Chapter 4: History and Philosophy of psychiatric Classification.

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4.1 Introduction
The findings of the last chapter will come as no surprise to readers who have followed the controversies surrounding the publication of the DSM 5. Though previous editions have all attracted their share of criticism, the vehemence of arguments from both sides reached unprecedented levels (cf. Lieberman 2013, Frances 2013). Whether this simply reflects an increase in importance and scope of the DSM or points to fundamental problems with the DSM-project, will be examined in this chapter.

In Chapter 3 we saw that DSM classification played a peripheral and mostly post-hoc role in practice. Whilst most participants emphasized the scientific and communicative value of the DSM, the expected role of scientific evidence and findings connected to and organized around DSM diagnoses in actual practice all but failed to materialize. Instead, scientific evidence and etiological theories appeared to be applied in a piecemeal, pragmatic fashion, with psychiatrists organizing their knowledge not only at the level of holistic diagnosis, but also at lower-level partial analyses and phenomena. Multiple theory-based categorizations were used besides DSM in developing a diagnosis. DSM diagnosis was valued primarily as a communication tool supplying a succinct reduction of
the clinical diagnosis, but this reduction was seen as so strong as to severely limit clinical utility, meaning the DSM project, having not yet supplied the hoped for etiological theories, also seems to be failing to fulfil its secondary purpose as a heuristic tool for organizing scientific knowledge. Thirty years after the historic reconfiguration of the DSM classification towards a descriptive, polythetic nosology, with the explicit aim of enabling research to produce both etiological and inductive knowledge related to the categories, and two decades after the breakthrough of evidence-based medicine, this finding warrants further examination. Should we add to the woes of the DSM a troubled relationship with clinical practice? How have the DSMs, and their predecessors, set out to bridge the gap between scientific research and clinical practice? How successful were they in doing so? And which ideas on classification, science, disorder and practice were inherent to these efforts? To answer these questions, we shall go back to the beginnings of psychiatry as a profession and examine the development of classification throughout its existence. The historical overview offers us context and a sociocultural backdrop to the forthcoming philosophical discussion. From the point of view of social studies of science, such histories are also a necessary empirical part of weighing scientific developments (Hess 1997), a position reiterated by Kendler (2009) and Berrios (1999). Examining the historical development of psychiatric classification is also another expression of the main philosophy of this thesis: to perform ‘philosophical field work’, and to, where possible, employ an empirical approach to the philosophical questions. In this case, where we are interested in the philosophical foundations of psychiatric classification, we want to start with examining the historical development of these classifications.

4.2 History of Classification in Psychiatry

“To contemporary psychiatrists the history of nosology represents a version of the idea of progress… To more skeptically minded historians, however, the only constant is the process of change itself. The search for a definitive nosology, therefore, may simply be an expression of the perennial human yearning for omniscience—an attribute eagerly sought by many but never yet found.” (Grob, 1991)

Historical analysis is prey to the same questions of realism and constructionism that pertain to any analytical undertaking. Wallace has provided an extensive overview of the problems and pitfalls involved in presenting history (Wallace 2008). To put it briefly, one may veer too closely either to uncritical insider ‘Whig’ analysis, or to the opposite outsider ‘critical’ approach, both extremes prone to
insufficient reflection on one’s own perspective. Attention to empirical historical research, awareness of philosophies and theories of historical interpretation, and of the fact that historical facts do not simply present themselves but require interpretation and contextualization, are all important considerations when reviewing the history of psychiatry. The historical overview is presented as five transitions, in which significant changes to the nosological systems occurred, focusing on the factors involved in these transitions. For more comprehensive analysis, there is a wealth of literature to be recommended, including Grob (1991), Wilson (1993), Kendler (2009), Decker (2013) and Berrios (1996, 1999, 2012).

Also it should be noted that some historically valuable nosologies are readily available on the world wide web, such as Cullen’s *Synopsis Nosologiae Methodicae* (https://archive.org/details/SynopsisNosologiaeMethodicae) and Pinel’s *Nosographie philosophique ou méthode de l’analyse appliquée à la médecine* (http://gallica.bnf.fr/ark:/12148/bpt6k85083b).

The philosophical interest in the history of psychiatric taxonomy is in the place of science in its development, its relationship with clinical practice, and in the views of science, disorder, and diagnosis inherent in the classifications. Berrios (1999, 2012) and Kendler (2016) have provided us with helpful conceptual tools with which to analyze such developments. Berrios refers to the developing metalanguage of classificatory theory, the set of conceptual tools to allow examination of the first-order language, in this case taxonomy. Firstly, there is the distinction between the classificatory system and its domain, where there is a two-way interaction between the definitions of units of analysis and their domain. Secondly, the metalanguage is expressed as a series of dichotomies: ‘categorical versus dimensional’; ‘monothetic versus polythetic’; ‘natural versus artificial’, ‘top-to-bottom versus bottom-up’, ‘structured versus listing’, ‘hierarchical versus non-hierarchical’, ‘exhaustive versus partial’, and ‘idiographic versus nomothetic’. We will expand on these concepts as they become relevant to the analysis. Kendler (1990, 2016) makes a distinction between empirical and nonempirical factors influencing the development of psychiatric taxonomies. “Empirical factors”, he writes in 2016, “lead scientists to prefer theories (or, for us, diagnostic systems) with scientific successes as demonstrated by experimental or observational studies. Non-empirical factors that lead scientific communities to prefer one theory over another include social, cultural or political forces.” This distinction is an analogue to Berrios’ natural vs. artificial distinction, itself an ambiguous dichotomy with stronger and weaker versions, the former assuming the existence of natural

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9 These are just selected works as authors such as Grob and Berrios are recognized authorities in the area of the history of psychiatry. See also Braslow (2000).
kinds, and where ‘artificial’ points to ‘man-made’ influences as opposed to essential, natural effects, from the reality ‘out there’. Without taking a position on the naturalism debate here we can use these distinctions to track the influence of scientific versus cultural/political/social forces on the transitions. Helpfully, a number of historical studies have focused specifically on elucidating such factors.

4.2.1. Taxonomic transitions in psychiatric classification since the 18th Century

I have chosen to begin this overview of psychiatric classification in the 18th century because this was the period in which the first formally recognized medical nosologies were published and attained a degree of dispersal that resulted in a measure of scientific and professional authority. This sets distinguishes these classifications from previous ‘folk’ taxonomies, simply due to their connection with the developing profession of medicine.

By most accounts, psychiatry as a profession developed during the late 18th and early 19th centuries, after a prolonged period of transition from medieval religious understandings and care for the insane to Modern Enlightenment ideas and ideals, leading to care for the insane increasingly falling under the domain of the medical profession, embodied by the alienists and asylum doctors of this period. Obviously, the scale of psychiatry by our current standards was small. In 1815, Bethlem, one of the then seven public asylums in England, counted 122 patients (Shorter 1997). The private ‘Mad Houses’ probably cared for a greater number of patients. According to a national census in 1826, less than 5000 persons were residing in asylums, of whom roughly two-thirds in private institutions, compared to a total national population at the time of approximately 10 million. On mainland Europe, care for the insane was primarily in public hands. Famously, Louis XIV of France founded the Bicêtre and the Salpêtrière in Paris 1656. On the eve of the Revolution, the Hospice de la Salpêtrière was the world’s largest hospital, with a capacity of 10,000 patients and 300 criminals. However, the percentage of residents suffering from mental disorders was small. In 1788 the Salpêtrière counted 245 ‘insane’ residents (including those suffering from epilepsy and ‘mental retardation’).

As the young field developed, the first references to insanity in medical nosology appeared. According to Berrios (2012), the most influential of these was William Cullen’s Synopsis Nosologiae Medicae (1769). Cullen’s nosology had its roots in Linnaean taxonomy whereby specific surface features were selected as essential, determining categorization (Kendler 2009, Berrios 2012). A highly regarded professor of medicine at Edinburgh University and tutor to Benjamin Rush (the later ‘father of American psychiatry’), Cullen distinguished 4 kinds of neurosis
(neurosis at that time denoting an affliction of the nerves): coma, adynamia, spasm and vesania. These vesaniae comprise one of the first examples of the presence of insanity in a formal medical taxonomy. They comprised amentia, melancholia, mania and oneirodynia (disorders of sleep). Like most of his contemporaries, Cullen held a unitary concept of insanity, being caused by hereditary, somatic, and environmental factors, the precise combination of which determined its expression in individual cases. Cullen’s view of causation was that of over- or understimulation of the nervous system. Of note from our current perspective is the fact that academics of this period considered environmental causal impetus as fully continuous with bodily transmission of the impulse. In other words, with respect to the mind-body relationship, they were causally monistic. Cullen’s nosology was translated into French by Pinel and achieved widespread recognition. However, rival nosologies multiplied throughout the 19th Century.

Medical science (and therefore professional legitimacy) in the late 18th and 19th centuries was focused on the promise of pathological anatomy, which was flourishing as religious constraints on the examination of the body were gradually relaxed. As lesions and causative agents were found for all other fields of medicine, it is unsurprising that the same hope held out for psychiatry. Developing taxonomies based on surface features was seen as a necessary stepping stone towards elucidating the full pathophysiological characterization of insanity, though pathological-anatomical studies thereof were in their infancy. Academics and clinicians alike were therefore well aware of the provisional status of the nosologies of the time, as may be apparent from this quote from 1843 (quoted by Grob, 1991) by Amariah Brigham, one of the founding members of the Association of Medical Superintendents of American Institutions for the Insane, which eventually became the American Psychiatric Association:

“No system of classification appears to be of much practical utility; all categories based on symptoms must be defective, and perhaps none can be devised in which all cases are arranged.” (Brigham, 1843.)

Meanwhile, the development of a nosology was one measure of professional success (Berrios 1999). The Linnean approach favored by Cullen was applied, but taxonomists differed in their selection of the essential surface features on which their categories were based (Kendler 2009). Kendler characterizes this as the ‘essentialist top-down approach’, leading to a ‘profusion of proposed psychiatric nosologies’ from leading figures such as Pinel, Griesinger, Kahlbaum, and Wernicke (ibid.). For practice, this nosological Tower of Babel did not prove much of a hindrance. Given the fact that etiology was unclear and to all intents and purposes the body to
psychiatric science was mostly shrouded in mystery, the alienists and academic psychiatrists of the 19th century focused on describing the specific, individual details of cases, their context, and possible environmental and hereditary factors as a means towards determining the course for treatment. This approach would later be characterized by Jaspers, after Windelband, as idiographic. Grob notes (1991) that this should not lead us to conclude that alienists were uninterested in nosology: far from it, they conducted vigorous debates on the matter. However, they were also realistic enough to recognize that science had not progressed sufficiently to offer the sought-after pathophysiological grounding of classification. On this account therefore, classifications in the 18th and 19th century seem to possess little practical, therapeutic relevance to clinical practice in the asylums. Many alienists were naturalistic in the sense that they did assume that mental disorder had a somatic foundation, but the evidence for the latter was lacking, and hence, nosologies were chiefly related to surface features, though etiological speculations did find their way into some.

