Plutynski, A. 2023. Four Ways of Going "Right": Functions in Mental Disorder. *Philosophy, Psychiatry, Psychology* 30(2): 181-191.

FOUR WAYS OF GOING "RIGHT"

Functions in Mental Disorder

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The author reports no conflicts of interest.

Article submitted on August 23, 2022

Revision submitted on October 11, 2022

Accepted on October 24, 2022

ABSTRACT: In this paper, I distinguish four ways in which aspects or features of mental illness may be said to be functional. I contend that discussion of teleological perspectives on mental illness has unfortunately tended to conflate these senses. The latter two senses have played important practical roles both in predicting and explaining patterns of behavior, cognition, and affective response, and relatedly, in developing successful interventions. I further argue that functional talk in this context is neither inconsistent with viewing some disorders as dysfunctional in one of several senses, nor inappropriately adaptationist, provided we keep these senses of function distinct, and are precise about which is in play in a given context.

KEYWORDS: Function, dysfunction, mental disorder, heuristic role

There are a variety of ways in which talk of both "function" and "dysfunction" have played important heuristic roles in psychiatry and clinical psychology. Garson (2020, 2022) gives a history of "teleological" perspectives on mental disorders[1], according to which, mental disorders are taken to serve some purpose. In his historical narrative, however, Garson places rather more emphasis on continuities among these thinkers than disagreement. In the following, I argue that

the label of 'functional' has served to lump together quite diverse phenomena. Taking up this functional perspective in a serious way requires differentiating these views. My goal is thus to give a more fine-grained characterization of the variety of senses at play. I then describe several variants of the view that have played important heuristic, predictive, and explanatory roles, particularly in the context of clinical care. I conclude by addressing potential objections to this approach.

Some ground clearing is necessary before we begin. First, as recent scholarship has shown (Murphy, 2021), there is no consensus view among biomedical researchers or clinicians concerning how best to understand the appropriate use of "function." Although some take it that the only warranted sense of "biological function" is one traceable to a history of natural selection in the evolutionary past,[2] there are yet other notions of "function" at play in the biomedical literature. For instance, on Cummins's (1975) view, the "function" of an entity is the causal role it plays, in its contribution to the capacity or persistence of the overall system that includes it. Such an account is far more permissive. Thus, for the purposes of my paper, and in keeping with the diversity of uses of the term in the literature, I do not commit to one view of function. The goal is rather to document the variety of senses at play, and characterize their heuristic, predictive and explanatory roles.[3]

Further, a state of affairs can be "functional" in some respects, and "dysfunctional" in others. Taking both perspectives on the same state can yield fruitful insights into etiology and treatment, as has been argued in the context of somatic disease (Plutynski, 2018). Key to this possibility is first, that a candidate condition can be decomposed into discrete parts or processes, or habitual patterns of behavior and affective response. Second, functions are context dependent (e.g., a trait that might be "optimal" at one stage of development, or benefit the organism at one

temporal scale, but yield dysfunction at another stage or scale). Thus, when clinicians and researchers refer to mental disorders or disease (or, more often, features or aspects thereof) as "functional" (in one or more of the several senses specified below), and "dysfunctional" in another, they are not necessarily making a claim that is inconsistent. A habituated behavior, affective response, or combination of both, might be functional in one environment, or at one stage of life, and less so (or not at all functional) in another.

Most of the disorders of the DSM are characterized by clusters of symptoms. While some such symptom clusters might be grounded in or explained in terms of dysfunctional biological or psychological states (in one of several senses distinguished below), arguably, many are not so grounded, or perhaps might be better characterized as "emergent" clusters of similar habituated behavior, belief, or affect (Lilienfeld et al., 2019). In other words, the class of mental disorders listed in the DSM is not unified or explained via biological dysfunction (Wakefield, 2020). Insofar as many conditions are decomposable into various symptoms and habits, and insofar as some such symptoms or habits serve different needs at different times and places, it is not necessarily inconsistent to assert that at least some aspect or feature of mental disorder serves some "function," in some sense, while being "dysfunctional" in yet another sense.

