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# The normativity in psychiatric nosology. An analysis of how the DSM-5's psychopathology conceptualisation can be integrated

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## ABSTRACT

The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) uses the conceptualization of psychopathology to make psychiatric diagnoses operational. The use of explicit operational criteria appears to be based on an implicit neo-positivist epistemology. Operationalism involves an excessive focus on quantitative descriptions of behavior manifestations, contesting that psychopathology is understood as a deviation from the normal or the average in a given population. Consequently, the normal and the psychopathological become homogeneous. Our analysis investigates if this neo-positivist epistemology narrows psychopathology conceptualization and endanger integration with the hybrid biopsychosocial model of psychiatry. Based on Georges Canguilhem's theorization of a qualitative approach to the individual organism who is in a state of morbidity, we show that the (psychiatric) pathology also contains differences in quality. Moreover, that humans are norm-producing organisms that actively respond to changes in their internal and external environment. In this regard, the operationalization of mental disorders could include the normativity in humans, i.e., the ability to produce norms. We argue this will mitigate the one-sided psychopathology conceptualization and strengthen the relationship between psychiatric nosology and psychiatry's hybrid biopsychosocial model.

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## Introduction

The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), operationalizes mental disorders in order to understand and depict the psychiatric object (American Psychiatric Association, 2013). Operational diagnostic criteria are characterized by the use of explicit definitions of what the clinician should observe in the patient (the

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symptoms), what he or she can infer from the information available and what he or she can exclude based on the simultaneous clinical evaluation of other possible diagnoses. Such criteria stems from the publication of the DSM-III in 1980 that sparked the so-called “operational revolution” in psychiatry (Nordgaard & Parnas, 2013, p. 434). In this sense, the DSM-5 follows in the footsteps of previous manuals.

However, the DSM-5’s use of operational diagnostic criteria seems to overlook that its psychiatric nosology is founded on a neo-positivistic epistemology (Aragona, 2013a, p. 167; 176–178). This epistemological stance has its roots from the DSM-III’s atheoretic approach to mental disorders. The DSM-III was based on a positivist and behaviorist epistemology, founded on the philosophical positions of logical empiricism/logical positivism, referred to as “operationalism” (Aragona, 2013a, p. 172, 2013b, p. 418; Hempel, 1954, p. 216; Josef et al., 2013, p. 273).

Presuming that the psychiatric nosology is atheoretic when in fact it is rooted in a neo-positivist epistemology may have a downside. It may forestall epistemological pluralism since it implicitly leans toward one specific epistemological framework. As a result, it may be cumbersome to integrate psychiatric nosology with the hybrid biopsychosocial model. Presumably, research more in line with a neo-positivist framework will fit better with operationalized psychiatric nosology and thus have an implicit advantage over other epistemological frameworks. However, this normative nuance is sidestepped as the DSM-5 claims the psychiatric nosology is theory-free and, in a sense, value-neutral. If psychiatry is without normativity, then it consists solely of multiple observations devoid of a psychiatric gaze. Hence, the implicit neo-positivist epistemology may be considered as an obstacle to the development of psychiatric nosology.

The DSM-5 has been criticized for overlooking other theoretical and empirical aspects of psychopathology (Drozdstoy et al., 2019, p. 59; Kendler & Parnas, 2015, p. 6) and getting caught in the epistemological gap between mind and brain (Telles-Correia, 2018, p. 797). Thus, leading to a lack of subjectivity (Josef et al., 2013, p. 270) and overlooking the fact that psychiatry is a hybrid discipline (Marková & Berrios, 2012, p. 220; 223). However, these analyses do not use Canguilhem’s concept of normativity to elaborate how their results may be a consequence of the implicit neo-positivistic epistemology inherent in the diagnostic criterion. Margree (2002) discusses the shortcomings of the positivist conception of psychopathology (in the DSM-IV) against Canguilhem’s concept of normativity. Although Margree (2002) shows how normativity mitigates these shortcomings, she does not argue how these shortcomings may persist due to the neo-positivist based operational diagnostic criterion.

Our analysis investigates how this neo-positivistic epistemology in the DSM-5 may fail to integrate that psychopathology is a result of reduced

normativity: namely, psychopathology is quantitatively *and* qualitatively different from the normal. Furthermore, we argue that the current nosology might hinder psychiatry as a hybrid discipline: viz. the implicit neo-positivism in the DSM-5's nosology stands in the way of using the hybrid biopsychosocial model and thus how psychopathology is studied from multiple sciences. In conclusion, if psychiatric nosology does not include normativity, psychiatry risks becoming an epistemological monism and favor particular sciences over others.

### Psychiatric nosology and neo-positivism

Psychiatric nosology refers to the systematic classification of mental disorders (VandenBos, 2007). As mentioned above, the release of the DSM-III changed psychopathology classification. The DSM-III's goal was to apply a classification methodology shared as much as possible in psychiatry by integrating and systematizing the varied knowledge of the numerous psychiatric schools. For this reason, a descriptive, atheoretical, categorical approach to psychiatric taxonomy was chosen (Rick & Horwitz, 2005, p. 252; 261). However, the DSM-III's change in diagnoses classification may not have been a paradigm shift. The DSM-II also adopted a descriptive stance contrary to the DSM-I, and the DSM-III is not purely atheoretical, but speculative etiological theories are avoided to enhance clinical utility (Aragona, 2014, p. 30). For instance, the DSM-III refers to etiology when designating of organic mental disorder (American Psychiatric Association, 1980, p. 101). Although the DSM-I and II were Kraepelinian in how they listed mental diseases, among other things, the DSM-III weighted additional aspects, such as: etiology as the ideal end of the scientific process, exacting and thorough clinical description and differential diagnosis to make out mental disorders, internal medicine as the aspiring medical model, and the causal priority of brain mechanisms (Aragona, 2014, pp. 35–6; See Aragona, 2014 for specifics). Moreover, the DSM-I and II acknowledged low inter-rater reliability as a concern. The DSM-III differs from its predecessors in that low reliability was seen as discrediting psychiatry as a science and was not solely viewed as a technical problem (Aragona, 2014, p. 37). To mitigate this problem, the DSM-III introduced descriptive behavioral diagnostic criteria with explicit definitions of satisfaction criteria for each diagnosis (Aragona, 2014, p. 37), the so-called operationally defined diagnostic criteria (Aragona, 2014, p. 30). What truly differed from previous editions was the DSM-III's grounding diagnoses classification in a neo-positivist epistemology (Aragona, 2013a, p. 167) and stringent neo-Kraepelinian, biomedical framework (Aragona, 2014, p. 30). However, it is clear that psychoanalytic ideas and Meyer's ideas were essential for the development of the DSM-I and II and understanding

of diagnosis as dynamic states (Aragona, 2014, p. 28), which sets them apart from later versions of the DSM-III and onwards. Moreover, many psychiatrists conjured that a specific diagnostic criterion could not capture the individual (Rick & Horwitz, 2005, pp. 249–50; 262).