First transition: Kraepelin’s empiricism
The loose relationship between nosology and clinical practice was reduced with the advent of Kraepelin’s empirical methods in the latter decades of the century which focused on course and prognosis. Kraepelin’s influence on our current classification is broadly recognized, so much so, that according to Berrios and Hauser (1988, cf. Jablensky 2007) psychiatry is still ‘living in a Kraepelinian world’. Kraepelin, a student of Wundt, set out his fundamental scientific and research philosophy in his 1886 inaugural lecture at the University of Dorpat (now Tartu, Estonia), and followed these themes with great diligence throughout his career (quoted here in full from Jablensky 2007):

a) ‘Psychiatry needs a profound and deep union with general medicine.’ It is ‘above all the medical, somatic side of our science’ that provides the ‘point of departure for psychiatric research’.
b) The clinical study of mental disorders should proceed though ‘the empirical determination of individual forms’ of illness according to their cause, course and outcome by applying ‘impartial observation and tireless pursuit of individual psychiatric cases’, as opposed to ‘medicospeculative theory which strives to be more than it really is’.
c) The existing nomenclature subsumes ‘all those small variations and intermediate forms ... under excessively large and therefore meaningless and blurred categories’.
d) ‘As long as it is impossible to relate a simple and unequivocal patho-
anatomic observation to an equally simple and unequivocal psychopathological observation', scientific psychiatry will not have reached the goal it should be capable of reaching’.
e) Among psychiatry’s auxiliary sciences, the ‘strictly empirical research methods’ of experimental psychology ‘hold out the most promise’ of ‘validity and scientific utility’.

Kraepelin’s commitment to longitudinal, empirical study is in evidence here, coupled with the conviction that mental disorders are disease entities, to be discovered through the pathological-anatomical method, physiology, and biology. The empirical study of ‘cause, course, and outcome’ was an auxiliary to this process of discovering the essential somatic ontological reality of disorder. The belief that the body was where the essence of mental disorder lay was the dominant ontological conviction of this period, unsurprising given the nature of the medical problems encountered in the asylums in this period. These patients suffered from serious mental disturbances associated with clear physical impairments and disease. In fact, the assumption of the bodily essence of mental disorder was continuous with previous 18th and 19th century thinking. This will be expanded upon in chapter 9.

Kraepelin followed a then at least century-old tradition of putting empirical, descriptive clinical observation central in the nosological effort (nosography). His move away from a unitary view of insanity towards specific disease entities was in keeping with contemporary medical developments in other disciplines. He was the first, however, to systematically apply a longitudinal descriptive approach to individual illness, using his now famous Zählkarten, with which he attempted to group the phenomena using a kind of pattern recognition process. This emic bottom-up approach to nosology stood in contrast to the ‘top-down’ essentialism of contemporaries, and was greeted with enthusiasm (Kendler 2016). This is the first of our historical transitions. It does seem reasonable however, to doubt whether Kraepelin could escape any ‘top-down’ theoretical preconceptions (Weber and Engstrom 1997). His influential distinction between the two main categories of schizophrenic and affective psychoses was not a simple product of the empirical facts, but ‘gradually dawned on him’ through prolonged observation of patients (Decker 2007). Late in his career he himself admitted this distinction may be false, and the persistence of the debate on this matter illustrates the complexity of, and the perhaps intractable problems related to, deciding how to draw taxonomic lines ‘bottom-up’ from empirical data.

Kendler (2016) identifies six nonempirical factors influencing the transition from taxonomies based on surface features wedded to etiological research, towards
Kraepelin’s course-based taxonomy. First, there was the increasingly apparent (especially in contrast to successes elsewhere in medicine) failure of the pathoanatomical model to come up with (empirically supported) etiological theories and treatments for insanity. Second, the asylums were becoming increasingly unpopular in public opinion, due to overcrowding, poor circumstances, and concentrations of medical conditions with poor prognosis. The proliferation of different taxonomies and the lack of consensus on a nosology was seen as one part of the general failure of psychiatry to conform to general medical scientific standards. Third, Kraepelin carried great personal authority and prestige, amplified by the dominant scientific authority of his native Germany. His nosology was viewed as scientifically promising and more in line with the methods of disease description associated with the recent advances in pathology, endocrinology and medical microbiology. With the rise of academic psychiatry in the second half of the 19th century, classification became a feature in establishing and maintaining professional jurisdiction over the domain of insanity (Engstrom 2003). Arguably, the center of scientific authority at the time lay primarily in Germany where a struggle was playing out between the asylum physicians, known as alienists, and the psychiatrists of the first academic clinics, the ‘Kliniker’, represented by Griesinger. This struggle for intellectual authority over the profession was also a competition over scientific and treatment methods, the alienists committed to both cure and care, fashioning the asylums on the principle of an idealized and patriarchal community with the asylum director as the *pater familias*, and the academic clinics focusing on cure, based on empirical methods. The success of Griesinger in moving the power base of the profession to the academic clinics entailed a victory for the empirical nosological approach connected to cure, thereby offering an alternative legitimacy to the profession. Such legitimacy was sought after by United States psychiatry, which was viewed as scientifically backward. Fourth, taking course as taxonomic rule was conceptually appealing as it mirrored the process of discovery of general paresis of the insane, and hence, brought psychiatry closer to a brain-based science. Fifth, the ability to predict course had pragmatic benefits to institutions in handling the flow of patients in the already overcrowded asylums. Finally, Kraepelin had influential allies in the United States, including Adolf Meyer, who argued strongly for Kraepelin’s nosology.

In contrast, empirical factors had little bearing on Kraepelin’s success, writes Kendler: efforts to validate his taxonomic constructs met with mixed results, and those studies that supported them had little effect on the reception thereof. Kendler concludes that “nonempirical factors were the major reason for the widespread adoption of Kraepelin’s views in the United States at the dawn of the twentieth century.”
In Berrios’ terms, the transition comprises a move from a theoretically driven ‘top-down’ approach to nosology (essential features defined from idiosyncratic theory) to a ‘bottom-up’, empirical, approach. The contemporary rise of in popularity of empiricism, related more to the promise of the natural sciences rather than any results in the care of the insane, amplified the scientific appeal of such a move.

Second transition: a single national classification
In part due to the untimely death of his main academic competitor Wilhelm Griesinger, Kraepelin’s nosologies became the most academically influential in the Europe of the late 19th and early 20th centuries, even in the face of criticism from Jaspers (Ghaemi 2009). This was the state of affairs in America at the turn of the 20th century. Working together with the National Committee for Mental Hygiene, the AMPA published the first standardized national psychiatric nosology, the Statistical Manual for the Use of Institutions for the Insane, in 1918 (https://archive.org/details/statisticalmanu00assog0og). The nosology comprised 22 groups and became the standard for the interwar years, though it too was not free from controversy, most notably from Adolph Meyer, who criticized the effort to subsume all the problems of administration, psychiatry and sociology under “one confused effort of a one-word diagnosis marking the individual.” (Grob 1991). The first Statistical Manual was grounded in Kraepelin’s approach, and consisted primarily of psychotic conditions (Kawa & Giordano 2012). Nine subsequent editions were published. Though the Manual devoted more attention to clinical usefulness than did previous systems, it was still primarily an administrative classification. This move to one single standard national classification is our second transition.

In 1921, the AMPA changed its name to the American Psychiatric Association, the APA. It subsequently collaborated with the New York Academy of Medicine to develop a nationally acceptable psychiatric classification that would be incorporated within the first edition of the American Medical Association’s Standard Classified Nomenclature of Disease. This system was designed primarily for diagnosing inpatients with severe psychiatric and neurological disorders. The rise in influence of psychodynamic theory would already become apparent in the latter Statistical Manuals (in which, amongst others, the concepts of hysteria and neurosis were introduced), but the breakthrough for psychoanalysis came throughout and after the Second World War.

The 19th century saw the development and rise in influence of statistical methodology in both scientific and social spheres. Besides being a useful tool for the management of asylums and other public services, the actuarial method was
seen as having the potential to inform political decisions of a broad scale, even to the point where statistics might surpass moral reasoning and political debate in indicating the correct decision for society. To this end, in America, as far back as 1840, a census was taken of the asylums. The profession itself was not slow to take up the statistical methods. The American psychiatrists of this time were committed to the collection and analysis of such data, data which they believed could help predict recovery rates, aid in the disease etiology project, serve the ends of policy advocacy, and enhance the legitimacy of both their specialty and their hospitals (Grob 1991). In practice however, most of the categories used by early 19th-century psychiatrists in their statistical endeavors pertained to demographic characteristics of patients as well as admission and discharge rates. The burgeoning faith in statistical methods ran concurrently with the Mental Hygiene movement, which developed both in Europe and America in the late 19th and early 20th century, and promoted public efforts outside of the asylum aimed at prevention, early intervention, and general promotion of mental health. The choice to focus on prevention was an understandable reaction to the failure to develop successful therapies throughout the 19th century and the overcrowding in the asylums: if one could not cure insanity, the logical course of action was to prevent it. As a basis for prevention, especially on a national scale, an agreed-upon nosology was required.

Grob notes that the impetus in the early 20th century to create a single, official, psychiatric nosology came from outside the profession. In his account, the rising influence of statistics as a methodological instrument for the public hygiene movement was crucial, manifest in 1880 with the tenth federal census. This census was accompanied by a substantial volume on dependency by Frederick Wines, secretary of the Illinois Board of State Commissioners of Public Charities, and a figure of national influence. He viewed dependency as a significant evil within society and saw the census as an indispensable tool for combating and alleviating it. In his contribution he identified the fact that psychiatric classifications were based on etiological theories (primarily physical), symptomatology and/or the consequences and course. After consulting with a number of alienists, he compiled a classification containing seven forms of insanity: mania, melancholia, monomania, paresis (general paralysis of the insane), dementia, dipsomania, and epilepsy. The scope of the 1910 census increased, with a further emphasis on the relationship between insanity and social factors. The value of demographic data for public officials, both within the asylums and without, dealing with insanity, was increasingly recognized, and the actuarial method increasingly embedded in social and political practices. This reminds us that any classification, whilst aiming to faithfully describe reality, is also a goal-directed enterprise, and that a
classification may be used for multiple purposes. For the goals of policy setting and asylum management, it was the demographic variables which held most predictive value at the time. For the psychiatric profession, it was the promise of a widening of its domain beyond the confines of the asylum, and a new professional legitimacy, which prompted the American Medico-Psychological Association, slightly belatedly, to respond to the request of the Bureau of the Census to form a Committee on Nomenclature of Diseases. In 1917 they reported back that the state of classification in psychiatry at the time was chaotic, "reflecting unfavorably on our Association", and the decision was swiftly made to work towards an official nomenclature.