NOTIONS OF "DYSFUNCTION" AND "FUNCTION" AT PLAY IN PSYCHIATRY AND CLINICAL PSYCHOLOGY

There are (at least) three common senses in which mental disorders are typically described as "dysfunctional": they may involve disruptions to selected mechanisms, they may involve failure of some part or process of a biological or psychological mechanism to play its causal role in the overall system of which it is a part, or they may involve disruptions to social roles. "Social-role functions" concern "whether a person is able to function well at school, at work, or in

interpersonal relationships." For instance, the American Psychiatric Association refers to an individual's "role or functioning in family, school, or community activities" (American Psychiatric Association, 2013) as the broad class of functioning that is typically disrupted in mental disorder. Mental disorders are said to disrupt social role functions when a person cannot "carry out his or her normal expectations and responsibilities."

In contrast, some psychiatrists and psychologists habitually refer to some aspects or features of habitual behaviors, beliefs, associated with mental illness, as serving (or having served) some function. There are at least four ways in which this "functional" talk in psychiatry might be understood, or four ways of "going right.": the condition (or aspects or features of a condition) a) served some function in the evolutionary past, and still performs that function ("mental disorder as adaptation"), b) served a function in the evolutionary past, but it no longer performs that function ("mismatch"), c) served some (either psychological or biological) function at some stage of life, but no longer currently (an "adaptive response gone awry"), or d) serves some psychological function currently, but in the long run is less than optimal in service of an individual's overall goals ("suboptimal response").[4] Among those with a "teleological orientation," then, psychologists may be referring to "biological" functions (a)–(b) or, to "mentalistic" or "psychological" functions (c)–(d), and sometimes, to both (c).

EVOLUTIONARY FUNCTIONS

Turning to the first two cases (a)–(b), evolutionary psychologists (e.g., Barkow, Cosmides, & Tooby, 1991; Nesse, 2001) take some mental illnesses to be driven by psychological mechanisms evolved for specific tasks. Such conditions enabled (some) of our ancestors to better survive and reproduce, given the complex social and physical environments they were confronting. For instance, according to Nesse (2000), depression may be a mechanism selected

for detaching from unrealistic life goals, or generalized anxiety disorder is a mechanism for making us hyper-vigilant to potential threats (Glover, 2011; see also Brüne, 2008). In some cases, these traits are still viewed as adaptive; in most cases, such conditions are taken to be a mismatch with our current environment. Such views have been subject to ample criticism in both the scientific and philosophical literature (e.g., Murphy, 2005**;** Murphy & Stitch, 2000).[5] Indeed, there is good reason to think that this is by and large not what clinical psychologists have in mind when referring to a behavior, affective response, or cognitive pattern as "functional" in some sense.[6] So, for our purposes here, I set these debates to one side.

PSYCHOLOGICAL FUNCTIONS

What has received far less attention from philosophers are cases of (c)–(d): aspects or features of many conditions (e.g., habits of belief, affect, or behavior) that are often spoken of as "adaptive," though not "adaptations." The central idea is that some habits of belief, behavior, affect, or all three, while harmful over the long run, might in the short term, or at one point in an individual's life history, have been an effective means of meeting a *social or psychological* need. To be sure, the *capacity* to form such habits is at least *indirectly* explained in terms of biological mechanisms, such as the capacity to form memories, learn, or respond to environmental threats. However, the resulting habits may be "maladaptive" in the long run, even if "adaptive" (though not "adaptations") in the short run. Such a view is not novel. For instance, Goldstein argued in his book, *The Organism* (1934), that "adaptivity," a feature he glosses as the "ability to continually modify… behavior in such a way as to surmount environmental challenges," is a common feature of all living things, and that "many of the psychiatric problems (such as those among "shell-shocked" war veterans) were adaptive, or compensatory responses to damage." On this view, the habituated behaviors or emotional responses typical of these soldiers suffering

from shell shock are by and large adaptive responses, as is the capacity to rehearse stressful situations in one's memory. These capacities enable organisms to either escape current threats or anticipate and plan for future threats. The problem comes when they become "entrenched," or habituated to such an extent that individuals become hyper-attentive to threats. Thus, while the capacity to respond to threats was selected for, the development of entrenched habits of over-active affective responses may be closer to an instance of (c) above: "adaptive response gone awry."

