For example, if the working definition of 'tall' at one time was 'greater than 6 feet in height' and that definition was then revised to 'greater than 6 feet and two inches', the new definition is more stringent and the extension of the concept of tall (i.e., the range of people it encompasses) becomes smaller. Similarly, if the diagnosis of a condition requires 3 criteria from a set of 5 to be met, and a diagnostic revision requires that only 2 of the 5 criteria be met, then the new, less stringent definition will have an enlarged extension. In both examples, the extension of the concept has changed through a quantitative alteration in the stringency of the criteria (or criterion) for identifying cases.

The second form of conceptual change can be called 'horizontal'. Such change involves contraction or expansion of a concept's extension through an alteration in the qualitative range of phenomena it encompasses rather than a quantitative alteration of its stringency. For example, if a concept expands to incorporate an entirely new kind of phenomenon – as when the concept of 'refugee' was extended to include people displaced by natural disaster or climate change rather than being restricted to people displaced by conflict – then it has undergone horizontal expansion. Similarly, if a diagnostic concept at one time encompassed a subtype that later came to be considered as a separate condition, and was therefore excised from the diagnosis, then the concept has undergone horizontal contraction. In both examples, the extension of a concept has changed through a revised understanding of the kinds of phenomena that fall within its semantic purview rather than through a revision of the stringency with which potential instances of the concept are identified.

These two forms of conceptual change – horizontal and vertical – represent distinct ways in which the concept of mental disorder might shift over time. The concept's extension might expand, either by an amoeba-like incorporation of new kinds of behaviour and experience into the concept, or by a loosening of the criteria for diagnosing people who demonstrate kinds of behaviour and experience that are already recognized as falling within the psychopathological domain. In essence, horizontal expansion shifts the concept of disorder outwards into new territory, whereas vertical expansion shifts it downwards into milder or subtler variants of already-recognized conditions. Likewise, the concept of mental disorder may contract rather than expand, either by shrinking the range of phenomena it identifies as pathological or by tightening the criteria for diagnosing pathology.

In the following pages, I explore shifts in the extension of 'mental disorder' as it has been defined across successive editions of the DSM, starting with 1952's first edition [5]. My focus is not on formal definitions of disorder – which are often lacking in any event – but on the ostensive definitions offered by the listing of conditions and criteria for identifying them in each manual. In principle, every edition of the DSM [5-10] collects together a diverse set of forms of experience and behaviour that qualify as mental disorders, and implicitly identifies a certain fraction of humanity that qualifies as disordered. The extension of the concept of mental disorder, as I am considering it here, represents the size of that conglomeration.

Although my analysis is somewhat sketchy at this point, and space limitations prevent a more comprehensive investigation, its strong conclusion is that over the last 60 years the concept of mental disorder has undergone significant expansion, both horizontal and vertical. An increasingly wide assortment of psychological phenomena fall within the psychiatric domain and diagnostic criteria

have tended to loosen over time, so that clinical presentations that would once have failed to reach the threshold of diagnosis now do so. The proliferation of diagnostic categories in successive editions of the DSM – from 106 in DSM-I to over 300 in DSM-IV-TR – is well known, but the expansion of the implied meaning of mental disorder, which is not entailed by that proliferation, has not received the same attention. In the pages that follow, I explore first horizontal and then vertical expansion with that goal in mind.

Horizontal expansion

DSM-I [5] contained eight groupings of mental disorders. "Acute brain disorders" and "chronic brain disorders" each included an assortment of conditions associated with "impairment of brain tissue function", classified according to presumed cause, such as infection, intoxication, or physical trauma. "Mental deficiency" was subdivided by severity and hereditary versus idiopathic cause. "Psychotic disorders" incorporated psychotic depression, manic depression, involutional psychosis, and a variety of schizophrenic and paranoid reactions. "Psychophysiologic autonomic and visceral disorders" encompassed a variety of somatic reactions that were thought to be psychologically influenced. "Psychoneurotic disorders" included a variety of anxious, phobic, conversion, depressive, and obsessive compulsive phenomena. "Personality disorders" contained not only a few personality disturbances in the modern sense but also sexual deviation, addiction, and several "special symptom reactions" such as enuresis and somnambulism. Finally, "Transient situational personality disorders" captured a variety of stress and adjustment reactions.