This points to a predominance of nonempirical factors in this transition, in this case convergence of a national public interest in a singular taxonomy on the one hand, and the professional interest in legitimacy and public recognition on the other. In Berrios’ terms (1999), we might view the popularity, both within the scientific community and in the public sphere, of statistics (and their entailed empiricism) as a ‘fashion’, providing a strong, if not necessarily decisive, influence on these developments. Interestingly, in this example fashion traverses the science-society divide. The relationship between classification and practice meanwhile remained as loose as it had been in the 19th century, as treatments remained eclectic, and the categories of the Statistical Manuals were quite general, aimed as they were at collecting institutional (epidemiological) data.

*Third transition: DSM-I*

In the interwar years, the institutional geography had changed (Wilson 1993). The impetus towards prevention in the public sphere rather than curation within the asylum, and the growing influence of psychoanalysis, meant that asylum psychiatry was overtaken by private practitioners and hospital and community psychiatrists applying a psychosocial model derived from, amongst others, the ideas of Freud and Meyer. In the Second World War, psychiatrists, employing psychotherapeutic interventions, proved to be highly effective in treating neuropsychiatric casualties of war, enabling them to return to their units swiftly. This success was reflected in the increasing number of physicians assigned to the neuropsychiatric sections of the Army Medical Corps: 35 in 1941 vs. 2400 by the end of the war. This not only boosted the reputation of the psychodynamic approach, but emphasized the role of environment and adaptation in the genesis of psychopathology.

The influence of the war experience was apparent in the first Diagnostic and Statistical Manual (DSM-I), published in 1952 (http://behavenet.com/apa-
diagnostic-classification-dsm-i ) During the war, the psychiatrists working for the Military and Veterans Administration had already noticed that the nosology they employed was ill-suited to the problems they were encountering in the field, the psychological reactions to the combat situation being obviously of a different nature to the problems of the asylum upon which the Statistical Manuals had been based. Therefore, under the leadership of William Menninger, an Armed Forces Nomenclature was drawn up (and modified by the Veterans Administration), which greatly expanded the categories of neurotic syndromes, based on psychodynamic theory, to better incorporate the outpatient presentations of World War II servicemen and veterans (Wilson 1993). At the same time, the World Health Organization (WHO) published the sixth edition of ICD, which, for the first time, included a section for mental disorders. ICD-6 was heavily influenced by the Veterans Administration classification and included 10 categories for psychoses and psychoneuroses and seven categories for disorders of character, behavior, and intelligence.

The VA classification subsequently became the basis for the first DSM which therefore represented the increasing influence of psychoanalysis. The use of the term “reaction” throughout the DSM was a reflection of the influence of Adolf Meyer’s psychobiological view that mental disorders represented reactions of the personality to psychological, social, and biological factors and was a consequence of the increasing psychosocial approach within psychiatry and its move out of the asylums and into society, written at a time of social activism and optimism with regard to psychiatry’s social potential. The DSM-I divided mental disorders into two groups, the first being caused by impairments in brain function (e.g. intoxications, trauma, circulatory problems, hereditary diseases and neoplasms), the second based on a failure of the individual to adjust to his surroundings, and including psychosis and the psychoneuroses. This division also reflected an institutional divide, with the latter group chiefly being treated in outpatient clinics by psychodynamically oriented psychiatrists, and the former in the public mental hospitals. Psychiatry entered into a phase of increasing prestige and popularity, and the influence of psychodynamic thinking became omnipresent, including a degree of integration into general medical training. In the postwar years, the American Psychiatric Association experienced a surge in membership of primarily psychodynamically oriented psychiatrists, sharing an optimism in the therapeutic potential of psychodynamic therapy and psychosocial interventions for wider society. The material representation of this faith was the formation of the Group for the Advancement of Psychiatry in 1946, a central aim of which was to promote the expansion of the domain of psychiatry beyond the confines of the asylum, and beyond the classic biological disorders towards the functional neuroses, again with
the promise of being able to prevent the occurrence of the more serious mental illnesses. Community psychiatry flourished. The postwar years saw a huge rise in the amount of federal funding available for training and research in psychiatry and clinical psychology. With the National Mental Health Act of 1946, the amount of funds dispersed by the NIMH between 1948 and 1962 for research and training grants rose from $374,000 to $42.6 million and from $1.1 million to $38.6 million, respectively (Starr, 1982). The DSM-I was a visible symbol of the transformation of American Psychiatry in the postwar period.

The theoretical tenets of Freud and Meyer ran counter to the descriptive approach of Kraepelinian nosology, whose support had already diminished with the relative marginalization of the asylums. The new views went further than in previous transitions: where those were epistemic departures, in this instance a different view of mental disorder was being put forward, expressed by Karl Menninger in 'The Vital Balance' (1963): “We propose to think of all forms of mental illness as being essentially the same in quality, and differing quantitatively” (quoted in Wilson 1993). Such a view entails a dimensional rather than categorical approach to taxonomy. The fact that the DSM-I became a wedding of the previous brain-based approach (disorders arising from disturbed brain function) and the psychosocial/psychoanalytical views (disorders resulting from a failure to adapt), perfectly illustrates the broadening scope of psychiatry at the time and the degree to which it was being shaped by psychoanalytical theory. The epistemic approach in DSM-I differs strongly from the Kraepelinian model: rather than specifying symptoms, general descriptions are given of disorders, e.g. 'Inadequate personality' is defined in DSM-I as: “Such individuals are characterized by inadequate response to intellectual, emotional, social, and physical demands. They are neither physically nor mentally grossly deficient on examination, but they do show inadaptability, ineptness, poor judgment, lack of physical and emotional stamina, and social incompatibility.” Neither did DSM-I (or II) devote much attention to explicating a classificatory scheme. According to Mayes and Horwitz (2005), the relative unimportance of specific diagnostic entities was related to the influence of psychodynamic theory, which conceived of the essential level as that of the underlying dynamic conditions or reactions rather than their surface manifestations as symptomatology. Idiographic meaningful understanding of the person therefore was prioritized over nomothetic classification.

This third transition is a greater departure from previous nosologies, encompassing as it does a different ontology of mental disorder and a corresponding epistemology. At first glance there seems to be continuity on a number of factors: nonepistemic influences such as the successes of
psychoanalysis in the War, and the relative lack of importance of the nosology for clinical practice. However, it could be argued that the former influence is in fact an empirical one, namely of effectiveness of treatment. To view the success of psychoanalysis as 'nonempirical', I would argue, is to veer towards presentism, as at the time psychoanalysis was widely regarded within the profession as scientific in and of itself. On second look, the relationship between nosology and practice differed from previous taxonomies: whereas the freestanding nature of nosology previously was due to the lack of etiological findings or data to guide specific treatment choices in asylum psychiatry, in the DSM-I there was a discrepancy between different ontological levels (material, mental, behavioral, interpersonal) which were used in taxonomic definitions, and the essential theoretical and treatment level of the (holistic) mind. This discrepancy itself illustrates the relative unimportance of the taxonomy at the time. Perhaps the most striking element of Berrios’ scheme applicable to the DSM-I is the interaction between taxonomy and domain: psychoanalysis and its concepts expanding the domain of psychiatry to an unprecedented degree in the postwar decades. This transition is the only one to have ostensibly been based on the social perception of therapeutic success. It also incorporates two etiological theories: brain causation and psychodynamics. The latter rather than the former comprised detailed and systematic background theory, hence the DSM-I seems more clearly theory-laden and 'top-down' than its forebears, the Statistical Manuals. However, we should recall the fact that pre-Kraepelinian nosologies were laden with etiological theories leading to preferences for specific essential surface features.

Fourth transition: DSM-III

An important conceptual feature of both the psychodynamic and the psychosocial models in psychiatry was the view that mental health and mental illness were concepts on a continuum rather than separate categories, and that therefore the supposed boundary between the two was fluid. This entailed a substantial broadening of the concept of mental illness, which was reflected in practice in the societal expansion of psychodynamic and psychosocial models outside asylums and hospitals, and into community medicine, education, child-rearing practices, and even business and advertising. For two decades, this expansion was seen to be successful, however, gradually, psychiatry’s growth became its weakness. Investment in expansion beyond the asylums always had been partially funded on the faith that this would lead to a fall in the numbers of the mentally ill. Funding for research grew exponentially and treatment was fully reimbursed. However, as had been the case with the asylums, hope gradually gave way to the realization that the number of citizens receiving treatment within the mental health service was
increasing rather than falling. On the scientific front, there was criticism of the lack of progress in psychosocial research, and biologically oriented psychiatrists advocated a return to the traditional empirical medical model. The first challenge to the blossoming social standing of psychiatry came from the group of critics labeled ‘antipsychiatrists’, including most prominently Thomas Szasz (1961), who famously declared mental disorders to be myths since, given there was no clear etiology determining their illness status, and boundaries being fluid must also be arbitrary, they could not be diseases in the classical medical sense. It should be noted here that Szasz’ critique is in fact based on just such a traditional model of disease, namely that only disorders with known pathophysiological etiology qualify as disease. On the concept of disorder therefore, Szasz and the biological psychiatrists agreed (Fulford 1989). A number of eye-catching studies drew attention to problems of reliability and validity in diagnosis (e.g. Kendell et al. 1971, Rosenhan 1973). Added to these were critiques of conditions and practices in the asylums and state hospitals, stressing the alleged repressive social functions of labeling (Goffman 1961), but also calling attention to legal and human rights issues. The controversies surrounding the status of homosexuality were an additional embarrassment to the scientific legitimacy of psychiatric classification. From this beleaguered position the DSM-III was developed by a Task Force famously chaired by Robert Spitzer.