The central focus of the next section will be on how talk of "psychological" function of aspects or features of mental disorder informs many current theories, training methods, and successful interventions in mental health care. Habits of belief, behavior, or affective response may (at least initially) serve as coping mechanisms, or ways to adapt to difficult circumstances or affective responses to these circumstances. The goal of therapy (at least as often theorized by many clinicians) is to identify and shift such habituated patterns. In this way, talk of "function" has played a key heuristic role developing and applying successful psychotherapeutic interventions.

IMPLICATIONS IN CLINICAL PRACTICE

Below I provide several illustrations of how identifying and appealing to *psychological* "functions" to diagnose and treat patients has been fruitful in clinical practice. Indeed, referring to aspects or features of mental disorder (habits of belief, affective response, and behavior) as "functional" (in some sense), has been key to developing effective treatments for conditions like anxiety, depression, and trauma.[7] For instance, a therapist will attend to a client's patterns of psychological responses to specific events, interactions, or personal losses, in service of discerning what pattern of belief, emotion, and behavior has become typical or habituated for

them. To be sure, there are different theories about what prompts such habituated patterns, leading to different clinical recommendations, but key for our purposes is that patterns of social adjustment and emotional regulation are characterized in terms of their actual and potential "functional" roles in the psychology of the agent. Such psychological purposes are often not assumed to be deliberate or intentional. Such habits may have been learnt in service of goals that the individual is only vaguely aware of: coping with fear or anxiety, or maintaining coherence of social groups. Uncovering such entrenched patterns can inform effective treatment, whatever your theoretical orientation—whether cognitive-behavioral, dialectical behavioral, psychodynamic, or otherwise.

To illustrate, often therapists in training are puzzled by some pattern of belief or behavior in a client or patient. Why, for instance, does this successful individual have such self-undermining beliefs? Why does an educated, independent, woman or man stay with an abusive spouse? Why does a child continue to react violently to authority when it only yields punishment? Various models of training in therapy prompt the clinician to ask, "Why does the patient engage in X?" "What *function* does this behavior, belief, or pattern play for the client or patient?" "What role has this (defensive, problematic) behavioral, or belief pattern served?" "How might it serve some function, for example, managing anger, fear, anxiety, or disappointment?" Seeing such behaviors as serving a psychological function is often key to resolving such patterns. When the therapist can work with the client to identify these patterns, understanding one reason why they might be engaging in this pattern may help the patient reorient their attention away from the trigger (e.g., fear or anxiety that led to the behavior, affective response, or belief repetition) and direct them toward achieving the same end in a less harmful way.

Let us consider a concrete example. In a volatile family environment (such as with an abusive parent), becoming emotionally detached, or distrusting authorities, may have been "adaptive" during childhood. However, such habits of detachment (or "failures of attachment") can lead to "dysfunctional" states currently, in a variety of senses: an individual struggle with trust, may fail to develop lasting relationships, or struggle with authority in school or in the workplace (Riggs & Kaminski, 2010). Or a child with a neglectful parent may only receive attention, for instance, when they "act out." Thus, they come to develop such habits of behavior around those in authority. Recognizing such habitual patterns can help therapists connect this history of either abuse or neglect with a pattern of behavior, affective response, or both, and thus diagnose and better treat patients. Knowing that a child (or adult) has a history of abuse can lead a therapist to predict certain patterns of behavior; conversely, seeing patterns of behavior shared with others who have been abused (or neglected) can indicate that abuse (or neglect) may have been a contributor. In either case, one can better design a course of treatment that can address those patterns and develop more effective habits.