DSM-II [6] introduced numerous modifications to diagnostic and classificatory practice, many of them primarily matters of terminology, high-level organization of the classification, and levels of differentiation. For example, the DSM-I language of "reactions" was largely abandoned, nine major disorder groupings were recognized rather than the previous eight, and the number of available diagnoses increased by 72%, due often to the splitting of DSM-1 conditions (e.g., DSM-I's singular "sexual deviation" became eight DSM-II deviations, famously including homosexuality). None of these developments directly implies a horizontal expansion of mental disorder, but there is evidence of such a broadening elsewhere.

First, a new "Special symptoms" grouping was introduced, which substantially expanded the "special symptom reactions" subgrouping within the DSM-I's "Personality disorders". This expansion brought tics, disorders of sleep (beyond DSM-I's somnambulism), and feeding disturbance (intended to include anorexia nervosa) into the realm of mental disorder for the first time. Second, whereas DSM-I had largely omitted disorders of childhood and adolescence, with the exception of vaguely described situational "adjustment reactions" of infancy, childhood, and adolescence, DSM-II retained these situational reactions but also inaugurated a new grouping of "Behavioral disorders of childhood and adolescence", which covered an assortment of hyperkinetic, withdrawing, anxious, fugitive, aggressive, and delinquent tendencies. Third, DSM-II recognised substance abuse as distinct from addiction for the first time, including separate disorders for episodic and habitual excessive drinking without implied addiction, in contrast to DSM-I's exclusive reference to addiction. These three changes are not exhaustive, but they exemplify a trend for DSM-II to expand the concept of mental disorder into new symptom domains (e.g., sleep, eating, drug use) and new populations (i.e., children), thereby pathologising new phenomena.

DSM-III [7] is well known as a revolution in psychiatric classification. Many of its transformations took place at the level of broad structure, notably the placement of personality disorders on a separate diagnostic axis from other conditions, and the subdivision of many DSM-II groupings. For example, DSM-III carved off substance-related disorders and sexual disorders from DSM-II's broad "Personality disorders and certain other non-psychotic mental disorders" grouping, re-organized its "Special symptoms" grouping into separate eating and sleep disorder categories, and cleaved its "Neuroses" grouping into separate anxiety, mood, and dissociative disorder groupings. Other major changes involved shifts in terminology (e.g., the abandonment of "neurosis"), much greater specification of diagnostic criteria, and a further 46 percent growth in the roster of diagnoses. However, in addition to these changes, DSM-III also pushed back the psychiatric frontier by recognising new kinds of disorder in a clear demonstration of horizontal expansion.

First, DSM-III created new groupings of factitious and impulse-control disorders, none of their conditions corresponding in a straightforward way to those described in previous DSM editions. Second, DSM-III added entirely new conditions to several groupings. Disorders involving cognitive difficulties were included in its grouping of "Disorders first diagnosed in childhood and adolescence", whereas the corresponding DSM-II grouping was restricted to problems of anxiety, aggression, and restlessness. DSM-III's sexual disorders grouping added "gender identity disorder" (a condition of gender, not sexuality) and sexual dysfunctions, and its anxiety disorders grouping incorporated social fears and extreme shyness ("social phobia"), which had not been represented in DSM-II's array of neuroses.

Further horizontal expansions of the concept of mental disorder could be documented in later editions of the DSM

(e.g., DSM-IV [9], DSM-5 [10]). For example, DSM-5 [10] expands the concept of mental disorder by including for the first time some so-called behavioural addictions, where the dependency is on an activity such as gambling rather than an ingested substance. For our purposes, however, the key conclusion is that successive editions of DSM from 1952 to 1980 progressively increased the range of phenomena that qualified as examples of mental disorder. Many people whose clinical presentation would not have warranted a DSM-1 diagnosis – alcohol abusers, insomniacs, bulimics, Touretters, gender dysphorics, anorgasmic women, dyslexic children and shy adults – would have received a DSM-III diagnosis by virtue of this expansion.

Vertical expansion

Horizontal expansion is only half of the story when it comes to the semantic stretching of the concept of *mental disorder*. Qualitatively new forms of mental disorder have been added to the concept by accretion in successive editions of the DSM, but some already recognised conditions have also come to be defined in less stringent, more inclusive ways. As a result, clinical phenomena of reduced severity have come to be defined as disordered, and the extension of mental disorder has increased.