Wilson draws our attention to the fact that whilst criticisms of the state of psychiatry had been around since the sixties (e.g. Grinker 1965, Akiskal & McKinney 1973), it took until 1976 before Alan Stone, the president of the APA, delivered a strong criticism of psychosocial psychiatry, stating that social psychiatry and social activism, “carrying psychiatrists on a mission to change the world, had brought the profession to the edge of extinction” (Wilson 1993). The impetus for this belated reaction, according to Wilson, came from the constriction of available financial resources. NIMH funding decreased by 5% yearly from 1965 to 1972. Part of the problem was with methodology, and distrust of the data, due to by then well-known problems of reliability and validity. Medical insurers had cut back their coverage of mental health expenses, citing lack of clarity and uniformity of terminology concerning mental diagnoses and treatment modalities (Greenberg 2013). Psychiatry was regarded by the federal government and by private insurers as a “bottomless pit”, and they demanded accountability, under threat of withholding reimbursement. In other words, the confluence of the antipsychiatry critique and the scientific evidence of lack of reliability of diagnosis only became a call to action for the profession once it became a factor in reimbursement issues.
Spitzer had already done psychiatry a service when he had attained a compromise in the controversy over the homosexuality debate in the early seventies, and thereby demonstrated his scientific and political dexterity, so at the time he was a natural choice to chair the Task Force for the DSM-III from 1974 onwards. Spitzer worked at Columbia University in New York, and in the early seventies he collaborated with group of researchers from Washington University in St. Louis to develop fourteen diagnostic groupings, based on descriptive criteria. In 1976 the group published the Research Domain Criteria, a list of 22 diagnostic categories specified by descriptive symptom criteria and temporal demarcations, in so doing, reviving the scientific approach of Kraepelin, earning them the epithet 'Neo-Kraepelinians'. Klerman (1978) laid down their tenets:

1. Psychiatry is a branch of medicine.
2. Psychiatry should utilize modern scientific methodologies and base its practice on scientific knowledge.
3. Psychiatry treats people who are sick and who require treatment.
4. There is a boundary between the normal and the sick.
5. There are discrete mental illnesses. They are not myths, and there are many of them.
6. The focus of psychiatric physicians should be on the biological aspects of illness.
7. There should be an explicit and intentional concern with diagnosis and classification.
8. Diagnostic criteria should be codified, and a legitimate and valued area of research should be to validate them.
9. Statistical techniques should be used to improve reliability and validity. (Klerman, 1978)

We list these tenets in full here not only for their historical importance, but to draw attention to the juxtaposition of statements related to jurisdiction (statements 1, 3, 6), ontology (statements 4, 5 and 6) and epistemology (2, 7, 8, 9). Statements 2, 7, 8 and 9 provide scientific norms. The statements form a self-supporting web, descriptive and empirical in nature, and inimical to the philosophies (epistemic and ontological) of both psychoanalysis and psychosocial psychiatry, with their fluid, dimensional views of mental health and disorder, and their fundamentally relational nature. In the light of the alignments found in the previous chapter between ontologies, professional domain and role, it is striking to find them here again, in one of the main foundational texts of the current DSM project. Spitzer, as reported in Greenberg (2013), was personally critical of the psychoanalytical approach, much preferring the clarity and reliability of description. As chair of the
Task Force for the DSM-III, whose prime objective was to bring the DSM into alignment with the WHO’s International Classification of Diseases, Spitzer extended the model of the Feighner criteria to encompass the entire field of psychiatry. To this end, he requested input from clinicians to submit their classificatory proposals, conforming to the RDC structure, as polythetic descriptive categories. These categories were described as ‘atheoretical’, in the sense of not presupposing an etiological theory.

Decker (2007), Kendler (2009), Greenberg (2013) and Frances (2014) have offered fascinating insights into the process of the construction of the DSM-III, and their accounts converge on the conclusion that contingent social and political, and even personal factors were crucial in its development. Kendler, for example, draws attention to Spitzer’s desire for increased reliability in the classification leading him to be interested in John Wing’s criteria in the Present State Examination, themselves based on Kurt Schneider’s approach to the diagnosis of schizophrenia. History, Kendler notes, might easily have developed in a different way, leading to an altogether different DSM-III (as argued in a thought experiment by Kendler and Parnas 2008).

Both in the DSM-III and the DSM-IIIR, produced not long after the former, the influence of the opinion of expert clinicians upon the composition of the DSM-categories was substantial. Greenberg cites Allen Frances, who was present at meetings of the DSM-IIIR Task Force, describing the process of category definition:

“In the morning, everyone would be screaming ideas,” Frances recalled. “Bob [Spitzer] and Janet [Williams, Spitzer’s wife and a member of the revision committee] would be on a blackboard, trying to put it into some kind of order. Then we’d have lunch, usually a big lunch.” While the others ate, Spitzer and Williams would refine the morning’s arguing into diagnostic criteria. When the group reconvened, Frances said, “we’d be sleepy and much more subdued,” making it that much easier “for the most powerful person in the room to rule.” (Greenberg 2013)

Judging by this description, the Neo-Kraepelinians, though perhaps faithful to the descriptive philosophy of Kraepelin, were not prepared to wait for empirical research of the sort that Kraepelin himself so impressively produced. This classification-by-committee approach was criticized by Frances, who indeed, when subsequently becoming Chair of the Task Force on DSM-IV, emphasized caution, conservatism, and a strong attention to empirical studies in revising the DSM-IIIR. As Hinderliter (2012) has noted however, Frances’ approach did not correct for the purported errors of the DSM-III, but rather helped entrench those categories, leading to the ‘grandfathering’ in of categories, some of which remain contestable,
such as, he argues, the paraphilic disorders. The conflict between the psychoanalysts aiming to preserve their concepts within the nosology versus the research psychiatrists fighting for their empirical approach are the twentieth-century version of the struggles between German Academic Psychiatry, led by Griesinger, and the alienists of the asylums (Engstrom 2003). Now, as then, academe won out, and there is much to be said for a sociopolitical alignment as well: with the administrative and governmental desire for reliability being congruent with the descriptive, empirical approach, adopting this nosological approach offered both groups advantages. Given the sociopolitical power of these groups, the outcome is hardly surprising.

The fourth transition has repeatedly been described in the literature as a revolution. From the point of view of the then dominant theoretical and therapeutic approach, psychoanalysis, this is undoubtedly true. However, from the conceptual point of view the DSM-III was a return to the late 19th century empirical, categorical approach and the same basic research program of aiming to identify underlying pathophysiologies. One contrast with Kraepelin was the effort to refrain from integrating etiological theory within the nosology, thereby stressing scientific humility: “This is all we can do for the time being.” (Decker 2007). However, critics have pointed out the theoretically-informed categorical and hierarchical structure of the DSM-III, as was the case in Kraepelin, presupposes biological causation (as is apparent in Klerman’s tenets above). In accordance with the second transition, sociopolitical factors (financial and professional) were decisive in its development, only now, the external social pressure was in an opposite direction: where the construction of the first Statistical Manual served an epidemiological goal in service of a preventive public health endeavor, thereby expanding the scope of the taxonomy, the DSM-III was aimed at reining in psychiatry’s expansion.

**Fifth transition: DSM in doubt**

The DSM-III was a resounding international success, becoming the official state classification system in many countries, the dominant nosology in psychiatric research, and a fundament for clinical training in mental health professions. The DSM’s following the DSM-III followed the same general model. Put briefly, the DSM-IIIIR, whilst meant to be a minor correction to the DSM-III, proved to comprise so many changes that it provoked negative responses from the scientific community, coming as it did shortly (1987) after the previous publication. Hence the DSM-IV stressed conservatism and reflected the growing influence of evidence-based medicine, as Frances, mindful of the scarcity of scientific nosological evidence, put the burden of evidence for change on the presence of sufficient evidence.
As the DSM project progressed, and clear etiological findings failed to materialize, problems with the DSM became more and more apparent, chiefly, of course, the problem of validity, linked as this had been primarily to the identification of pathophysiology. Besides, issues of significant comorbidity in patients, insufficient empirical separation of disorders (the lack of ‘zones of rarity’ pointed out by Kendell and Jablensky 2003), non-specificity of treatment, lack of predictive value, were all acknowledged (Kupfer, First & Regier 2002) leading to a proposal for the DSM-5 Task Force to redouble its efforts towards a neurobiologically based classification, promising a ‘paradigm shift’ in the process.

These efforts were insufficiently successful as a basis for the DSM-5 however, and the profession had to make do with the introduction of dimensional scales in the classification (a significant reduction to the original scope for dimensionality within the classification, cf. Greenberg 2013) as the most significant nosological change. The APA members had voted against earlier proposals including a more significant role for dimensions on the grounds that these proposals were clinically unwieldy: the experiences of the uptake of numerical axis-V measures of severity by insurance companies as a basis for conceding to or denying service to patients, and ensuing bureaucratic workload for clinicians, made a proposal with just such possible consequences unattractive (ibid.). Criticism of the DSM-5 was broader than in previous versions, encompassing, as had previous criticisms, perceived lack of transparency of the process itself, implicit sexism within certain categories, the in or exclusion of certain categories, and the quality of the science that lay behind it. Significantly, the basic validity of the whole project was called into question by none other than Thomas Insel, director of NIMH, who retracted his support from the DSM project one week before it was released, stating:

“The strength of each of the editions of DSM has been “reliability” – each edition has ensured that clinicians use the same terms in the same ways. The weakness is its lack of validity. Unlike our definitions of ischemic heart disease, lymphoma, or AIDS, the DSM diagnoses are based on a consensus about clusters of clinical symptoms, not any objective laboratory measure. In the rest of medicine, this would be equivalent to creating diagnostic systems based on the nature of chest pain or the quality of fever. Indeed, symptom-based diagnosis, once common in other areas of medicine, has been largely replaced in the past half century as we have understood that symptoms alone rarely indicate the best choice of treatment. Patients with mental disorders deserve better.” (Insel 2013) The departure of a major research institute(i.e. the NIMH) from the dominant taxonomy, employing a different conceptual framework, is our fifth and (for now) final transition.
Chapter 4

Ever since Kupfer’s announcement that a paradigm shift was required for true scientific progress to be made in the DSM taxonomy, the onus lay on psychiatric science and the Working Groups to provide (preferably neurobiological) pathophysiological foundations. However, the neurobiological etiological clarity hoped for in Kupfer’s statement did not arise. Why then issue a new version of the DSM? On Greenberg’s (2013) account, multiple sociopolitical and financial pressures applied. In fact this expectation had been raised by DSM-III revolution, mirroring the hope for pathological anatomy in the 19th century. Initiatives such as the Decade of the Brain reiterated this hope, such massive financial investment reflecting faith in the scientific project. Kupfer’s bold aim was understandable from this perspective. A further development was the increased intertwining of scientific, professional, public and market interests, and the role of the DSM herein. Sadler (2013) argues that the hegemony of the DSM in recent decades has been based on economic dominance, related to its central position in a “mental health medical-industrial complex (MHMIC, fig. 1)”. This refers to the growth in size of mental health care in the US against the backdrop of increased orientation of the health care system towards a market system, and to the institutions and parties that have significant interests in this system. Amongst those are the for-profit service industry (e.g. managed care organizations, health insurance providers), pharmaceutical companies, academic medical centers, and the NIMH. These parties share interests and a conservative approach towards the DSM: the ‘atheoretical’ descriptive approach of the DSM facilitates the potential for cross-indications (using the same pharmaceutical compound for different diagnoses), and the historical increase in DSM-categories offers opportunities for market expansion. Academic medical centers have become more dependent on ‘soft money’ (grants and contracts), transforming the ‘physician-scientist’ into the ‘physician-entrepreneur’.

This forms the background for major conflict-of-interest issues between DSM panelists and the medical and pharmaceutical industries, which have been widely criticized. Financial dependency also influences scientific standards: the profit motive of the service industry incentivizes drug therapy over psychosocial therapies. DSM categories fit the clinical trial format that favor the former, inducing a ‘mutually reinforcing arrangement where industry supports clinical trials, the service industry gets cheap treatments, and DSM developers can benefit from industry clinical-trial contracts, consulting arrangements, and the like.’ (Sadler 2013).

Such mutually reinforcing relationships constitute the MHMIC. Science itself pulls in two directions, stable categories being a requirement for longer-term research, whilst there is a desire to integrate new findings into the developing taxonomy.
However, the worry is that if the effects of the MHMIC compromise scientific inquiry, the evidence-base for preferred treatments and for the taxonomy becomes invalidated.