A habit of behavior or belief may also *currently* serve a psychological "function," while at the same time causing harm. For example, it is not uncommon for someone who has an abusive spouse to rationalize their behavior or echo their spouse's rationales for the abusive behavior (e.g., the spouse was tired, had a hard day, did not "intend" to lash out, I was "nagging" them, thus taking them "over the edge," etc.). Psychologists sometimes talk of such rationalizations and accompanying self-undermining beliefs as serving a "function," even if of the long run, they are less than optimal. The source of such self-undermining beliefs is varied. One immediate cause may be that repeated abuse teaches that failure to accept their abuser's rationalization can lead to even more abuse. More subtly, rationalizations or self-undermining

beliefs may also serve a function of protecting one from the shame of being in an abusive relationship or preserve hope that the abusive partner is "deep down," a" good guy," or "really loves me." In general, rationalizing of this sort is "functional," in the minimal sense that it is a coping strategy in a situation where there may be few options. Habits of thought, affective response, or belief may be reinforced by fear of further abuse, abandonment, or lack of love, security, or financial support (Barnett, 2001a, 2001b). Such habits become entrenched because they may maintain the family unit, preserve a sense of safety, or help fend off more destabilizing feelings of shame, or fear of abandonment or loss of love. Such beliefs that "this time will be different" sadly are all too common. This provides an illustration of how otherwise puzzling (or dysfunctional, irrational) beliefs can be made sense of in part by inquiring into the psychological function they serve. This can prompt the clinician to work with a patient find new ways to meet these same needs.

Indeed, several approaches to intervention presuppose such habits of belief and behavior to serve a function, though one that may not align with the client's long-term goals. For instance, "motivational interviewing" is used to uncover the client's longer term, overall goals, and preferences. Once the client realizes that their current patterns of belief and behavior are inconsistent with these longer-term goals, they are (ideally) motivated to change. When speaking of such cognitive states as serving a "function," the clinician is describing how these beliefs help a person cope with bad feelings (shame, fear, sadness, or anxiety), preserve internal consistency, or resist realities that are too difficult to accept. Treatment in such cases consists in discovering such beliefs, and addressing their functions and thus the underlying fears or insecurities that prompted them. This allows the client to re-orient themselves toward actions or beliefs that empower them to act on their long-term goals. It is taken as essential to this form of therapy that

one understand what *function* these (often false) beliefs serve. This is necessary to replace these beliefs with others that benefit them in the longer term.

The idea that some aspects or features of mental illnesses serve an "internal" psychological purpose that one is unaware of is sometimes referred to as using "defenses."[8] Defenses are taken serve various psychological "functions," for example, of emotional regulation. The functions defenses serve are not rational, deliberate intentions or plans. The aim of therapy, on some approaches, is to bring these patterns and their causes into conscious awareness. Such therapies presuppose that awareness of these underlying psychological ends is essential to successful treatment. Such a view is not unique to psychodynamic approaches; indeed, it is not considered controversial that many habits of behavior, belief and affective response are not adopted consciously or deliberately, and that at least some such habits can be characterized as more or less "adaptive" in a psychological sense. Humor, for instance, can be an effective tool for tamping down strong emotions, both individually and in groups, when addressing emotionally sensitive topics, or it can be a way to deflect attention away from unpalatable feelings or attention. Use of humor in such contexts may not be deliberate, intentional, or conscious, but nonetheless serves a psychological function. Even in popular discourse, people will refer to humor as a "healthy" response, or "adaptive" behavior. In contrast, denial, dissociation, splitting, or somatization, are described as performing a similar "function" (e.g., deflecting strong emotions, responding to interpersonal conflict), though less optimally than humor. The presupposition at work in such talk is that the habit of denying or attributing one's feelings of anger, fear, anxiety, or sadness, to another person, for instance, is less effective in the long run than addressing interpersonal conflict directly. Such patterns of "defense" are

performing the "function" of addressing hard feelings, though in a "suboptimal" way. The more "mature" forms of "defense" are often contrasted with the so-called immature defenses.

To be clear, talk of "defense mechanisms" need not commit one to any theoretical view about the mind. One need not accept motivations along classical Freudian lines (e.g., drive theory) to grant that it may be better in the long term to acknowledge and work through uncomfortable feelings, rather than deny or dissociate from them. This central notion behind the idea of a "defense mechanism" has played an important role in clinical research and practice, whether in diagnosis or treatment (Metzger, 2014). Talk of more or less "functional" patterns of belief and behavior informed therapeutic methods in behaviorist, cognitive behaviorist, and psychodynamic theories. Identifying such patterns of belief and behavior in one's clients, or helping clients identify such patterns in their *own* belief and behavior, has been an effective tool in therapeutic contexts, whether individual, or couples and family therapy (Wampold & Imel, 2015; Wampold, 2019).