Examples of vertical expansion are easy to find, although documenting it in the first two editions of the DSM is difficult because of their lack of operational diagnostic criteria. The issue of vertical expansion was particularly salient in the recent debate around DSM-5, and served as the basis of Allen Frances' campaign to "save normality" from the manual [11]. Frances' fundamental claim was that DSM-5 contracted normality by vertically expanding abnormality, chiefly by proposing relatively mild conditions that were likely to explode the prevalence of mental disorder. I will discuss a few cases of vertical expansion below.

My first example concerns depression. Horowitz and Wakefield [12] make a strong case that recent ways of diagnosing the condition systematically misdiagnose normal affective responses as forms of psychopathology. For example, symptom-based diagnosis of depression conflates contextually justified sadness with melancholia, the more restrictive traditional understanding of depression as 'sadness without cause', resulting in a recent explosion of diagnosed depression. (Similar observations in relation to anxiety conditions have been made by Horwitz and Wakefield [13] and Lane [14].) A specific demonstration of this expansion is the removal of the bereavement exclusion in DSM-5, whereby people who had lost a loved one in the previous two months are no longer excluded from a possible depression diagnosis [15].

A second example can be found in the progressive expansion of post-traumatic stress disorder (PTSD), a condition that was added horizontally to the concept of mental disorder by DSM-III. The vertical expansion here is derived from a progressive loosening of the definition of what counts as a traumatic event, the all-important "Criterion A" in PTSD's diagnostic rules. In DSM-III [7] a traumatic event had to "evoke significant symptoms of distress in almost everyone" and be "outside the range of usual human experience". DSM-III-R [8] relaxed Criterion A to include experiences that threatened kin or friends rather than the person affected, as well as indirect experiences such as witnessing serious injury or death to others, or learning after the fact about an event that had affected them personally. DSM-IV [9] opened the criterion further to indirect exposures to traumas, relaxed the assumption that traumas must involve threats of serious injury or death by listing "developmentally inappropriate sexual experiences" as potential traumas, and increased the emphasis on the subjective experience of the trauma rather than its objective properties. Scholars have noted how this progressive reduction in the stringency of Criterion A as resulted in "conceptual bracket creep" [16] – a downward expansion of the severity required to define an event as traumatic – and worrisome increases in the range and prevalence of people who would meet diagnostic criteria for PTSD [17-19].

Finally, formal recognition of spectrum conditions underpins a diverse assortment of cases of vertical expansion. It has become increasingly apparent that psychopathology tends to fall on a set of continua, with no objectively determinable boundary between those who merit a psychiatric diagnosis and those who do not [20]. Consequently the placement of diagnostic boundaries is to a considerable degree arbitrary, and clinical phenomena fall on a spectrum of severity. Over the course of several decades, many new conditions that represent milder variants of recognized disorders have been identified, each representing a vertical expansion of the concept of mental disorder. In the domain of eating disorders, binge eating disorder has been identified as a less severe variant of bulimia nervosa. In the domain of mood disorders, bipolar II disorder and cyclothymia were identified as milder variants of prototypical bipolar disorder. DSM-5 introduced somatic symptom disorder, a relatively benign condition with clear family resemblances to existing somatoform conditions, and also mild neurocognitive disorder, a sort of 'dementia lite'. In a particularly interesting example, Asperger's syndrome was recognised as a high-functioning variant of autism – itself one of DSM-III's horizontal expansions – but was subsequently re-incorporated into a vertically expanded definition of autism in DSM-5. All of these examples demonstrate a consistent tendency for more recent DSMs to define disorder down, thereby defining its prevalence up.

Looping effects?

I have argued that the concept of mental disorder – defined ostensively as the collection of conditions recognised in the American Psychiatric Association's diagnostic manuals – has changed significantly from 1952 to the present. Just as Hacking showed that individual disorders are moving targets, my analysis demonstrates that disorder itself, considered as a collective noun, is also a moving target, at least where its semantic extension is concerned. The movement of this target appears to be systematic, directed outward and downward. Mental disorder has continually expanded its territory to incorporate phenomena that might previously have been understood as moral failings (e.g., substance abuse, out of control eating), personal weaknesses (e.g., sexual dysfunctions), medical problems (e.g., sleep disturbances), foibles (e.g., shyness), or ordinary vicissitudes of childhood (e.g., attention deficits). The concept has also expanded into less severe variants of recognised conditions, extending diagnosis to people whose problems would not have been considered disordered in earlier times. Like a vortex, the concept of mental disorder has dynamically broadened and deepened. Its history has been centrifugal.