![Diagram](image)

**Fig. 4.1.** The “Mental Health-Medical-Industrial Complex”. Note that this network is limited to describing the involved communities and institutions in the US. From Sadler, J.Z. 2013. In: Making the DSM-5: Concepts and Controversies. © New York: Springer.

If the DSM is seemingly unassailable, how are we to understand the departure of the NIMH? According to Sadler, this may be one way for scientists to find some autonomy vis-a-vis the MHMIC. However, conceptually the RDoC is hardly inimical to the interests of the service and pharmaceutical industries, rooted as it is in a brain ontology of mental disorder. Greenberg describes the NIMH’s loss of faith in the DSM project through Insel’s experiences. Insel had heard ‘over and over’ from psychiatrists that they were tired of being ‘trapped’ by the DSM.

“We are so embedded in this structure,” he told me. He and his colleagues had spent so much time diagnosing mental disorders that “we actually believe they are real. But

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[Image: Diagram of the Mental Health-Medical-Industrial Complex]
Chapter 4

*there’s no reality. These are just constructs. There’s no reality to schizophrenia or depression.*” (quoted in Greenberg 2013.)

In Insel’s view, psychiatry would have to “just sort of start over”. In the RDoC project, the strategy of beginning with surface features of mind and behavior and correlating these to biology is supplanted by a primary focus on biology: the taxonomic foundation of the RDoC is the brain circuit and its function.

The NIMH move brings us back to the 19th century debate on validation. For Insel, the essential ontological level is the brain, either in the material or the functional sense of brain circuits. The scientific and financial position of the NIMH will guarantee that the RDoC initiative will gain influence in coming years, but the simple fact of contention of the DSM hegemony may open up the field to other contenders, pushing forward their own taxonomies based on different essentialist preferences. Already in the Netherlands, at least two alternative approaches to taxonomy have arisen, the network analysis of symptoms approach proposed by Goekoop et al. (2012) and Borsboom and Cramer (2013), and the individual time-sequence approach of Wigman et al. (2015).

The NIMH departure may impress on us as a ‘bottom-up’, empirical enterprise, and to a degree it is. However, it also draws our attention to the fact that empirical research is carried out against a backdrop of theoretical assumptions. The caveat Kendler (2009) pointed out in relation to 19th century nosologies therefore may prove to highly relevant in the near future, namely that empirical findings by themselves will not allow us to choose between taxonomies based on different ideas on essential validators. The mutually defining relationship between taxonomy, domain, and the taxonomy’s units of analysis now occurs in an increasingly complex network of relationships traversing the science-profession-society borders, with cross-cutting shared interests and related epistemic and ontological preferences. Sadler’s analysis limits itself to the US, but it seems reasonable to extend the terms of his analysis internationally, especially in view of the fact that many of the related parties are globalized industries.

On the question of the relationship between taxonomy and clinical practice, Insel’s comments point to a closer connection between the two. The increased dominance of technical and rationalized approaches to (mental) health care and the retreating autonomy of the health professional in recent decades have been well-documented. As an actuarial touchstone, the DSM is one vehicle for managerial control, as it is connected to measures of reimbursement and care organization. As professionals have ceded societal power in the organization of mental health care, they may point to the DSM as one source of their diminished authority, and they
would have a point, albeit in the sense that the DSM functions as a conduit for wider socioeconomic and political forces.

4.2.2. Conclusions

Changing historical circumstance sometimes provides a window into what has persisted. According to Berrios (2014), in an epistemological sense, little has changed since the late 19th Century: Kraepelin’s assumptions on the nature of the phenomena (fundamentally material), the appropriate methodology (empirical) and sorting method (categorical) are still in place (we could argue that the DSM I and II, partially psychoanalytically based, formed an epistemological intermezzo). Meanwhile, the search for definite etiology remains as elusive now as it was in Kraepelin’s time, and with it, a societal consensus on the classification’s legitimacy. In fact, with the final transition we may be moving back towards a repeat of 19th century competing taxonomies. The size and scale of the supporting and related institutions however, have markedly changed since then. Their economic power and reach far exceed those of the 19th-century.

The main abiding feature of psychiatric taxonomy is its sensitivity to the social context. In fact, sociopolitical factors rather than scientific discoveries prove to have been decisive at transitional points in its history: the mental hygiene movement, the war-driven success of psychoanalysis, and the economic worries of the Seventies all were major factors in taxonomic change. However, to point to sociopolitical factors is not to apply a dichotomy between profession, science, and society: social influences required the cooperation of professional and most often academic groups, as vividly illustrated by the DSM-III revolution (Decker 2013). The relative contributions from science and society to the taxonomies vary through time and location. An alternative for the science/society perspective on such influences is to focus on (shared/aligned) epistemic values, as Sadler (1996, 2005) has done. Sadler distinguishes value commitments, value entailments and value consequences relating to the values present within taxonomy. Projected onto the history of taxonomy, we can see that the historical transitions in the taxonomy’s development were crucially supported by specific value alignments between professional and social communities. As Berrios (1999) notes, shared interests may be enacted in different ways, but one of them is through a shared episteme, the choice of validators, and the conceptual framework for the taxonomy. The controversies surrounding the DSM-III, pitting the Neo-Kraepelinians against the psychoanalysts, are a good example. Viewed from the social study of science perspective, the alliance connected to the epistemic values of precision, categorization, and reliability was supported by institutions with sufficient power and influence to determine the outcome. Such social and normative alignments cut
across the categories of profession and society and co-determine the philosophical framework of taxonomies. The openness of taxonomy to values in science and society demands a normative response from the profession.

According to a scheme proposed by Khushf (2013), the results of our qualitative study and these historical studies would be termed ‘descriptive epistemology’: empirical investigation into how people come to know the things they know, and how they use this knowledge. From the epistemological point of view, there is a striking correspondence between them on one feature, namely the role of pragmatism. Where in the qualitative study we observed psychiatrists applying pragmatic-ethical considerations at the level of explanations rendering diagnosis part identification and part construction, in nosological decision-making, pragmatic and ethical considerations also featured prominently. These not only include value-based judgments on disorder status, but go deeper into the taxonomy, at the level of in or excluding certain disorders, setting criteria for levels of evidence, or prioritizing reliability. How should we assess such normative practices, from a scientific and professional viewpoint?

Besides continuity and correspondence, history also shows change. The ‘Great Men’ who developed Kendler’s 'expert taxonomies’ generally combined clinical and scientific activities. Such activity at the time was restricted to one or two asylums, with little patient traffic between regions. Psychiatry was local, and concentrated within the asylums. This smaller scale of practice and of academic communication reduces the likelihood of epistemic conflicts between nosological systems: Cullen practicing nerve-based psychiatry in Edinburgh, Rush transforming this approach into the circulatory system in America, whilst Pinel moved towards the Psyche in Paris: these treatment practices would not come into conflict clinically, let alone taxonomically. We do not expect many nineteenth-century patients to have remarked, on being subjected to bloodletting in the Philadelphia Hospital: “But doctor Rush, did professor Cullen not propose sensory deprivation for just this malady?” Debates on nosology were therefore both literally and figuratively academic, and nosological systems could function within localized webs of knowledge. So while there was a large conceptual distance between the ideal of a universal nosology and taxonomic practice, within the local and a priori understandings of these experts, practice and nosology were concordant. The profession at the time was rather phlegmatic about the lack of unity in classification, whilst enthusiastically supporting various scientific and empirical efforts to advance the situation.

Mobility and communication have transformed society and research communities since the days when every self-respecting alienist developed his own taxonomy.
(Berrios 1999). The social reach of psychiatry has grown enormously, and psychological theory has infiltrated language, as have taxonomic concepts, (Tsou 2007, Hacking 2000). If psychiatry's taxonomy interacts with society, it now does so on a global scale. With this growth, the complexity of the interface between profession, science, and society has grown, to such a degree that tracking interactions between these domains for the DSM would be a gargantuan task. The transition point analysis showed that decisions on fundamental rules of taxonomies have been determined by both empirical and nonempirical factors (cf. Kendler 2016). The profession of psychiatry straddled both spheres, operating in the field of science as well as the sociopolitical domain. Examples such as Frances’ epistemic conservatism, born of an ethically-grounded desire to prevent a false epidemic, demonstrate the deep connections between the political sphere, professional ethics and value-bound decisions on taxonomy. At the time of writing it has become increasingly difficult to disentangle professional, commercial, and scientific interests. Depending on one’s view of science, such entanglement threatens the status of the knowledge claims derived from the taxonomy: to what degree have they been compromised by human interests? This question underlies a substantial part of the critical literature on the DSM. Also, if we follow Insel’s view that it is time to start over on taxonomy, how far have we really come in over 200 years of modern psychiatric classification? If we are still relying on a ‘consensus of clusters’, can we legitimately defend the DSM as a scientific classification? Has actual scientific taxonomic progress been made? And given the socio-politically legitimizing role the DSM-III played in providing a foundation and legitimacy for the psychiatric profession, where does this leave the profession? We turn to the philosophy of classification to begin to answer these questions.

4.3 Philosophy of Classification

In the following a philosophical characterization of the taxonomic approaches to psychiatric nosology will be provided with a view to critically assessing them and suggesting possible ways of going forward. The main points from the study so far have been a) the peripheral role of the DSM in actual practice; b) the pluralist and pragmatic approach to diagnosis in practice; c) the strong influence of historically contingent social factors in the development of psychiatric taxonomy; and d) the increasing entanglement of scientific and social factors influencing taxonomic development. Can we understand these findings from a philosophical perspective, and furthermore, are they features which should be considered as justifiable? The approach taken here will be to first offer an overview of recent philosophical
Classification is the ordering of phenomena into groups, and should be distinguished from identification, which is the allocation of observed phenomena to previously defined groups. A taxonomy is a biological classification based on shared characteristics. The term nosology is used for classifications in the medical domain. According to the Oxford Textbook of Philosophy and Psychiatry, classification plays a fundamental role in the scientific process of exploring our world (Fulford, Thornton and Graham 2006) and ‘forms the heart of explanations and predictions’. Scientific classifications vary in structure: they may consist of rigid and mutually independent groups, groups based on potentially overlapping factors, numerical features, or causal factors, for example. Hjørland (2011) provides a summary of philosophical and theoretical issues related to classification: the question of ‘natural kinds’, the theory-dependence of observation, relationships between theory and classification, the question of whether classifications are accurate descriptions versus more or less pragmatic constructs, and which methodological foundations are applied to classification (e.g. observation, logical analysis, historical reconstruction or pragmatic analysis).