Logical empiricism initially believed that science could describe reality using straightforward, atomistic and atheoretical statements based on empirical observations. However, it soon became apparent that language is never “atheoretic”. The elaboration of the “operational definition” was the answer to this critical observation, as the definition of a concept in terms of actual operations should be the univocal link between the concept and its referent in nature (Bridgman, 1927, p. 36). This neo-positivistic/neo-empiricist perspective emphasizes observational facts over subjective arguments and metaphysical claims. A central claim is that observational facts must be at the level of sensory experience to allow for testability and significance (Aragona, 2013a, p. 169). However, the DSM-III also contains non-operational elements. Its neo-Kraepelinian stance claims mental disorders are neurobiological diseases, i.e., their phenomenal descriptions result from neurobiological factors. As such, mental pathologies are natural biomedical entities that may be validated with neurobiological research (Aragona, 2014, p. 40).

This stance endorses a type of realism incompatible with operationalism. Most logical positivists were empiricists in the sense that they were instrumentalists and anti-realists, i.e., theories are instruments for predicting observable phenomena. They would regard mental disorders as theoretical constructs useful to clinicians and as a means to investigate psychopathology patterns in a population (Zachar & Jablensky, 2014, p. 4). It seems that the DSM-III’s operationalism goes a step further than the logical positivists’ understanding of operationalism when it considers mental disorders to be neurobiological entities existing in the world. This perspective is akin to viewing mental disorders as natural kinds, i.e., mental disorders refer to something that reflects the structure of the natural world unaffected by the psychiatrist or psychologists. Whereas Bridgman’s operationalism claimed that concepts were equal to the corresponding set of operations (Green, 1992, p. 304), the DSM-III sees the set of operations (i.e., operational diagnostic criteria) as reflecting the natural structure of mental disorders grounded in biomedical pathologies. Thus a diagnostic score is directly related to the diagnosis being measured.

The DSM-5 does not depart from the neopositivist and neo-Kraepelinian epistemological position of the DSM-III, but it seems to drop the claim of being atheoretic (American Psychiatric Association, 2013). Others state that the DSM-5 upholds an “atheoretic” stance (Castiglioni & Laudisa, 2015, p. 4; Di Nicola & Stoyanov, 2021, p. 132) and the DSM-5 seems to not provide a theoretical background for their definition of mental disorder (American

Psychiatric Association, 2013, p. 20). However, there appears to be a subtle inclination toward etiological theories on how mental disorders are grouped (American Psychiatric Association, 2013, p. 13; Cooper, 2018, p. 59) and favor evidence grounded in neurobiology: “*Until incontrovertible etiological or pathophysiological mechanisms are identified to fully validate specific disorders or disorder spectra (...)*” (American Psychiatric Association, 2013, p. 20). In this respect, the DSM-5 upholds the neo-Kraepelinian aim of validity (Aragona, 2014, p. 39). Whereas DSM-III sought to find such validators for individual mental disorders, the DSM-5 seeks to find such validators “*within and across adjacent DSM-5 chapter groups*” (American Psychiatric Association, 2013, p. 20). Thus, the DSM-5 aims to validate phenomenal descriptions with neurobiological correlates (Aragona, 2014, p. 39). No laboratory test has validated this view of mental disorders (Cloninger, 2014, p. 204) and reducing mental disorders to neurobiological dysfunctions is controversial (Stoyanov, 2021).

The DSM-5 continues to describe diagnostic criteria empirically, favoring observational terms using operational criteria (Aragona, 2014, p. 41) that are embedded in a neopositivist epistemology. Focusing on observable behavior diminishes valuational and subjective aspects, indicating that normative aspects provide unclear nosology criteria (Aragona, 2013a, p. 174). This view upholds that diagnostic operational criteria anchored in observable behaviors are superior to intrapersonal aspects since the latter provide unclear criteria for establishing diagnostic entities reliably (Aragona, 2013a, p. 172).

Devaluing subjective aspects of diagnostic categories originate from a neo-positivist focus on testability and observation, as neo-positivism considers phenomena that are not observational and empirically testable as meaningless (Aragona, 2013a, p. 169; 174). The rationale appears to be that assertions about the factual content of a given state of affairs have to be empirically verified through sense experience. Moreover, it seems to imply that subjective statements have no factual meaning because they cannot be either true or false (Ayer, 2012, pp. 107–10); thus, they simply reflect particular inclinations toward a specific situation, i.e., they express feelings, not truth and falsehood. Presumably, this may be observed at the level of sense experience, but the truth of the statement (i.e., the subjective experience) cannot be asserted, according to Ayer. From such stances, diagnostic propositions are defined in operational terms using observable behavior to increase reliability (Aragona, 2013a, p. 172) and presumably make them empirically verifiable, i.e., diagnostic propositions are meaningful if their truth or falsehood can be settled by experience. Subjective aspects appear to be minimized by using the quantitative and polythetic diagnostic thresholds, the explicit operative diagnostic criteria and the descriptive approach that are the foundation of psychiatric diagnoses (Aragona, 2009, p. 10). The

explicit operative diagnostic criteria refer to a priori diagnostic rules belonging to the diagnostic criteria, while the descriptive approach signals that diagnostic criteria are based on phenomenal descriptions (Aragona, 2009, pp. 3–4). A priori diagnostic rules seem to disregard subjectivity as they reflect predefined categories decided by the DSM-5. The clinician uses them to evaluate if the patient fits the diagnostic criteria. As such the patient's experience of suffering does not qualify for a diagnosis on its own, but only after the patient's expressions are controlled against the a priori diagnostic criteria. Likewise, it may be argued that the phenomenal descriptions of clinical manifestations, such as symptoms or behaviors, are defined in advance and thus appears to disregard subjectivity in favor of generic descriptive symptoms. The quantitative and polythetic diagnostic threshold may exemplify this further. If a person has X number of symptoms, he or she is given a diagnosis, assessed against specific criteria. Hence, the patient has a mental disorder if he or she exceeds a threshold of observable behavior manifestations belonging to the descriptive symptoms with a minimum quantity requirement of symptoms independent of their quality (Aragona, 2009, p. 4). The definition of symptoms is usually of the polythetic type in the sense that there are no symptoms that are essential or more important in terms of quality than others, but it is sufficient to have a minimum number of symptoms among those listed in the criteria; i.e., it is necessary to overcome a diagnostic threshold that is substantially quantitative (Aragona, 2009, p. 4). Hence, the qualitative aspect of psychopathology is implicitly overshadowed and is transformed into quantity.<sup>1</sup>