For instance, cognitive behavioral therapies take various patterns of thinking to become entrenched, self-perpetuating, or persistent patterns (Beck et al., 2001). Beck recognized that there can be persistent patterns of maladaptive beliefs. He suggested that they may become entrenched, or self-perpetuating beliefs and affective states, leading to poor relationships, self-image, and persistent anxiety or low mood. This view is not mutually exclusive with the presence of various biological dispositions that lead some, for example, to be more likely to suffer from depression, or anxiety. Key to Beck's view (and indeed, many therapeutic paradigms and modes of intervention) is the idea that many habits of thinking and affective response come to serve a function that in the long run are maladaptive. Identifying these thought patterns—for example, black and white (or "all or nothing") thinking, overgeneralization, catastrophizing,

emotional reasoning, disqualifying the positive, and so on—is key to developing more successful ways of coping. Such habits of thinking may continue to serve some function now, but in a suboptimal manner. For example, "black and white thinking" may be an "immature" "defense" against bad feelings or shame at one's own flaws (or a way to deflect or deny the flaws of a beloved other). In the long term, more "nuanced" thinking (acknowledging that even the best of us can be jealous, angry, and hateful, or that good people can do bad things), enables the client to feel less shame at, and more willingness to acknowledge and apologize for, their own flaws, and to acknowledge that even those who love you may disappoint you occasionally. Black and white thinking is often spoken of as performing the "function" in the short term of preserving either a positive view of the self (or of a beloved), by "projecting" bad feelings outward (e.g., on others). In the long term, whatever the story one tells, black and white thinking can lead to difficulty in maintaining interpersonal relationships (Beck et al., 2001), as can be seen in some narcissistic or borderline personalities (Kernberg, 2020). Some integrate these view of the function of defenses with a particular understanding of the cause and typical features of various disorders. For instance, some have argued that traits associated with borderline personality disorder (mistrust of other people) are coherent defenses to adverse childhood experiences. The aim of therapy in such cases is to better understand why a patient adopted such defenses, and how to develop better strategies to cope with the feelings that trigger such defensive reactions (Siegel, 2020).

In sum, the last two senses of function ("adaptive response gone awry" and "suboptimal adaptive response") both play important roles in clinical practice. First, as we've seen, a central presupposition of many individual therapies is that behaviors, beliefs, or dispositions may have served some (psychological) function at some stage in life or may currently serve some function. Such a behavior, belief, or disposition may help one preserve consistency with an "internal"

psychological state (a belief, value, or preference), but not in a way that helps one achieve long-term goals. Discovery of such patterns and replacement of them with more optimal patterns are considered key elements of many therapeutic interventions.

Second, such functional behavioral, belief, or dispositional states may be attributed not only to agents, but also whole family units, or social groups, and may serve the interests of the group, or be advantageous to one or several members, but harm others. Here, the group is treated as a functional unit. This view of the family as a "system," where everyone plays a "functional role," is sometimes described as a "systems" view of the family (Broderick, 1993; Kerr, 1981/2014), or what is sometimes called "family systems" theory. This approach takes the family as a functional unit, where group members take on various roles, which may either serve the collective advantage of all, or serve some, at a cost to others. These patterns of relationships are sometimes referred to as "dysfunctional," but the *individual roles of each member are taken to serve some "function,"* in that they allow for the persistence and relative harmony of the group. Where group members continue to play their roles, in other words, some profit (even if others do not, more or less). For instance, one family member—an abusive parent—may direct others to share his grandiose beliefs or engage in behaviors that serve his ends at the cost of others' happiness or safety. The group members may acquire patterns of behavior or beliefs that serve the interests of the abuser, and thereby prevent his destabilizing the family unit (or, perhaps, workplace). These social roles are functional, in Cummins's sense of part function, in that however disadvantageous the role is for any individual, their activity preserves the stability of the group. Key to this systems approach is the insight that not all forms of organization, or distributions of roles in family systems are advantageous to all members.