Zachar (2012) states that every classification requires a frame of reference by which it is validated. Zachar distinguishes two forms of validity. From a realist perspective, validity is a dichotomous quality, often expressed as whether or not ‘something really exists’ and termed ‘Validity with a big V’ by Zachar. He contrasts this with validity pluralism: seeing validity as a matter of degree, assessed with the aid of different validity indicators which may be connected to scientific theory (physics, chemistry, biology), professions (medicine, psychology, sociology) or goals (pragmatic or ‘folk’ classifications). This perspective allows for different classifications to validly coexist within scientific disciplines, distinguished by their pragmatic goals, theoretical frameworks, or objects of study. The choice to make use of one singular classification within psychiatry could either be a reflection of faith in scientific realism or may reflect the prioritizing of certain validators based on socially and historically contingent factors. A substantial part of the philosophical debate on taxonomy has focused on issues of realism, either through the question of whether mental disorders can be seen as natural kinds and whether the DSM has the potential to capture the natural alignment thereof, or in the question of whether the DSM classification itself can be seen as being realistic in the scientific sense, as opposed to, for example, a socially contingent construction.

A number of authors have connected historical overviews of the development of psychiatric nosology to the underpinning philosophies involved (Wallace 1994,
Berrios 1999, Kendler 2009, Philips et al. 2012). There is apparent agreement that empiricism and a commitment to scientific realism has been the dominant aspiration in psychiatric nosology. There is an air of inevitability to this commitment, rooted as the birth of modern medicine and the psychiatric profession was in the Enlightenment. Equally though, these overviews showed persistent tensions: between taxonomy and psychiatric practice, between the scientific aspirations epitomized by the DSM, and the progress of psychiatric science, and between its purported scientific stance (realist) and the actual practice of developing the taxonomy (pragmatic).

Pragmatic decisions with regard to taxonomy are criticized by supporters of a realist view. Ghaemi (2012) argues that allowing for pragmatism opens up the nosology to political abuse. The promise of a paradigm shift before DSM-5 as a move towards a truly etiologically-based classification was an avowal of scientific realism (Kupfer, First & Regier 2002), Zachar’s validity with a capital V. If we take such pronouncements to be representative of the attitudes within the DSM project, it continues to aspire to a scientific realist view of nosology, whereby this essential reality is proposed to be located within neurobiology. This view is also present in numerous discussions in the qualitative study on the imperfect status of the current DSM: many of the participants, often referring to Insel’s RDoC project, seem hopeful that such a project will in time reflect the reality of mental illness, and are primarily interested in what we should do in the meantime. Others are more pessimistic. We will turn to the issue of scientific realism shortly, but the point here is to argue that the discrepancy between the purported scientific tenets of the DSM project and the pragmatism demonstrably involved in its development is at least one contributory factor to the controversies surrounding the DSM. It also points to two possible solutions: either the DSM process must abide more faithfully to such tenets, or it must change them. So this leaves us with a few questions: can the DSM-process be legitimately and viably cast as a realist project, how well does the current process abide by the standards required, and if not, what alternatives are there? We will now examine the current philosophical debate surrounding the DSM with these questions in mind.

4.3.1. DSM Epistemology

In a series of articles initiated by James Philips in the AAPP Bulletin (Philips et al. 2010a,b) and subsequently expanded on in a series of articles (Philips et al. 2012 a-d), the question of the epistemological status of psychiatric classification was extensively discussed. A number of epistemological positions are described in relation to mental disorders and classification: realism, nominalism, and constructionism, pragmatism and nihilism. Few authors supported the strong
scientific realist position of a natural order of mental phenomena independent of man, and reliably identifiable through observation. Ghaemi (in Philips et al. 2012a) is an example, asserting that ‘psychiatric diseases exist independent of me’, pitting this claim against a claim of ontological constructionism, which he labels as postmodernist and equates with the idea that this would render mental disorders unreal. This appears to be straw man argument: the social constructionist does not deny the ontological reality of mental disorder, rather denies the mind-independent quality thereof. It is in fact the ‘nihilist’ Szaszian position which most closely approximates Ghaemi’s example, which as Zachar (ibid.) notes could better be described as that of a ‘disillusioned realist’: failing the discovery of a material essence to disorder, it becomes myth in the eyes of the realist. This is the backdrop of many a discussion on the reality or unreality of contemporary diagnoses, revealing widespread realist assumptions both in the lay public and in the mental health professions. Ghaemi does not engage with nominalism, which represents ontological (or modest) realism combined with epistemological antirealism: particular phenomena exist, and we group them into different categories (disorder vs. non-disorder, affective vs. psychotic disorders) for various reasons, without being able to discern what is naturally one or the other. Nominalism and pragmatism prove to be the most popular among the contributors. As Pouncey (ibid.) states: “Calling a mental disorder a ‘construct’ does not imply invention so much as it serves as a reminder that our epistemic access to the reality of things is always limited. On this view, every abstract entity is a construct, and constructs can be legitimate objects of scientific investigation.” Pincus (ibid.) emphasizes the pragmatic contemporary nature of the DSM enterprise, used as it is by so many groups for so many different purposes:

“Umpire 4 (pragmatism) also understands that these various “user groups” approach their tasks with varying empirical, philosophical and historical backgrounds and, and with this proliferation of users and backgrounds, there needs to be a balance between (to mix metaphors) letting “a thousand flowers bloom” - creating a Tower of Babel with little ability to effectively communicate among these groups - and a single approach that cannot be tailored to particular needs.” (Pincus in Philips et al. 2012)

Pincus believes that the central goal of the DSM has evolved from the clinical, research and educational goals of classification to the management of information. This is consistent with the increase in size, scope and complexity identified in the historical overview. Implicit in Pincus’ position is epistemological nominalism, leading to a form of pluralism combined with pragmatism with regard to classification. Pincus suggests that the DSM/ICD (which are set to merge in the near future) should serve as a ‘Rosetta Stone’, facilitating communication between user
groups with diverse (pragmatic) goals (e.g. research, treatment, health policy, institutional management), whilst allowing such groups (or individual scientists) the freedom to develop their ‘tribal’ classifications on the condition that in public reports clinical populations would not only be described in terms of such classifications, but also in DSM/ICD terms. His approach to future changes in classification would be conservative and focused on the following criteria:

1. Enhancement of overall communication among the “tribes”
2. Enhancement of clinical decision-making
3. Enhancement of patient outcomes

Note that these are pragmatic goals, value-laden, and sensitive to sociohistorical influences on what is seen as good communication, decision-making, and patient outcome.

Scientific antirealism allowing for plural scientific perspectives on reality, either incorporating or incorporated by pragmatism (depending how the latter is defined) garnered most support in Philips’ articles. Differences occur in what should be seen as progress: some authors remained hopeful of some degree of convergence towards a minimal scientific consensus representing the best guess towards the truth, others believe it’s pluralism all the way down and will remain that way. Dupré (1995) notes that there are no scientific fields we know of, including the scientific realist exemplar chemistry, where just one epistemic perspective covers the entire domain. He argues for ‘promiscuous realism’, the claim that there are many ways of categorizing phenomena into kinds. There is no independent viewpoint from which to determine whether one classification is better than the other, rather classifications have their merits in relation to their goals. This epistemology, I would argue, fits the historical approach to DSM-classification, in the sense that it has been constructed to serve both scientific and social ends.

As examples of the realist versus antirealist positions, Pincus’ pluralist proposal can be contrasted to Kendler’s suggestion of ‘epistemic iteration’ (Kendler 2012), which works on the principle that increasingly rigorous empirical methods will bring about improved classifications, in the sense that they deliver better approximations of the ‘true reality of psychiatric diseases as they exist in nature’. Kendler (2009) initially added a provisional note to this suggestion, acknowledging its dependence on a scientific realist view, whilst noting the historical contingency of many of our current concepts. However in Kendler 2012 he leaves his proposal open to a pragmatic interpretation. Kendler’s own position on the ‘umpire debate’ seems agnostic, as he has both criticized the idea of a truth correspondence to a theory-independent reality (Kendler 2009, 2016) and
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proposed a version of ‘epistemic iteration’ that depends on it. This approach
derives from mathematics, using available data to generate a series of increasingly
accurate estimations of a desired parameter. Each estimate should improve on its
predecessor, getting closer to the true state of the parameter. In order for iteration
to work, three criteria must be met. First, the phenomenon in the world to which it
is aiming needs to actually be there, in a ‘roughly stable place in the world’. Second,
the process of iteration needs to have some stability over time: the ‘aim’ of the
iteration may not diverge too much between estimations, i.e. one should not go
looking in an altogether different place, or with altogether different tools. Third,
the ‘likelihood surface’ needs to be reasonably smooth. This refers to the viability
of moving from the estimations towards the true phenomenon, without requiring
a full ‘reset’ of the taxonomic approach: the initial concepts that the process leaves
from have to be ‘in the correct ball park’. Kendler contrasts the epistemic approach
to the ‘modified random walk’, exemplified by the concept of the ‘average skirt
length’ of women’s dresses, which clearly depend on sociohistorical variables such
as fashion, morals, economy etc. Not quite random, as Kendler states, but
undesirable as opposed to epistemic iteration. However, Kendler previously
argued (2009), that no empirical fact can decide which validators related to a
phenomenon should be preferred. If so, how can we tell whether we are in the
correct ball park? To make such a judgment would require the strong realist extratheoretical ‘view from nowhere’. All we then have is different ball parks, but as
sports lovers well know, some ball parks are better than others, so perhaps there
is hope for pragmatism, as Kendler (2009) does allows for: an alternative to an
independent stable place in reality (corresponding to ‘natural kinds’ models of
disorder, see Chapters 8 and 9) could be formed by an agreed upon set of tasks we
want the taxonomic system to fulfill (corresponding to Zachar’s practical kinds
proposal, 2002). This necessarily involves values and norms, threatening the aim
of epistemic iteration as a project of ‘getting nearer to truth’ but feasible on a
pragmatic view of scientific progress (cf. Ghaemi 2012). The validity of values
within science has been convincingly argued for elsewhere (Longino 1990,
Machamer and Wolters (eds.) 2004), whether through paradigmatic, pragmatic, or
coherentist models of science. From a values-inclusive, pragmatic perspective,
scientific progress remains possible without recourse to mind-independent Truth.
Schaffner (2012), in a response to Kendler, modifies iteration with a coherentist
account of knowledge. This opens the iteration approach to pluralism if one allows
for coherentism across different scientific paradigms or research programs. This
too involves modification of the norms for progress.

An historical worry for psychiatry has been that a normatively laden classification
could be susceptible to political abuse. However, Fulford, Smirnov and Snow
(1993) have pointed to an historical example of a realist account of schizophrenia
legitimizing political abuse, its seeming objectivity masking political ideology. The strong realist position has been characterized by Fine (1996) as amounting to an additional thump on the table exhorting the truth of one’s scientific claims. If exaggerated claims of objectivity are wedded to scientism in the general population, the risk of embedded value-related considerations remaining obscured increases, and (on the assumption that identification of values in science reduces the chances of political abuse) the risk of abuse increases.