One aim of using operative diagnostic criteria to depict mental disorders is to increase the reliability of clinician diagnosing (Aragona, 2009, p. 2; Josef et al., 2013, pp. 272–73). However, Nordgaard and Parnas (2013, p. 434) prompt us to notice that the “operational” criteria in these manuals drift away from the original meaning that the operational method had given them, i.e., the formulation of action rules for the clarification and definition of the concepts used in such a way as to obtain an absolute univocity of meaning. For example, the operational definition of the physical quantity “speed”, for which a faster object travels a greater distance at the same time, or the same distance in a shorter time, implies identifying two measuring instruments (the stopwatch and the meter) and a protocol, i.e., the determination of an unambiguous procedure with which to use the measuring instruments. Instead, what the adjective “operational” equates to in these manuals is nothing more than simplified descriptions of symptoms and signs, which are not always phenomenologically correct (Nordgaard & Parnas, 2013, p. 434). Consequently, Nordgaard and Parnas (2013, p. 435) argue that the operative diagnostic criteria represent third-person data not adequately reflecting first-person experiences. This discrepancy in diagnostic criteria between first-person experiences and third-person data may

influence the validity of the epistemological object of psychiatric nosology. In logic, validity and invalidity refer to arguments, while true or false refer to propositions (Hacking, 2001). Propositions consist of premises and a conclusion and validity concerns the logical nexus between them. This is different from diagnostic validity or the validity of the psychiatric object, which concerns the connection between measurement and mental disorder. Thus, diagnostic validity is about measuring mental disorder accurately, while diagnostic reliability is about measuring it consistently (Zachar & Jablensky, 2014, p. 3). Low validity indicates a discrepancy between measuring mental disorder accurately, i.e., the measurement does not accurately depict mental disorder. Validating diagnostic criteria has been challenging, seemingly inconclusive (Zachar & Jablensky, 2014, p. 7). In this respect, the operative diagnostic criteria and the current conceptualization of mental disorder may not adequately represent mental symptoms (Phillips, 2014, p. 166). The etiology of the operative diagnostic criteria has still not been validated (Cooper, 2018, p. 50; Zachar & Jablensky, 2014, p. 9).

The observational and descriptive criteria depict psychological and behavioral functioning. These criteria are normative as they make value judgments about what is considered to be pathological i.e., what is not functioning as it should be. However, the operative diagnostic criteria are inattentive to the norms of psychological and behavioral functioning since the criteria are solely based on descriptions and observations (Bolton, 2008, p. 97; 99; 119). Furthermore, these criteria are embedded in implicit neo-positivistic and neo-Kraepelinian epistemologies that may influence how the DSM-5 conceptualize mental disorders and demarcate the normal from the pathological. As they are implicit, the operative diagnostic criteria neglect the normative aspect of psychopathology inherent in observational and descriptive terms. As a consequence, the psychiatric nosology neglects that “[...] mere observation does not exist, that all facts are theory-laden [...]” (Aragona, 2013b, p. 420) and that our epistemological perspective influences what we look after (Marková & Berrios, 2016, p. 193).

### The DSM-5’s conceptualization of psychopathology

The psychiatric objects of psychiatric inquiry are mental symptoms and mental disorders, namely psychopathology. *Psychopathology* is defined both as the scientific study of mental disorders “including their theoretical underpinnings, etiology, progression, symptomatology, diagnosis, and treatment” and as “the behavioral and cognitive manifestations of such disorders” (VandenBos, 2007, p. 861). In the latter sense, psychopathology is synonymous with mental symptoms and mental disorders (VandenBos, 2007, p. 861). The DSM 5’s conceptualization of psychopathology affects both meanings.



One of the main expectations of the DSM-5 was to integrate a neurobiological approach in order to describe psychopathological syndromes. The DSM-5 Task Force argues that a biological framework, including cognitive neuroscience, brain imaging, genetics and epidemiology, increases mental disorder comprehension (American Psychiatric Association, 2013, p. 5). These research fields delineate *averages* and *deviations* in the statistical sense. Although it is highly plausible that mental disorders involve neurobiological mechanisms, mental disorders also include other higher-order aspects (Maj, 2016, p. 2). Despite these expectations of a turning point of a “neuroscience-based DSM”, the DMS-5 continues the nosological approach of the preceding editions. Mental disorder continues to be defined as a syndrome. Hence, a mental disorder is a more or less characteristic complex of symptoms without a precise reference to its causes and mechanism of appearance.

The DSM-5 conceptualizes psychopathology as a mental disorder in the following manner:

*A mental disorder is a syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with significant distress or disability in social, occupational, or other important activities. An expectable or culturally approved response to a common stressor or loss, such as the death of a loved one, is not a mental disorder. Socially deviant behavior (e.g., political, religious, or sexual) and conflicts that are primarily between the individual and society are not mental disorders unless the deviance or conflict results from a dysfunction in the individual, as described above (American Psychiatric Association, 2013, p. 20).*

Although the definition includes the individual's environment, it favors individual factors, which becomes evident in the quote's last sentence. The last sentence presupposes that any deviant social behavior that is primarily between the individual and society cannot be a mental disorder if the mental disorder is not already present in the individual. Thus, suggesting that certain social aspects cannot influence the DSM-5's view of psychopathology. The definition of psychopathology favors an intrapsychic and biological malfunction in the individual that is not affected by the environment. This definition resembles the definition of mental disorder in the DSM-III:

*[T]he mental disorders is conceptualized as a clinically significant behavioral or psychological syndrome or pattern that occurs in an individual and that is typically associated with either a painful symptom (distress) or impairment in one or more important areas of functioning (disability). In addition, there is an inference that there is a behavioral, psychological, or biological dysfunction, and that the disturbance is not only in the relationship between the individual and society. (When the disturbance is limited to a conflict between an individual and society, this may represent social deviance, which may or may not be commendable, but is not by itself a mental disorder.) (American Psychiatric Association, 1980, p. 6).*

Based on the two definitions of mental disorder above, psychopathology's conceptual change from the DSM-III to the DSM-5 has been negligible. Moreover, the definition of mental disorder in the DSM-IV is said to be the same as the one in DSM-III and DSM-III-R (American Psychiatric Association, 1994, p. xxi), but there appears to be a slight difference (Cooper, 2018, p. 58). Cooper (2018, p. 54) argues that the diagnostic criteria in the DSM-5 are very similar to those in the DSM-IV. However, she contends that the DSM-5 is different on the structural level compared to preceding editions, e.g., it abandons the multi-axial system, there is a slight change in mental disorder conceptualization, includes theory, and how the classification may produce harm. Thus the difference in mental disorder conceptualization between the DSM-III and 5 seems to be only changing the word "typical" to "usually." Cooper (2018) shows that the DSM-IV conceptualization assessed harm differently than both. Whereas the DSM-IV inferred that harm was conceptually tied to disorder, the DSM-5 (and the DSM-III) does not (Cooper, 2018, p. 56). In this regard, a person may be diagnosed with a mental disorder even though the disorder causes no harm (Cooper, 2018, p. 62). It should be mentioned that both the DSM-III and 5 include diagnostic criteria that specify that the symptom cause some form of harm, e.g., some substance-related and addictive disorders (American Psychiatric Association, 2013) and substance-induced organic mental disorders (American Psychiatric Association, 1980) include such specification.