By way of analogy, we can imagine the abusive spouse (or totalitarian leader) as a malignant cell; demanding to be "fed" with praise, and intolerant of resistance, criticism, or rivals. The members of the group have to "feed" the abuser with praise for the whole to function, as he may cause harm (or the collapse of democracy, if he's a leader of a country, for instance) if they do not. The group may acquire beliefs, behaviors, and so on, that shore up the abusive leader's fragile ego, and thus the stability of the group (Kernberg, 2020), but that (over the longer term) cause harm to individual members. Kernberg's (2020) analysis of "malignant narcissism and large group regression" is hard not to read as forecasting what happened, sadly, in the recent attack on the capitol of the United States.

It is important to keep this *psychological or mentalistic* notion of the "functional role" of patterns of belief and behavior distinct from other senses of "function" (biological and social role function) discussed above. The two have very different implications for both the empirical investigation of the origins and persistence of psychological conditions, and their treatment. To be clear, the claim here is that socialized, reinforced, or learned belief, behavior, and affective response, though dysfunctional in some sense, may well be adaptive, or serve a function in a variety of senses; or at least, they may once have been functional, for a given agent, family, or social group.

THREE OBJECTIONS: RAMPANT FUNCTIONALISM, REDUCTION, MEDICALIZATION

To recap briefly, I have argued that talk of aspects or features of mental disorders as playing some functional role has played both predictive and explanatory roles in mental health care. Such a view currently serves as a fruitful tool in generating hypotheses about the causes and effects of mental disorders, and effective courses of care. A more fine-grained analysis of these notions of "function" can help us avoid conflation of such talk with, for instance, appeals to adaptation or

natural selection. Now I turn to objections. The first is what I call the concern with "rampant functionalism." One might worry that granting a such an ample variety of "functions" is likely to lead to rampant speculation. Critics might argue that psychologistic explanations are too easy to generate. Anything might be said to serve some psychological function or other.

This objection may sound familiar from the history of psychiatry. In particular, the rise of the *Diagnostic and Statistical Manual of Mental Disorders*, third edition, III and removal of all psychoanalytic language was associated with concerns over speculative explanation by psychoanalytically oriented psychiatrists (Decker, 2013). To be sure, attributing functions of psychological states can be overused, so clinicians should be parsimonious in proposing such hypotheses. However, a well-trained and practiced clinician can often identify patterns relatively quickly, especially when familiar with typical responses to abuse, or a history of trauma. Indeed, in some cases, it is as if no inferential process is involved. Part of the role of clinical supervision and training is to reign in speculation, and to ensure that clinicians are careful in drawing upon evidence from the clinical encounter. To the extent possible, of course, it is ideal to empirically ground any judgments about "functional" patterns of belief, behavior, and so on. Attending to multiple examples of detailed personal histories and how they shape an individual's psychology is thus part of training. With more clinical experience, one also becomes increasingly familiar with patterns across similar cases (for examples of such model-based instruction, see Chisolm & Lyketsos, 2012). A functionalist approach is often the first step in a variety of forms of mental health care, whether cognitive, behavioral, or psychodynamic. In her excellent introduction to psychodynamic psychotherapy, McWilliams writes, "With patients, we try to understand where they are coming from, what problems they are trying to solve, what contexts make their solutions reasonable" (2004, p. 23)

Alternatively, some might argue that functionalist approaches can or should be reduced to causal talk—after all, if one holds that any appeal to psychological functions is non-scientific and can be replaced with causal talk (stimulus and response), talk of function may seem to be an excess of a bygone age, and belief in speculative "unconscious" states. First, psychologists study beliefs, which play causal roles in generating behaviors, affective response, and further beliefs. Even if talk of such psychological states may (at some point in the distant scientific future) be eliminated and replaced with talk of brain states, for the moment at least, it is not possible to causally intervene on beliefs with even our best neuroscience. It is, however, possible to intervene with talk therapies that engage with patterns of belief, behavior, and affect, in addressing anxiety, depression, and trauma. Functional talk arguably plays an ineliminable *heuristic* role in development such therapeutic strategies, even if future science will be able to describe and explain all such patterns at a more "fundamental" mechanistic level.