A practical problem for iteration in relation to managing fact plus value equally, is the fact that psychiatry is a young science in which many different scientific/theoretical approaches are already in place. Sullivan argues that from the current state of science we can expect diversification rather than convergence, based on current divergence in measuring instruments, techniques, interpretation, and related conceptualization of taxa (Sullivan 2014). She sketches the effort that would be required to ‘stabilize’ the methods sufficiently to guard against divergence, but even with these in place, a ‘moderate pluralism’ is the best that could be hoped for. Kendler suggests a pragmatic unifying force: that of a consensus on the goals of psychiatric diagnosis. But the diversity of the worldwide user communities of the current classification and their goals practically guarantees dissensus on this point. We might applaud the DSM project for having been able to attain a combination of pragmatic (instrumental, value-related) and empirical consensus surrounding the taxonomy, but having been developed from one national organization (the APA) it is open to criticism of parochialism of its values hierarchy (Watters 2010, Berrios 1999). An added worry here is that if the DSM is, at least in part, leaving from the perspective of user communities unsuited to the ‘goals of psychiatric diagnosis’, conservatism will serve to hinder progress. Sadler’s description of the disenfranchisement, on the one hand, of both patients and certain theoretical and therapeutic perspectives, due to the sociopolitical power of the MHMIC, is an example of this criticism. If progress is to be made to answer to both factual and moral norms (as I would argue a pragmatic approach in health care necessarily implies), the implications of conservatism versus change need to be weighed from both perspectives. This is not impossible. In fact, the historical overview demonstrates exactly this ambition in successive taxonomic projects involving negotiation on societal, professional and scientific values with a view to a group of aims for diagnosis related to the general overarching concept of ‘mental health care’. Comprehensively assessing the performance of psychiatric taxonomies from the pragmatic/normative perspective is a project waiting to be undertaken, but criticisms of the DSM often do take such perspectives, e.g. in the effects of labeling, or in the facilitation of overprescribing drugs. From the historical overview and qualitative study we might conclude that the taxonomic
project has delivered mixed results, on the one hand being scientifically fruitful and effective in knowledge management for significant periods of its history, but also having low relevance to clinical diagnosis and treatment, and being conducive to disenfranchisement of epistemically ill-fitting but possibly advantageous approaches. Judging taxonomic progress from a values-inclusive, pragmatic scientific perspective requires an adequate normative framework.

Could such a framework combine scientific and broader normative perspectives? Scientific progress could be fulfilled through different research programs, for example, by incorporating phenomenological research (Mishara & Schwartz 2013), or applying mathematical methods from physics which may bridge the conceptual divide between lower-level physical systems and emergent behavioral phenomena (Mender 2010). Novel nosological contributions prioritize one or a limited number of epistemic perspectives, together with their accompanying validators. Even the pluralist and pragmatic proposal of Pincus offers a list of but three prioritized pragmatic criteria. These all suggest a desire for a framework containing one or more yardsticks with which progress should be measured. Porter (2013) notes that where participants in the debate speak of pragmatism, they are frequently invoking normative criteria. He notes, and we concur from the historical overview, that the nosology of the DSM has always been more than descriptive: it is also a ‘call to action’, and prescriptive in this sense. According to Porter, it is acknowledgement of this normative dimension of nosology that would represent a true paradigm shift for the classification. It would certainly imply a departure from the current more or less explicit claims and aspirations to scientific realism that have accompanied the DSMs, and would allow for an assessment of the nosology in terms of how it functions in the world. A more modest realism, according to Kitcher (2001) allows for the involvement of political, social, and economic values in science, and the integration of the value of knowledge with moral and political values. Pragmatic, value-based discussions on the consequences of nosological decisions have been an integral feature of the development of psychiatric classification throughout its history, but have been rather hidden from view, and masked under proclamations with regard to ‘the strength of the underlying evidence’ (Whooley & Horwitz 2013).

Sadler and Fulford (2004) have noted the importance of good process rather than a (one-sided and probably illusory) reliance on foundations. With regard to psychiatric classification, Sadler (2005) describes a ‘political architecture’ for the nosological process. He notes that all DSMs involve political\textsuperscript{10} values, and that all

\textsuperscript{10} ‘Politics’ here referring to the ‘moral-intellectual endeavor to provide the best account or means to arrange our lives as groups of people, collectives, or communities.’ (Sadler 2005, p. 360.)
have had significant democratic elements. He presents a number of democratic value conflicts within the DSM process (noting these do not entail a comprehensive political value analysis). Amongst them is the democratic assignment to balance majority rule with minority interests. He notes how the DSMs have drifted towards “a normalizing and normalized nosological product that tends to constrain the (clinical practice) liberty of people who do not share the DSM biomedical vision of psychopathology.” (Sadler 2005 p 385). In our qualitative study, we noted that participants resisted this normalizing influence to varying degrees (through level 3 activity), exercising varying degrees of professional autonomy to utilize their own epistemic perspectives. Sadler describes the measures the DSM Task Forces have undertaken to protect minority interests and constrain majoritarian elements, e.g. by inviting ‘outsider input’, disseminating an options book, widespread disclosure of process issues in professional publications and meetings, and the development of a Primary Care version of the DSM-IV aimed at this domain. However, he also suggests improvements could be made by bringing outsider groups in at an earlier stage of the process, before all the chairs and committees are appointed and the structure is set. Also, it remained insufficiently clear what constitutes the ‘diversity of opinion’ within the DSM Task Force committees and appointees. Sadler does not view such shortcomings with suspicion or cynicism, rather his general conclusion is that the DSM approach to values is inconsistent and haphazard in a manner in which its approach to scientific deliberations is not. Sadler provides a framework for managing the broader nonepistemic values involved in taxonomic development, alongside the management of epistemic/scientific values policed by epistemic communities (Kuhn 1962, Longino 1990). Though Sadler admits his meta-ethics justifying the prioritizing of one value over the other is sketchy, he contrasts how values have guided the DSM process with his own proposal how they should do so, providing a different hierarchy of values. He stresses that good taxonomic process with respect to such a hierarchy entails that the values involved in the DSM process should be subject to review and formulation by (representatives of) the communities with a stake in the outcome. This would also entail a significant degree of negotiation (of values and interests) within and between communities with varying values priorities. In his chapter referring to the MHMIC, he notes coming to realize that the DSM itself is one element of a larger and even more complex system of interests, described above. It could be argued that given the size and scale of the social-scientific network the DSM is connected to, even a democratization of its taxonomic process would have insufficient resources to navigate wider value conflicts, which are of an international nature. Combining Pincus’ and Sadler’s views could provide a less unwieldy approach to managing science and values in an integrated manner.
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Integrating broader (e.g. professional, social) values into a taxonomic framework may serve to bring the latter closer to practice. The DSM may be seen as peripheral from the clinical perspective, it maintains relevance for practice due to its roles in information management and remuneration. The process of diagnosis described in Chapter 3 involves an epistemology that does not always follow the realist model: rather than being aimed at identification of a certain (singular, or limited set of) disorder(s), the act of diagnosis in the DEF is a complex interplay of descriptive identification, meaningful understanding, and value-laden and pragmatically driven explanation, with multiple possible interrelations between all these aspects preceding any final or provisional diagnostic pronouncement. Philosophical positions taken in the taxonomic debate were also recognizable in the qualitative study: ontological realism, epistemological pluralism, and pragmatic commitment to (value-laden) therapeutic improvement, the self-evident central value of medicine. Faith in the prospects of a form of epistemic iteration was divided, but this did not seem a major worry to most participants, who applied their own theoretical concepts, professional values and heuristics to guide their decisions. We noted that convergence on one unifying explanation for the problem(s) the patients brought to the encounter was not a priority for the participating psychiatrists, and piecemeal, lower-level accounts of ontologically varying (physical, psychological, social) phenomena could be individually related to combined treatments or connected and grouped in various ways. Again, given the limitations of this study, we cannot extend implications hereof too far, but it is reasonable to state that a classification aiming for both clinical utility and validity should carry the conceptual resources to address not only scientific worries concerning the reliability and validity of classification instruments, but also the wide diversity of other factors (institutional, interpersonal, contextual, professional) that play a role in clinical diagnostic practices. The professional management of fact and value in the diagnostic process at the clinical level should be mirrored by the (expert) scientific and normative management of both in the domain of taxonomic development. The DSM, in its current form, does not fulfil this aim: as Sadler (2005) stated: its management of values lags significantly behind that of facts. In fact, it is difficult to envisage any single classification being able to manage this, since developing a single coherent classification requires the narrowing down of epistemic perspectives (and hence of epistemic values). Two alternatives present themselves: developing taxonomy from a pluralist perspective, e.g. along the lines of Pincus’ (2012) proposals, or reducing and/or excluding nonempirical values from taxonomy and the taxonomic process. The prospects of a value-free reduction of psychiatric science will be discussed in Chapter 7.
We will try to address some of the challenges of accounting for both values and science pluralistically in such a taxonomic project.

4.3.2. A system of classifications
Allowing for scientific pluralism disciplined by methodologies determined by specific research programs and pragmatic goals will improve both the chances of research value, and clinical utility, since such classifications will be more theory-laden. Pincus’ (2012) suggestion of a system of tribal classifications is an example of a pluralist approach to taxonomy. He proposes a system of ‘tribal’ classifications, or –to follow Sadler’s metaphor- a system of nested classifications, with the current DSM/ICD functioning as a Rosetta Stone binding the branches of the tree. He describes the scientific framework required to make such a system work, but a normative framework should be added (from Sadler’s analysis). Society is rife with structures which have developed to accommodate values, the law being an obvious example. The possibility of providing an objective account of values in taxonomy will be explored in later chapters. In this model, values, ethics, and pragmatism are closely aligned. In the case of pragmatism, clarity and limitation of the goals of a certain enterprise, whether it is exploratory (in science) or modificatory (in treatment) serves to limit the epistemic range. If we accept a view of science and disorder which allows for values, and the entailed necessity of politics, such a system can function synergistically. If we extend the analogy of the law, the current DSM could be seen as a Book of International Law, governing all the subscribing countries, with little to no room for national variance. In the context of law we would find such a system unwieldy and insufficiently responsive to national and local variations and preferences in values. And in practice, in law, we have just such a system of a jurisdictional hierarchy of legislative formulations, at the International, national, state, and lower level. As we rise in the jurisdiction of these legislative branches, the requirement for democratic support of such measures grows, and is connected to higher order political institutions.
Fig 4.2. Hypothetical jurisdictional ‘tribal’ classification. All taxonomies must relate to the DSM in the manner specified by Pincus, and have a specified goal. In this example, the RDoC develops two sub-taxonomies, one specific for cognitive-behavioral therapy, and one based on small world network taxonomic research (Goekoop, Goekoop & Scholte 2012). To the right are two taxonomies defined by a pragmatic purpose: emergency psychiatry and health care rationing (versions of the DSM for primary care have been developed for previous versions, cf. Pingitore & Sansone 1998). The Health Care Rationing classification encompasses three sub-classifications for the USA, Europe, and Australia. In the middle are two taxonomies developing from their own theoretical foundations, those of personalized diagnosis (van Os 2014) and phenomenology.