The DSM-5's other main aim was to introduce dimensional classification in the diagnostic system instead of the categorical approach. However, the DSM-III and DSM-IV were dimensional in the sense that they endorsed a multi-axial approach to psychiatric classification (Kastrup, 2002, p. 123). They too recognized that it is challenging for a single diagnostic category to capture the complexity of mental disorder. In the categorical approach, the diagnosis is based on defined criteria that can be present or absent. In the dimensional approach, the disorder symptoms are defined along a continuum ranging from normal to pathology. The DSM-5 Task Force recognizes that an overly rigid categorical classification captures neither mental disorders nor always fits entirely within the boundaries of a single disorder: "[t]he boundaries between many disorder 'categories' are more fluid over the life course than the DSM-IV recognized." Consequently, the DSM-5 tries "[t]o introduce dimensional approaches to mental disorders, including dimensions that cut across current categories" (American Psychiatric Association, 2013, p. 5). The DSM-5, nevertheless, remains a categorical classification of separate disorders (American Psychiatric Association, 2013). That is why the definition in the DSM-5 appears to emphasize a quantitative difference between the normal and the pathological. A mental disorder is a disturbance of normal mental functioning, measurable as a quantitative difference toward the more or the less

(Aragona, 2009, p. 4). Furthermore, psychopathology's conceptualization focuses on three keywords: disturbance, dysfunction and disorder, which emphasize a quantitative difference between normality and pathology. A disturbance reflects an *unbalance* of the mental field, while a dysfunction refers to abnormal or impaired functioning of a bodily system. Disorder connotes a *lack* of normal functioning (Disordee, n.d.; ; Disturbance, n.d; Dysfunction, n.d.). These concepts state that pathology represents a “lack” or “unbalance” of normal functioning. Consequently, psychopathology and psychiatric diagnoses are understood as quantitative deviations from the normal.

### Epistemology, psychiatric nosology, and psychopathology

The neo-positivism and neo-Kraepelinian view in the DSM-5 psychiatric nosology seems to overlook that there is a relationship between a scientific method, theoretical point of view and epistemological object. Bachelard (1993, p. 70) argues that science “[. . .] realizes its objects without ever just finding them ready-made.” Observations are theory-laden, and scientists *see* with their theories (Popper & Notturmo, 2014, p. 8). Effectively, observations are a function of the environment and prior (theoretical) knowledge (Hanson, 1965). Hence, the method and theoretical perspective realize the epistemological object and do not discover the object in itself. Scientists use methodological instruments to explore an idea, but instruments do not pose questions (Canguilhem, 2000, p. 107). Canguilhem (2005, p. 203) further emphasizes:

*[. . .] natural object, outside of all discourse held on it, is indeed not a scientific object. Nature is not of itself cut and partitioned into scientific objects and phenomena. It is science which constitutes its object from the time when it invents a method for forming, by propositions capable of being consistently combined, a theory controlled by the concern of finding itself to be mistaken.*

The quote shows how scientific objects are interlinked with scientific theory and method. Canguilhem distinguishes between ontology and epistemology in the sense that scientific objects are constituted by methodical discourse and, therefore, secondary to natural objects (Canguilhem, 2000, p. 26). He talks about epistemology. This is relevant to point out as discussions about natural objects and scientific realism is a vast topic. Canguilhem (2005, p. 204) examines the search for truth, and the history of science is an axiological activity. In this context, he would agree with scientific realism that our best scientific theories give us knowledge about the observable and unobservable world. However, there are different notions of scientific realism (Chakravartty, 2017), and he would not contend that scientific objects correspond to natural objects. Canguilhem's stance seems close to Popper's

about the usage of the term “real.” Popper claimed that we use the term real “to characterize material things of ordinary size” (Karl & Eccles, 1977, p. 9). Popper states that entities we argue to be real should be able to exert a causal effect upon the material things we conjecture to be real. On the same note, Hacking (1983, p. 146) argues “we shall count as real what we can use to intervene in the world to affect something else, or what the world can use to affect us.” The main issue, at least in the present paper, is not whether mental disorder is a natural kind or not, but rather the DSM-5’s narrow view of psychopathology as real biomedical entities and its lack of justification for this view as this lack may lead to ontological reductionism. It is reasonable to consider mental disorder as a biologically, socially, and psychologically caused, so the shift to one view of mental disorder should be clarified by the DSM-5.

Scientific concepts should conform to specific norms of scientificity, what Canguilhem above calls “*a method for forming, by propositions capable of being consistently combined, a theory controlled by the concern of finding itself to be mistaken.*” Scientists use methods to investigate objects and, in Canguilhem’s view, these objects are both discovered and constructed. He does not dismiss that there are natural objects independent of scientific discourse but that such objects are not scientific objects. However, Canguilhem’s stance seems to differ from a “natural kind” understanding of scientific objects if such a stance presumes the possibility of speaking of an object without epistemological assumptions (Kirby, 2002). Thus for Canguilhem, scientific objects are real entities about natural objects with specific epistemological assumptions attached. Although this is a contested topic, this paper deploys Canguilhem’s epistemological stance to examine the psychiatric object in the DSM-5.