Third, some might be concerned that talk of such psychological functions encourages "medicalizing*"* mere "problems of living." In my view, this concern is misplaced. Many of those who seek out mental health care are helped by "talk" therapies that make appeal to the "function" of otherwise maladaptive habits of belief and behavior. The advantage of the "functionalist" view is that patients are empowered to recognize their symptoms not as "failures" or "disordered" states (alone), but as adaptive responses to difficulties in life—or as McWilliams says, (at least initially) "reasonable" solutions to problems. In a sense, then, this perspective is antithetical to what is often called (disparagingly, and perhaps not entirely fairly (see, e.g., Huda, 2021) the "medical model" in psychiatry. When we adopt a "functionalist" perspective, instead of focusing on diagnosis and treatment as a matter of targeting "dysfunction," the clinician and patient are together assessing whether their patterns of behavior and belief are optimal *for them*,

given their overall goals. This approach shifts the conversation toward therapies that serve a client's goals, reinforcing a sense of agency and potential for control, which is in itself therapeutic (Bertolino, 2018). Perhaps the right question to ask when debating overmedicalization is: Does such a perspective help us identify the causes of, and potential interventions on, forms of suffering we want to prevent or treat? Can such a perspective help us intervene and enable better outcomes? If so, then they are good tools for the very practical science of clinical mental health care. Indeed, exactly such attention to patients' experiences and goals has led to important recent advances in psychiatric medicine (see, e.g., Potter, Tekin, & Bluhm, 2019).

CONCLUSION

I have argued that there are at least four senses in which mental disorders (or some aspects or features of these disorders) can be spoken of as "functional." Setting aside debate about the first two senses (mental disorders as evolutionary adaptations or mismatches), I have argued that appeal to the "functional role" of beliefs, habits, or behaviors, guides a range of practical, effective interventions. Such thinking has played an important role in helping clinicians develop hypotheses about the causes of these patterns and predict responses to treatment. This functionalist strategy has helped patients in overcoming destructive habits. Understanding how different dispositions may play a variety of functional roles in different environmental contexts is arguably key to understanding the causes various forms of mental suffering and generating treatment strategies. Identifying psychological patterns figures in important predictive generalizations about what sorts of intervention are likely to work best for which clients. As we saw above, there are generalizations about patterns of "functional" belief and behavior, as in the

case of abused spouses, children, or those suffering from the trauma of war. Identifying such generalizations can help clinicians treat clients more effectively.

Embracing a variety of potential functional roles of aspects or features of mental disorders is thus fruitful for both investigative and therapeutic contexts, whether in generating hypotheses, encouraging collaborative research, or attending to diverse kinds of evidence, which may well provide insight into therapeutic targets and methods that would otherwise be lost. My view thus challenges a reductive, monistic view of "function" and dysfunction in psychiatry. Monist presuppositions can limit scientists' and clinicians' hypotheses about what similarities matter, and how, which can in turn limit options for diagnosis, treatment, and explanation. The monistic "dysfunctionalist" paradigm can thus lead us to ignore the many complex causal factors in interaction that yield a disorder. On this point, I'm in agreement with Garson (2022).

Moreover, understanding disorder as exclusively "dysfunctional" runs the risk of discouraging collaboration between the basic sciences, and clinical psychologists and psychiatrists, or targeting certain kinds of therapeutic goals to the exclusion of others. Such prioritizing—while helping us understand one domain well, can constrain the development of hypotheses, as well as tools that enable effective intervention. In mental health, we need to be open to the possibility of preventive and treatment interventions that grant a variety of understandings of or senses of "function" at play in mental disorders, at a variety of temporal and spatial scales.

NOTES

1. I use the term "disorder" rather than "illness," not because I am committed to the view that all mental conditions are dysfunctional or "disordered," but simply to follow convention. Included in the class of "disorders," are the set of conditions that the

Diagnostic and Statistical Manual of Mental Disorders classifies as such, not necessarily because I endorse all such categories, or believe these to pick out the one true natural classification, but because these are for practical purposes the conditions which qualify for mental health care*, and my focus is on how to best help those seeking care*. For the purposes of this paper, I bracket the question of the "naturalness" of these categories.