It is easy to envision such an organization for psychiatric classification, whereby pragmatic goals (including scientific research) are defined and a branch of nosology focused on this limited set of goals is desired. To this end, a framework could be envisioned that serves the dual functions of supporting Pincus’ methodological requirements and providing a democratic structure exploring and
reviewing value issues. Within such a framework, efforts should be made to guard against the 'science-values' dichotomy, ensuring the quality of value-related deliberation is as thorough as the scientific methodology. Into this model the notion of 'jurisdiction' is introduced, which pertains to the connection between taxonomy and its domain and to the fact that (scientific and ethical) norms are involved. The jurisdiction of a taxonomy includes all real-world phenomena it proposes to represent, but also the related scientific and ethical communities. In addition to the institutions of the scientific communities, democratic institutions and processes should reflect the nature of this domain and be capable of handling the related issues concerning (the interaction between) science and values. Taxonomies encompassing a wider set of phenomena, and more broadly used, should therefore be paired with sufficiently broad and representative democratic structures. The example of this model sketched in fig. 3.1 reflects the historically contingent current centrality of the DSM, but this is not set in stone. Local and lower-level taxonomies each with their domains, interests, and attached epistemic values will need to negotiate and coordinate with one another, and in cases of shared domains may compete scientifically and socially. In such a pluralist system, singular phenomena (e.g. 'depression', 'hallucinations') can lie in the jurisdiction of plural taxonomies. This is almost in opposition to the current situation in psychiatry, where ontologically plural phenomena, embedded within widely diverse social, scientific, professional and personal spheres, are 'governed' by a singular classification.

In this proposal it would be desirable, from the jurisdierarchical point of view, to transfer the final authority of the 'Rosetta Stone' of psychiatric classification, to an international forum, such as the WHO or the WPA, a move which could be envisaged after a merger between the DSM and ICD systems. Lower-level, national, or local branches of the nosological tree could be involved with certain areas of scientific research (such as the RDoC project), and as such represent Lakatosian research programs. Proposals such as the phenomenological project of Mishara & Schwartz (2013) would be equally welcome, ensuring the epistemic freedom criterion is strengthened. With regard to the 'epistemic iteration' versus 'pragmatism/values' tension, the fact that in this framework, these tensions are devolved increases the chances of 'branch groups' coming to (temporary) agreements. This is because of the reduction in scope determined either by the epistemic framework of the branch scientific community, or that entailed within the pragmatic goal(s). To illustrate with a simple example: if we have a set of colored building blocks, and we wish to arrange them, then the hierarchy of nosological criteria will change depending on what we want to build: if we want to build a house, form is prioritized, but if we urgently require anything red, color is.
Hence, pragmatic goals limit the epistemic range. Equally, with diminished pragmatic scope, and more local organization, we expect the range of value diversity to decrease.

**Fig 4.2: Values framework & 'taxonomic groups'.** In order to explain the practical application of this proposal, fig. 3.2 depicts one component, the 'taxonomic group' surrounding the separate classifications. The taxonomic group is the community of persons involved in developing a taxonomy devoted to a defined pragmatic aim, e.g. taxonomy A: ‘Personality Disorders in the US’, taxonomy B: 'Neuroscience-phenomenological taxonomy' and C: 'Care Reimbursement in the Netherlands'. Membership of a taxonomic group is relative to both scientific and social interest, and co-determined by the pragmatic aim and the scope of the taxonomy. The main pragmatic aim of the classification is evaluated: the more the classification is geared towards a societal goal, the more political-ethical considerations should apply, whereas the closer the aim is towards research, the more weight should be given to
expert scientific judgment. The nature of the objects of study are evaluated: the more these are deemed to be factually laden, the more appropriate natural science methodology is to the object, whereas the presence of values indicates ethical methodologies. Finally, the required level of expert knowledge is ascertained. Certain sorting questions do not require expert knowledge of a subject: I do not need to know the chemical composition of paint to sort colored wooden blocks. The faculty of color vision is sufficient.

Two concerns should be readily apparent: what is to prevent such “sub-taxonomies”, with local, idiosyncratic goals, from creating an epistemic Babylon? If the related epistemic communities are incommensurable, this could result in widely divergent practice for one and the same disorder, depending on one’s locale. We would swiftly return to pre-DSM days of lack of reliability, loss of fruitful communication between (international) research groups, and a loss of validity and legitimacy therefore. Secondly, what is there to prevent an ideological hijacking of such a system for political ends?

To start with the first concern, the jurisdictional pragmatic-scientific structure serves to counter this. At its current center stands the future ICD/DSM integrated taxonomy, given its widespread acceptance and use. It has the greatest epistemic scope and is shared by a wide epistemic community. This classification stands at the center of the system, and by virtue of its position, as it is now, it will tend to remain more stable. The requirement of describing research populations in DSM/ICD terms serves to bind the branches of the tree to the DSM, but the pragmatic jurisdiction also serves this function. Shared pragmatic goals confer shared location between classifications, as is apparent from fig. 3.1. The terms of a ‘sub-classification’ cannot stray so far from the higher-order classification as to make communication impossible. As these classifications are tied to practical human activity, both in the scientific and social spheres, the feedback from this activity will bind classifications in the same way shared research programs either prevent diverging of taxonomic language, or will stimulate the development of a ‘bridge language’ between different research programs (cf. Bechtel 1988). The smaller scope of the branches allows for the freedom to balance the ‘stabilizing’ required to perform iteration within a research paradigm, whilst remaining sufficiently in tune with pragmatic goals and sufficiently responsive to new scientific developments. The jurisdictional structure also allows for programs that are scientifically/practically successful to ‘move up’ the tree, reflecting a wider range of influence. Note that this does not presuppose any format for balancing epistemic and pragmatic values.
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With respect to the worry of ideology ‘hijacking’ the classification, the role of normative communities is essential. With respect to guarding scientific norms, it should be clear that the democratic structure of the classificatory tree in no way diminishes the weight given to science: classifications are beholden to their scientific communities. According to pragmatic philosophy of science theories should answer to the world in a practical, enactive fashion. This encompasses the scientific methodologies that have developed over centuries within science communities, but also opens science practice up to the pragmatic goals of health care (there is a sense of normative ‘opening up’ from Dooyeweerd’s philosophy (Chaplin 2011) that is relevant here, this will be expanded on in Chapter 7). What is novel in this approach is setting the pragmatic goals in a certain jurisdictional order (which would obviously be dynamic), and strengthening this order with democratic representation in order to ensure good process with respect to nonepistemic values. Rather than one central group (the APA) having the power to predetermine the structure and composition of Task Force Groups which subsequently are chiefly responsible for the DSM taxonomy, classifications would be democratically responsive to their pragmatic goal. The internal constitutions obviously would differ, as is apparent from fig. 3.2. The more central a classification is, the more it should be supported by both expert scientific knowledge, and expert political representation. I would propose that this is what in fact, to a degree, has been taking place already in the professionalization of various stakeholder groups and their lobbying (Cooper 2014) of the DSM process. However, as the science has made steps in increased accountability and transparency, so should the ethical and political process of psychiatric taxonomy, and again, on a gradient: the more people affected by a decision, the higher the requirement for adequate representation. I would argue that this proposal has multiple advantages: offering scientists more epistemic freedom, increasing pragmatic utility for both mental health professionals and other users of the classifications, and an improved framework for democratic accountability and stakeholder participation at fundamental levels. This proposal borrows from the non-foundational approach of Values-Based Practice, and therefore does not focus on any hierarchy of health care-related values such as quality of care, justice, access etc. Some may view this as insufficiently robust (cf. Loughlin 2014). However, as noted in Loughlin’s volume, VBP is not without principles, and neither is a normative structure adhering to democratic principles. The point is that such principles adhere in communities that also police these norms. This goes for epistemic and nonepistemic communities. Where communities mix and value hierarchies conflict, negotiations are in order, whilst there should be respect for the jurisdiction of communities.
It could be argued that breaking up the taxonomy to support a manageable integration of scientific and value-related goals risks entrenching rather than solving the disenfranchisement of sociopolitically weaker groups: tensions could be devolved to conflicts between separate branches, for example between the ‘remuneration’ branch and the ‘phenomenology branch’ (on the assumption that insurers might display a lack of patience for the phenomenological project), and one branch could be prioritized over the other (in funding, overall impact and input, etc.). The closer we get to the trunk of the tree, just as in politics and law, the more universal the normative principles should be, since the scope of the jurisdiction increases. Moving closer to the trunk, one of the responsibilities of the related community should be is to ensure value conflicts in more peripheral branches are navigated through good process rather than (political) power. Rearranging the organization of taxonomic development will not suffice to balance socially embedded power differentials: this requires action on the part of the communities.

This framework is sketched here as a pluralist approach to taxonomy, agnostic to the prospects of scientific realism vs pragmatism, and attuned to managing the presence of facts and values in taxonomic development in a rigorous and transparent manner. The structure incorporates both the desire for epistemic rigor, the necessity to accommodate pragmatic orientation towards society, and the democratic requirement to represent the views of stakeholders as well as possible. It is the latter point which is most evident when reviewing the historical literature, and also, so far, has been the elephant in the room in this discussion: the marginal place of patients in these developments. Perhaps in this context ‘the elephant outside the room’ would be more apt. Whilst acknowledging the work that has been done by successive Task Forces in improving the representation of service users, my impression is that the sudden (in historical terms) expansion in scope and influence of the DSM has not been, and perhaps could not have been (given the speed of this transition) matched by an equivalent evolution of the scientific-democratic framework. Besides the revolutionary aspect of the DSM III playing a role in this ‘normative lag’, I believe that the profession’s persisting commitment to scientific realism is a hindrance in this respect, promoting a preference for the ‘guardianship’ model with respect to science, based on a false dichotomy between science and values.

One feature arising from the historical review of classification in psychiatry, was its crucial role in providing psychiatry, and psychiatrists, professional legitimacy. Obviously, classification is one facet of the wider operation of science in psychiatric practice. I have now proposed allowing for a plurality of classifications, suiting the explanatory pluralism found in Chapter 2. However, we have not yet examined the
4.4. Main points from Chapter 4:

- Though the DSM has been portrayed as a result of progressive science from a scientific realist perspective, the historical record shows crucial (values based) political, socioeconomic, and pragmatic influences in its development.
- Though the debate is ongoing, the current majority position with respect to psychiatric taxonomy is a ‘middle position’ of weak nominalism or weak realism.
- Both positions allow for the legitimate presence of values in science, requiring a framework for dealing with the combined presence of fact and value in taxonomy.
- The growth in (social) scope of psychiatry has resulted in pressure towards greater diversity within science and values.
- Scientific and values pluralism can be accommodated in a combined framework for further taxonomic development based on Pincus’ and Sadler’s work.
- Within this framework, the centrifugal force of pluralist (and possibly incommensurable) science communities is balanced by the integrating force of shared pragmatic (value-laden) goals.