The DSM-5 appears to claim that the investigation of the psychiatric object should primarily be done from a neurobiological and medical framework (American Psychiatric Association, 2013; Kupfer et al., 2013, p. 1691). As mentioned above, it views the operative diagnostic criteria as reflecting underlying (authentic) biomedical dysfunctions. It seems that it follows a naturalist understanding of psychopathology, i.e., pathology should be understood as occurring at the biological level. Biomedical dysfunctions may then be empirically investigated using neurobiological research since “mental disorder” results from inherent biomedical dysfunctions. Explicitly this view assumes that there is some natural biomedical functioning where “natural” refers to independent of an observer (Nigel et al., 2014, p. 83). As such they are mind-independent entities marking a real division in nature, i.e., they exist independently of psychiatric classification. This may be called a naturalist understanding of “mental disorder.” However, Kupfer et al. (2013, p. 1691) neither justify why the DSM-5 should “better resemble the rest of medicine” nor does the DSM-5 argue why it prefers a medical view of

psychopathology (American Psychiatric Association, 2013) more than a biopsychosocial one (Cooper, 2018, p. 56). To summarize, it appears that the DSM-5 claims there are biologically objective and mind-independent causes of ‘mental disorder.’

However, as Canguilhem stresses, scientific objects cannot correspond to an extra-linguistic reality. They should conform to norms of scientificity, i.e., standards or rules that constitute the application of scientific methods and principles (Canguilhem, 1988, p. 33). Scientific concepts, e.g., mental disorder, should be validated through scientific methods, according to Canguilhem. Moreover, a practice may be called scientific “[i]f it provides a model for the solution of problems and if that model gives rise to effective therapies” (Canguilhem, 2000, p. 146). Thus, scientific theory should be established and progressed by practice (Zong Liang, 2005). In this context, the DSM-5’s conceptualization of mental disorder should be validated with methods from its biomedical framework, i.e., biological markers and underlying mechanisms should be validated by genetics, cognitive neuroscience, epidemiology, and brain imaging (American Psychiatric Association, 2013, p. 5; 13), and give rise to effective therapies.

When science uses concepts to explicate objects, pre-theoretical and pre-empirical assumptions follows. Pre-theoretical assumptions refer to philosophical preconditions that we all have in research. These are implicit and revolve around how the world is (ontology) and what we can know about it (epistemology) or how science should be practiced (normative) (Andersen et al., 2019, p. 1). However, philosophical preconditions do not impede science if we are aware of them. The neo-positivist and neo-Kraepelinian epistemology and naturalist ontology in the DSM-5 represent philosophical preconditions. Since these philosophical preconditions are implicit, it may hinder the progression and the use of psychiatric nosology. Certain scientific concepts in the DSM-5 illustrate the type of philosophical preconditions the DSM-5 has. Take the abovementioned concepts, dysfunction, disturbance and disorder used to study and conceptualize mental disorders. First of all, these concepts are considered descriptive of mental disorders. However, they are also normative. Thus, the operative diagnostic criteria and the conceptualization of psychopathology uphold a descriptive *and* normative view of mental disorders, but it fails to recognize the latter since it considers mental disorders as primarily resulting from biological dysfunctions. This also seems to be the implication of the conjecture that mental disorder “usually” is associated with significant distress or disability in the social or occupational life of the individual. Such a statement appears to imply that individuals could be disordered without experiencing “significant distress or disability” in social or other important areas of life. This conjecture suggests a divide between the patient’s voice of suffering and

psychiatry. Fundamentally this view postulates that there is an objective disorder without the evaluation from the patient suffering.

The framework used to study psychopathology influences interpretation. Favoring one framework over others may neglect other frameworks. In that case, the conceptual development of psychopathology would be narrowed, with fewer empirical and theoretical frameworks influencing conceptual progress. If the mental disorder of depression is primarily studied using neurobiological methods and understood using neuroscientific theories, other methodological and theoretical approaches may receive less attention. Conceiving depression as primarily occurring in the brain, the most suitable treatments for depression would be brain interventions. Explaining psychopathology from ever-smaller entities is not a problem *per se*. However, it can become a problem when claiming that brain dysfunctions are psychopathology's *real* nature, thus leading to ontological reductionism instead of methodological reductionism (i.e., using scientific methods in order to explain parts of a phenomenon in smaller entities).

The DSM-5's psychiatric nosology implicitly supports certain epistemological frameworks over others due to a quantitative reduction of psychopathology. This quantitative reduction might influence psychiatry as psychiatry uses the DSM-5 to diagnose patients and subsequently apply treatments. Since the DSM-5 leans toward neuroscientific and quantitative sciences over social and humanist approaches and qualitative research, this may influence how mental disorders are comprehended and treated by psychiatry. In this context, the DSM-5 risks disregarding the interrelationship between psychiatry's hybrid nature and psychiatric nosology. Ultimately, psychiatry is influenced by multiple epistemologies, while the DSM-5 is influenced mainly by neo-positivism and a neo-Kraepelinian framework. This may be problematic as psychiatry requires an interrelationship between various approaches, such as social psychology and neuropsychology, to comprehend psychopathology (Marková & Berrios, 2012, p. 226). Consequently, the DSM-5's neo-positivist and neo-Kraepelinian based nosology may stand in the way of psychiatry and psychopathology's hybrid nature, which may push psychiatry toward becoming a monistic discipline that unknowingly obstructs the integration of other ways of explaining mental suffering.

Another epistemological consequence of mainly adhering to neo-positivism and neo-Kraepelinian concerns a narrowing of our understanding of mental disorders. Prioritizing quantitative differences over qualitative ones has practical implications since quantitative difference operates at a different epistemological level than qualitative ones. For example, a quantitative focus and neuroscientific perspective operate at a level separated from humans practical everyday engagements which is a necessary precondition for making the world intelligible (Husserl, 1970). This level is

theoretical abstractions from neuroscience and derivative laws of mental disorder, i.e., it is the world of science and not our everyday world. Human beings do not live among these abstractions and laws, but with other human beings and events which vary these laws – “What holds up the bird is the branch and not the laws of elasticity” (Canguilhem, 1991, p. 197). To continue at this epistemological level, we must reduce the bird to colloidal solutions (Canguilhem, 1991, p. 110; 197–98). Likewise, to say that psychopathology is “nothing but” or “no more than” the communication between nerve cells reduces mental states to biological correlates. However, this view fails to notice that humans are bodily and social beings who live in a material and interpersonal world (Fjelland, 2020, p. 7). As a result, the DSM-5’s biological framework risks neglecting how the patient’s everyday lifeworld is interwoven with its biology and is a necessary precondition for understanding suffering. It seems that the dynamic polarity of life in its self-preservation to continue is lacking (Macherey, 1998, p. 109), i.e., how the patient strives to establish norms to modify its conditions in the world (de Cuzzani, 2003, p. 134). Hence, the patient is normal when he or she reflects an effort to maintain him or herself within norms that permit for some variation, in the sense that one of the norms may prove to be more beneficial in response to changes in environmental conditions (Canguilhem, 2000, p. 354).