2. For instance, Wakefield (1992) argued that: "Because natural selection is the only known means by which an effect can explain a naturally occurring mechanism that provides it, evolutionary explanations presumably underlie all correct ascriptions of natural functions" (p. 383). Recently (Wakefield, 2020), in considering cases like addiction, Wakefield grants that at least some aspects or features of addiction make use of otherwise "functional" brain systems. He thus makes a useful distinction between "mental disorder" and "brain disorder," where the former are disruptions to function in a much wider sense than the latter, which involve disruptions to selected functions. He argues that addiction may be an example of a "mental" disorder, even if not a "brain" disorder.
3. Recently in the context of somatic disease, Matthewson and Griffiths (2017) have argued that there are at least four "ways of going wrong" (i.e., four ways in which a condition could be disordered or fail to function): "(1) A biological structure … is unable to fulfill the causal role for which it has been selected in the recent evolutionary past… (2) The mechanism is operating in accordance with its design but outside the operating parameters for that design… (3) [the mechanism is in a] normal but inhospitable environment… and (4) developmental trajectories [are] initiated in the setting of imperfect information." I take my fourfold distinction to roughly follow this model.

4. To be clear, while describing this view, I am not endorsing it. I am sympathetic to Murphy (2005) and Valles's (2012) critiques of naïve adaptationism.
5. Thank you to a reviewer for pointing this out.
6. Although this would take a book to address, it is widely accepted (even among some skeptics) that "talk"-based psychotherapies have modest effects, whether alone or in combination with pharmaceuticals. For a review of the clinical literature on talk therapy's effectiveness, including measures of relative as well as absolute effects of different modes of intervention, and some fascinating discussion of the problem of "common factors," see, for example, Wampold and Imel (2015). For discussion of whether evidence-based methods of evaluation are appropriate in psychotherapy, see, for example, Erwin (2006), and more recently Hovda (2021).
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Table 1. Senses of "Function" <AQ>Please provide a table title.

Name of Function	Description	Type of Function
Mental disorder as adaptation	A condition, or aspects or features of a condition a served some function in the evolutionary past, and still performs that function	Biological function
Mismatch	A condition, or aspects or features of a condition served a function in the evolutionary past, but it no longer performs that function	Biological function
Adaptive response gone awry	A condition, or aspects or features of that condition, served some (either psychological or biological) function at some stage of life, but no longer currently	Psychological or biological or both
Suboptimal response	A condition, or aspects or features of a condition, serves some psychological function currently, but in the long run is less than optimal in service of an individual's overall goals	Psychological

[1] I use the term "disorder" rather than "illness", not because I'm committed to the view that all mental conditions are dysfunctional or "disordered," but simply to follow convention. Included in the class of "disorders," are the set of conditions that the DSM classifies as such, not necessarily because I endorse all such categories, or believe these to pick out the one true natural classification, but because these are for practical purposes the conditions which qualify for mental health care*, and my focus is on how to best help those seeking care*. For the purposes of this paper, I bracket the question of the "naturalness" of these categories (about which I'm honestly skeptical).

[2] For instance, Wakefield (1992) argued that: "Because natural selection is the only known means by which an effect can explain a naturally occurring mechanism that provides it, evolutionary explanations presumably underlie all correct ascriptions of natural functions." (Wakefield, 1992b, p. 383). Recently (2020), in considering cases like addiction, Wakefield grants that at least some aspects or features of addiction make use of otherwise "functional" brain systems. He thus makes a useful distinction between "mental disorder" and "brain disorder," where the former are disruptions to function in a much wider sense than the latter, which involve disruptions to selected functions. He argues that addiction may be an example of a "mental" disorder, even if not a "brain" disorder.

[3]

[4] Recently in the context of somatic disease, Matthewson and Griffiths (2017) have argued that there are at least four "ways of going wrong" (i.e., four ways in which a condition could be disordered or fail to function): "(1) A biological structure … is unable to fulfill the causal role for which it has been selected in the recent evolutionary past… (2) The mechanism is operating in accordance with its design but outside the operating parameters for that design… (3) [the mechanism is in a] normal but inhospitable environment… and (4) developmental trajectories [are] initiated in the setting of imperfect information." I take my fourfold distinction to roughly follow this model.

[5] To be clear, while describing this view, I am not endorsing it. I am very sympathetic to Murphy (2006) and Valles's (2012) critiques of naïve adaptationism.

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