Critics of the expanding concepts of mental disorder ushered in by successive DSMs have identified several dire consequences of this expansion. Diagnostic inflation, they argue, leads to over-medication, exaggerated estimates of the population prevalence of disorders, and the deflection of scarce resources away from more severe conditions. From a looping effects perspective, however, the key issue is not so much the implications of conceptual expansion for treatment as it is the implications for disordered people's self-understanding and for the understanding of disorder in society at large [21]. In short, the question becomes whether inflationary changes in the professional understanding of mental disorder affect the concepts of self and disorder of people who receive psychiatric diagnoses. There is surprisingly little work on this important question but several answers are plausible. I will sketch three of these, which I dub the normalisation, disease and moral typecasting accounts.

By the normalisation account, the expanding concept of mental disorder leads affected persons to perceive themselves, and to be perceived by others, as less deviant than they would have been viewed at an earlier time. As a wider expanse of human experience and behaviour falls within psychiatry's territory, and more and more people qualify for diagnoses, having a mental disorder becomes normalised. No longer understood as rare and invariably debilitating, mental disorder loses some of its stigma. People who receive a diagnosis now see their diagnosis less as a sign of shameful difference and more as an everyday affliction, and are consequently more open to talking about their experiences and seeking treatment. The culture at large increasingly views mental disorder as common and ordinary. The greater visibility and public tolerance of mental disorder potentially drives further relaxation of the concept's boundaries, so that future diagnostic systems identify even more phenomena and people as disordered. The looping effect is, in essence, a virtuous circle of expanding concern and acceptance.

A second account of the looping effects of diagnostic inflation is less rosy. People diagnosed with mental disorders commonly understand their conditions as biogenetically caused diseases, an understanding that is becoming increasingly dominant with the rise of biological psychiatry [22]. For example, a meta-analysis by Schomerus and colleagues [23] demonstrated that between 1990 and 2006 the proportion of the public ascribing schizophrenia and depression to genetic and brain disease factors rose significantly, as did the proportion endorsing biomedical treatment options. There is growing evidence that people who hold more biogenetic explanations of mental disorders often hold more stigmatizing views of affected persons [24], and that seeing mental illness as "a disease like any other" has decidedly mixed blessings [25]. In addition, affected persons who hold biogenetic explanations of their own conditions tend to be more pessimistic about recovery and less confident of their capacity to exert control over their difficulties [26]. By this account, expansion of the concept of mental disorder might reduce the number and variety of people who feel hopeful and efficacious in the face of their personal difficulties, although these perceptions are sure to be influenced by a variety of additional factors. The looping effect of psychiatry's inflating concept of mental disorder would therefore be an enlarged and demoralised population of sufferers.

A third but related account of the looping effects of the expanding concept of mental disorder suggests that this expansion might swell the ranks of people who see themselves as victims of harm. According to research on moral typecasting [27], people tend to be perceived either as moral patients, who are viewed in terms of their capacity to suffer and as being acted upon in moral or immoral ways, or as moral agents, who are capable of acting morally or immorally. Where harm occurs, people are therefore typecast either as victims who suffer harm but lack responsibility and the capacity to act intentionally, or as perpetrators who are blameworthy, but lack the capacity to suffer. If people experiencing mental disorders are understood as harmed and suffering, moral typecasting implies they will see themselves, and will be seen by others, as lacking agency. The spreading concept of mental disorder would therefore have the looping effect of expanding the sense of passivity and victimhood in the popula-

tion. On this view, as more and more people qualify for psychiatric diagnoses, they will increasingly understand themselves as patients rather than agents.

Conclusions

This discussion of possible looping effects of the expanding concept of mental disorder remains undeveloped. However, changes in how the psychiatric profession conceptualises disorder will surely affect how the growing numbers of people who fall within this capacious concept see themselves. Their self-perceptions will, in turn, surely have wider social effects, as Hacking's analysis suggests. Whether these effects are predominantly desirable or undesirable is debatable, but as my discussion of the evolution of DSM shows, the conceptual inflation that sets the loop in motion is beyond dispute.

Conflict of interests
None.

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