### The quantity and quality of psychopathology

As referred to above, the psychiatric nosology of the DSM-5 uses certain concepts to denote mental disorders advocating a quantitative focus on psychopathology. These concepts are dysfunction, disturbance and disorder, abnormal and anomaly. As dysfunction, disturbance and disorder were explicated above, we now focus on the latter two.

Anomaly is a substantive with no corresponding adjective, while abnormal is an adjective with no substantive. Anomaly originates from the Greek word *anomalía*, meaning unevenness or roughness. *Omalos* in Greek means that which is even or smooth. Etymologically, anomaly means *an-omalos*: that which is uneven concerning terrain (Canguilhem, 1991, p. 131). One common mistake is to assume that anomaly is derived from the Greek word *nomos* instead of *omalos*. The former means law, hence anomaly becomes *a-nomos*. In this case, we have a law (*nomos*) and a rule (*norma*).

Anomaly is a fact, semantically speaking, and a descriptive term, while abnormal implies a reference to a value and is a normative term (Canguilhem, 1991, p. 132). However, their respective meanings have been confused and switched. Anomaly has become a normative term, while abnormal has become a descriptive term (Canguilhem, 1991, p. 132). The contemporary definition of anomaly still refers to such

a distinction. An anomaly is a deviation or departure from the normal or rule (Anomaly n.d). This misconception brought the terms closer together and resulted in anomalies being explained and not evaluated by natural science (Canguilhem, 1991, p. 132). In the history of biology, an anomaly has been understood as a deviation from the majority and conceived as an empirical and descriptive concept, a statistical deviation (Canguilhem, 1991, p. 133). Thus, anomaly's reference to a living being's life and what obstructs and helps the individual appear weakened. The weight of *function* appears to be sidestepped over structure and form. Canguilhem (1991, p. 135) emphasizes that any anomaly is first perceived consciously and evaluated as hindering the living organisms' performative functions. Such sensation must be termed normative; the sensation is a value judgment concerning the individual's functions in its current environment. If the anomaly does not harm the individual's life, it is not pathological. Preference and exclusion are essential evaluative sides of living. Canguilhem's claim is not about what individuals may think but about how the organism expresses difficulties in life when noticing them. In this sense, he speaks of organic anomaly and not sociological anomaly. According to Canguilhem, there is no fact that is pathological or normal in itself. An anomaly need not be pathological but expresses other possible norms of life (Canguilhem, 1991, p. 144).

When demarcating disease from the normal state, understood as most what is most frequent, we narrow our understanding of the normal and the pathological. In contrast to the positivist thesis, according to which there is a continuum whose variation is purely quantitative between the normal and the pathological, Canguilhem proposes a new concept, that of normativity. The polarity within life and death, disease and health, of the living organism is expressed in the creation of norms. Health and illness are not neutral objects that can be described statistically, but also psychic or/and biological values or disvalues (Canguilhem, 1991, p. 197; 137; 228).

Let us clarify the relationship between the concepts of normal and normativity. Canguilhem (1991, p. 125) advocates that the concept of normal is "equivoque", i.e., equivocal. Current definitions suggest that "normal is that which is such that it ought to be" (Canguilhem, 1991, p. 125). Canguilhem observes, "this term is equivocal, designating both a fact and a value attributed to this fact by the speaker, by virtue of a judgment of appreciation which takes it into account" (Canguilhem, p. 125). Hence, Canguilhem (1991, p. 126) turns to the concept of "normativity". "Normative, in philosophy, means every judgment which evaluates or qualifies a fact in relation to a norm, but this mode of judgment is essentially subordinate to that which establishes norms. Normative, in the fullest sense of the word, is that which establishes norms" (Canguilhem, 1991, pp. 126–27). The functioning of an organism that takes place not according to univocal and necessary laws, but according to norms can be



qualified as “normative”. Hence, a characteristic of a living being is the ability to live ill as well as healthy, i.e., to maintain a certain degree of “rules”, even in its abnormal functioning. Canguilhem (1991, p. 125) prompts us to distinguish between two meanings of “normal”. In common sense, normal corresponds to the general standard, i.e., both the average and the type of optimal operation. However, everything that follows a norm is also “normal”. Canguilhem (1991, pp. 284–85) highlights the entire paradox of the norm. Under the abnormal is always another form of the normal. The patient is not without norms. Despite the anomaly from which she suffers, her organism attempts a new equilibrium, a new compromise of normality (of coherence in general functioning). Consequently, from Canguilhem’s perspective, anomaly, abnormal, disturbance, disorder and dysfunction are normative concepts when they are used to characterize something as too little or too much from the normal state.

According to Canguilhem (1991, p. 196; 228), the living organism does not know what reversibility is. The organism makes repairs that represent physiological innovations and the transformation of rules. The reduction in the ability to establish new physiological norms is an expression of the current severity of the disease. Based on his analysis, Canguilhem (1991, pp. 223–25) notes that disease is also a biological norm. Therefore, a disease is not something abnormal in itself, but becomes abnormal only in a particular situation. More specifically, having “health” and being “normal” are not equivalent dimensions because disease also represents something normal. Can we then claim that an entire existence without any disease would be a normal existence (de Cuzzani, 2004, pp. 24–5)? Iteratively, Canguilhem argues, there is always irreducibly a norm below the abnormal and a form of “normal”. This perspective is not a form of relativism because it does not deny the significant difference between a healthy human being and a sick human being. This difference depends on the quality of life we lead: the sick organism is characterized by the limitation of the power to establish norms:

*As a consequence we must say that the pathological or abnormal state does not consist in the absence of every norm. Disease is still a norm of life but it is an inferior norm in the sense that it tolerates no deviation from the conditions in which it is valid, incapable as it is of changing itself into another norm. The sick living being is normalized in well-defined conditions of existence and has lost his normative capacity, the capacity to establish other norms in other conditions (Canguilhem, 1991, p. 183).*

In the sick person, the normative capacity to implement new norms and transform old ones is reduced. If the individual cannot create new norms, its state will be called pathological, but not normless. The DSM-5 lacks this normative aspect of mental disorders by implicitly committing to a neo-positivistic and neo-Kraepelinian epistemology.

## Psychopathology is a heterogeneous state

To recap our arguments above, we claim that the normal and the pathological are not solely quantitative differences of the same state, i.e., normality and pathology are homogenous, but pathology is modifications of normativity. However, the DSM-5's psychiatric nosology neglects the heterogeneity between the normal and the pathological.

One possible reason for this neglect is that psychiatric science has found in the statistical average a scientifically objective equivalent of the concept of "normal" as medical science once did. This idea has its roots in Quetelet's thesis, the initiator of biometrics, according to which the binomial curve of Gauss would allow a definition of the average man (Canguilhem, 1991, p. 156–59). For Quetelet, the differences between individuals and their distribution on both sides of the top of the curve are due only to accidental causes. However, we find ourselves in the presence of two averages: one purely arithmetic, originating from a consideration of the set of individuals, the other which, by eliminating the extremes, considers only the largest subgroups, composed of individuals in which the value considered is more frequent than the extreme values. Thus, the top of the curve defines the statistical notion of "average". Furthermore, "being average" becomes one of the possible meanings of "being normal". Nevertheless, Canguilhem (1991, p. 160) argues that a human trait would not be normal because it is frequent, but frequent because it is normal. A human trait is "normative in a given type of life" (Canguilhem, 1991, p. 160). That characteristic and "average" trait would not express a particular stable equilibrium, but rather the unstable equilibrium of almost equal norms and forms of life temporarily reunited (Canguilhem, 1991, p. 162). Therefore, the biological constant of a living organism cannot be predicted a priori because the living organism constantly oscillates between precarious equilibrium states in the field of livability. In this way, Canguilhem (2012, p. 174) emphasizes the importance of a further factor that determines normativity, the conditions of life. For example, the hypoglycemia level observed in some Africans does not cause them any trouble, but would be dangerous for a European (Canguilhem, 1991, p. 171). Hence, in humans, statistical frequency also expresses biological and social normativity.

Not only does the concept of somatic pathology, analyzed by Canguilhem (2012), relates to the concept of "normal", but also the concept of mental pathology or psychopathology in the DSM-5. Moreover, it encounters the same difficulties. Positivist medicine makes the concept of pathology coincide with the quantitative modification of the physiological state called "normal", understood in relation to a statistical average, to call itself scientific. The pathological states, therefore, coincide with the quantitative deviations from the average/normal. However, Canguilhem (1991, p. 111)

observes, “The substitution of quantitative progression for qualitative contrast in no way annuls this opposition”, i.e., the opposition between the pathological and physiological. Even if mental disorders are considered a reflection of a quantitative deviation from the normal state, such an alteration will always be an expression of altered quality: “Quantity is quality denied, but not quality suppressed” (Canguilhem, 1991, p. 110). Canguilhem (1991, p. 110) gives as an example the phenomenon of light. Science reduces the qualitative variety of simple lights – which our eye perceives as color – to the quantitative difference in wavelengths. However, the qualitative variety remains in the form of quantitative differences in the calculation of wavelengths. In this way, increasing and decreasing, the quantity transforms into quality. From this perspective, Canguilhem (1991, p. 110) concludes, it is unjustified to affirm that the pathological state is only a quantitative variation of the physiological state and thus expresses the normal and the pathological as differences of the same state. To claim that the normal and pathological are differences of the same state is possible because one has affirmed homogeneity between them, based on denying quality. This thesis, however, goes beyond the proclamation of a simple continuity since it affirms a relationship of identity between the normal and the pathological. However, the use of the concept of normality implies a recognition of differences. For Canguilhem, this is not so much about patients’ experiences but about what the physician or physiologist interprets. He argues that normal and pathological have no meaning on a scale if we reduce the psychiatric object to biomedical interactions. This does not exclude the possibility of obtaining numerical results from analyses of pathological functions, which may be helpful. Canguilhem questions whether these numerical results in relation to the pathological as a quantitative variation of the normal are purely quantitative, and he argues that such quantification is expressed in relation to a norm. What Canguilhem (1991, p. 111) claims is that quantitatively different results would have no value or quality (in the laboratory) if they were not already part of a larger context (the clinic or hospital).

### **Psychiatric nosology is inherently normative**

The DSM-5 contains certain philosophical preconditions, such as the empirical and objectifiable nature of mental disorders. Thus, psychiatric classification is normative in the sense that it is based on value statements. A consequence of this neo-positivist framework is the assumption that psychopathology and normality reflect a difference in the degree of a homologous state, i.e., pathology is a deviation from normality and normality is derived from the statistical average. However, the concept of normativity suggests that it is possible to conceive of pathology and

normality in a different way. Normativity stresses that psychopathology and normality are heterogeneous states with different norm producing capacities. By including Canguilhem's concept of normativity in the DSM-5's conceptualization of psychopathology mentioned on page 9 it may be possible to progress the present psychiatric nosology.

Integrating normativity in the conceptualization of psychopathology may be easier than initially presumed. One reason, as we have already argued above, is that the concept of normal is equivocal. "Normal" already refers to what is most frequent of a given phenomenon and the mean of a measurable size, and what is as it should be. The term is both descriptive and normative. On a similar note, it may be postulated that psychopathology also includes this ambiguity. Psychiatry treats psychopathology as a statistical deviation from the average, which denotes what is as it should *not* be. Consequently, it may be possible to preserve the quantitative and descriptive nosology while refurbishing the inherent (reduction in) normativity in mental disorders. On the one hand, as Canguilhem (2012, p. 239–40) has pointed out, by indicating a state as normal or abnormal, it is attributed a value or a negative value. A mental disorder as a mental state that differs from the "Normal" one is a negative value from which to retreat to return to normality. However, the implicit normativity of psychiatric nosology is not only found here; mental disorders are also an expression of the normativity of the individual. Referring to Canguilhem (2012), the patient suffering from a mental disorder does not live in a universe without rules or norms. He or she, or rather his or her conscience of the self, assumes new reactions. These reactions are characterized by the fact that he or she has adopted new rules and norms through a reduction or modification of activity in relation to a shrinking or restricted environment. With Canguilhem (2012), we can make the following interpretation: the sufferer is ill because he or she cannot provide access to more than one type of lifestyle. In other words, the sick are not individuals without norms, but individuals who have lost, modified or weakened their normative capacity: the ability to establish new norms in the face of changing living conditions. Even illness, continues Canguilhem, is a lifestyle in which the intrinsic normativity of the individual is expressed (de Cuzzani, 2003, p. 117; 122–24; 143). Studies of changing life-worlds in schizophrenia patients may be thought of as exemplifying a change in their normativity. For instance, the life-world approach regards bizarreness as a change in human experience rather than purely pathological (Owen, 2016). There have been similar results in bipolar disorder (Rusner et al., 2009). From a Canguilhemian perspective, these studies show that there exist different norms of living that come to the forefront in the communication of their experiences. Such as "an illness that is intertwined with one's whole being" (Rusner et al., 2009). In the strict sense, these disorders may be viewed as representing pathology, i.e., reduced normativity, since

they imply difficulty with understanding their environment, which apparently contributes to suffering. Moreover, as mentioned above, the DSM-IV conceptualization of mental disorders had a stronger affinity to harm than DSM-III and 5. From a Canguilhemian perspective, something which stands in the way of the performance of functions, or discomforts or harms, is seen as an anomaly (Canguilhem, 1991, p. 135). In this sense, if the harmfulness reduces the organism's normativity, it is a sign of pathology. The inclusion of harm in relation to mental disorders seems important as some patients claim to experience recovery and show increased professional and social functioning even though they have ongoing symptoms (Friesen, 2019, p. 251). Consequently, if the conceptualization of mental disorder includes normativity, it seems to emphasize the qualitative sides of mental suffering. It underscores individuals' experiences of harm as necessary to be diagnosed with a disorder. Further, this inclusion may make room for considering qualitative research to a larger extent, and what matters for patients.

There are other possible pitfalls with adhering to a neo-positivist epistemology of mental disorders. 1) through operationalism they are perceived as objective representations and 2) an increase or decrease of symptoms may measure improvement. To view mental disorders as objective representations of reality may conflate (scientific) truth about pathology and normality with the objective reality of these states. In a neo-positivist framework, naturalization claims that the theoretical apparatus is part of reality, stating that “[. . .]” constructions” are in reality reconstructions, to be precise, *reconstructions* of what has been developed by nature/reality and is, *therefore*, inherent in nature or reality” (Puntel, 1999, pp. 120–121, italics in original). Hence, current psychiatric nosology risks neglecting how truth is dependent upon scientists while the objective reality is not (Fellowes, 2021, p. 2). To deem experiences that cannot be operationalized as meaningless and those who can as objective and sensible, like Hempel (1954) does, sets limits to what may be considered as knowledge about psychopathology. It rules out certain empirical observations, or at least makes them less valuable, if they do not fit the neo-positivist framework. Take, for example, hermeneutical methods, which focuses on interpreting the world without reducing essential immaterial aspects of human life. In the case of mental disorders, hermeneutics would seek to understand and interpret the lifeworld of the patient, whereas neo-positivism reduces the patient's world into the observational vocabulary of science with the help of operationalism (Hempel, 1954). Hence, the neo-positivist epistemology of the DSM-5 implicitly devalues hermeneutical approaches since it does not reduce the patient's lifeworld in the same manner. In effect, this may hinder epistemological and theoretical pluralism in developing psychiatric nosology as it may consider sciences that adhere to the neo-positivist epistemology more objective than others.

Argument two rests on the fact that some structured interviews operationalize symptoms of mental disorders to differences of numerical degrees, such as the Symptom Checklist-90-Revised (SCL-90-R) (Derogatis & Unger, 2010). Thus, symptoms are either present or not. This, too, may narrow the concept of psychopathology, and other concepts such as recovery, to purely quantitative ones. Thus, leaving out other ways of understanding mental disorders or improvement, such as qualitative ones. For example, improvement in life rests not only on a measurable scale, but also on evaluative assessments, which may not easily convey into a quantifiable domain. Moreover, it may overlook that a quantitative cutoff is conventional, derived from scientists (or clinicians) judgments. Thus, in a sense, it is arbitrary in that a specific number on a scale may not have the same meaning of improvement, or indeed suffering, for two different patients, or indeed the clinician and patient. A quantitative approach fails to notice this subtle qualitative difference. Expanding outcome measures in schizophrenia research may suffice as an example. For some time, schizophrenia research used outcome measures that primarily focused on symptom scales. After a while, there was increased criticism toward relying on symptom scales as a measure of efficacy due to low effectiveness, i.e., translating results from randomized clinical trials into clinical practice was poor (Friesen, 2019, pp. 246–47). Additionally, there was increasing awareness of the difference between factors considered by symptom scales and the factors thought of as essential for those diagnosed with schizophrenia. The latter may be seen as driven forward by the recovery movement and their demand to include more meaningful outcomes in research (Friesen, 2019, p. 247). Ultimately, these criticisms lead to developing functional and recovery measures that focus on work or school and hope and relationships rather than symptom scales that focus on, e.g., the presence of hallucination. This shift appears to have acknowledged that focusing on symptom scales may neglect essential aspects of people's lives that are necessary to obtain recovery, such as personal and social functioning (Davidson et al., 2007; Price-Robertson et al., 2017).

## Conclusion

Our analysis suggests that psychiatry's view of mental disorder as a homologous state between the normal and the pathological is inadequate. By focusing too much on the difference in quantity, this view overlooks that the normal and pathological are heterogenic. Hence, it omits that they also differ in quality and, consequently, neglects individuality. Normality may be defined differently. Rather than the "ideal" or "average", normality includes the individual's obstacles in current living. An immanent normativity characterizes everyday human living. We produce norms in life, regardless of

whether or not our life is limited by disease. What separates the former from the latter is our capacity to produce norms.

Moreover, the excessive focus on quantity is due to an implicit neo-positivist and neo-Kraepelinian epistemology. In this regard, psychiatry might have an overly narrow epistemological focus that may exclude or devalue other epistemological frameworks.

We propose that including normativity in the conceptualization of psychopathology will mitigate these weaknesses. Normativity may restructure our understanding of mental disorders from objectivity to individuality, because normativity emphasizes the heterogeneity of life, placing the individual in the foreground. As such, psychiatry moves away from understanding the pathological state as a modification of the normal state. Including normativity in the understanding of mental disorders will not lead to relativism. There is still a significant and qualitative difference between a healthy person's normativity and a sick one's. Including normativity may preserve the current psychiatric nosology while refurbishing the conceptualization of psychopathology. In this respect, the qualitative side of psychopathology is highlighted but notwithstanding the quantitative. Moreover, normativity underscores that the psychiatric object (i.e., psychopathology) is hybrid. This will probably strengthen the current psychiatric nosology's relationship with the hybrid biopsychosocial model, which is the bedrock of psychiatry. As a result, this mitigates epistemological monism as it opens up the possibility of psychopathology being understood from different epistemological frameworks.

## Note

1. Some may reproach, claiming that the DSM-5's symptom criteria reflect patients' experiences. However, the symptom-criteria are constructed by a Task Force, not patients (Aragona, 2009; Davies, 2017; Paris & Phillips, 2013). Although based on studies of patients, the DSM-5 field trials are said to primarily validate diagnostic criteria based on clinical consensus (Phillips, 2014, pp. 165–6). Therefore, the diagnostic criteria derive from interactions with patients, but they are. There is a similar critique of the clinical recovery framework in schizophrenia research. The personal and relational recovery framework argue that the criteria are researcher derived not adequately reflecting patients' views (Davidson et al., 2007; Price-Robertson et al., 2017).

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