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Pills That Talk: Therapy and the Marketplace

Defining mental disorders by their symptoms and abstaining from theorizing about causes, the third edition of the Diagnostic and Statistical Manual (1980) marked a revolution in psychiatry. The immediate losers were those of the Freudian school who thought little of the niceties of diagnosis, whose practices were not data-driven, and whose inferences as to the causes of symptoms were both idiosyncratic and unverifiable. Among the winners were the adherents of biological psychiatry, some of whom were at the forefront of the changes that went into the making of DSM-III. While no one could claim that the biological triggers, correlates or markers of mental illness were known, the hope of the biological party was that selection of research populations in accordance with well-designed criteria would enable the advance of such knowledge.

While DSM-III was under construction, the headquarters of biological psychiatry was the Department of Psychiatry at Washington University in St. Louis, among whose leaders was Samuel Guze. A few years into the reign of the new DSM diagnostic system, with the authority of Freud already badly damaged, Guze challenged the legitimacy of talk therapies in general. Arguing that psychotherapy as such was poorly controlled,

epistemologically contaminated and incapable of distinguishing effects from causes, Guze asserted that

> The powerful role of suggestion in the offering and accepting of interpretations during psychotherapy has thus far been beyond serious scientific control. No one has provided even moderately convincing evidence that suggestion can be eliminated as a major factor—if not *the* principal factor—in the development of what some psychotherapists refer to as 'insight.' . . . Psychotherapy can generate hypotheses concerning causal connections but it cannot test those hypotheses at the same time. The process of psychotherapy provides no opportunities to control for the therapist's preexisting assumptions, the patient's preexisting assumptions, and the impact of the therapist's interpretations and suggestions on the patient's communications.[1]

Thus Guze drew a battle-line between a psychiatry devoted to such scientific first principles as verification and a psychiatry that turned its back on both science and medicine and lost itself in a quixotic search for psychosocial causes. The title of his paper was a polemic in itself: "Biological Psychiatry: Is There Any Other Kind?"

Guze's attack on the foundations and scientific status of psychotherapy was and is a strong one. Moreover, it is consistent with the finding, well known at the time, that divergent styles of psychotherapy tend to have comparable success regardless of their conflicting assumptions and methods: a striking result whose likely explanation is that

psychotherapy as such offers reassurance and encouragement—in other words, taps the placebo effect. According to what is arguably the most comprehensive and searching analysis of the placebo effect in the literature, "The proliferation of psychotherapeutic schools suggests that the treatments provided by all types of psychotherapists may work to some extent, not because of the theories or therapeutic procedures but because of underlying, unspecified or not clearly determined nonspecific effects—or what we now subsume under the rubric of placebo effects."[2] Thus it isn't a good answer to Guze's charges to say that psychotherapy must be valid because it works. That a practice purportedly offering insight into self seems to work regardless of its actual theories or procedures raises disturbing questions about the influence of suggestion. The institution of psychotherapy is highly conducive to suggestion, after all, and its untroubled conscience over its exploitation of the placebo effect—so dissimilar from medicine's attitude toward this vexing confounder and unwelcome reminder of the past—leaves the field open to its power.[3]

The provocative assertion that true psychiatry is biological psychiatry reduces rivals to the status of pseudo-science and expresses the kind of confidence that might animate a vanguard that had recently won a revolution. Thrown on the defensive by the claims of biological psychiatry, the partisans of psychological treatments remind us that psychotherapy too can alleviate a disorder like depression.[4] As if lashing back at the Guze argument, they point out, furthermore, that pills of the Prozac class—the popular selective serotonin reuptake inhibitors (SSRI's)—are by no means free of a placebo component of their own. Antidepressants are known to be excellent

conductors of the placebo effect (if only because they combat the discouragement of depression by raising expectations), and a compelling exposé of their free-riding on the power of the placebo has been put forward by the psychologist Irving Kirsch.[5]

Carefully reviewing the data of both published and unpublished trials, Kirsch concludes that most of the effect of the Prozac family of antidepressants is placebo. Though these drugs allegedly act on a specific biochemical target (hence their label "selective"), they themselves, like talk therapies, give rise to "not clearly determined nonspecific effects." In some trials SSRI's show no effect above and beyond placebo, as if the power of the placebo had drowned out a weak signal, and in those trials where SSRI's do exceed placebo as the FDA requires, unpleasant side effects appear to paradoxically raise subjects' hopes by convincing them that they have received an active drug and not a dummy. The difficulty of establishing the efficacy of antidepressants, independent of the placebo effect, is only too well known to their makers. According to a Merck biostatistician, the chief obstacle confronted by phase-III clinical trials of antidepressants is "the high placebo response rate in depression, making it difficult to show a significant difference between drug effect and placebo."[6] But once a drug receives clearance from the FDA, the placebo effect changes from a nuisance to be controlled to a potential to be exploited, not least by the use of suggestive messages—advertising.

Antidepressant ads send the message that the time has come for depression to come out of the shadows and into the light of hope, and that no one need be depressed about being depressed.[7] Thus, from the understanding of depression as a disorder of

brain chemistry come drugs that offer psychological benefits similar to those fostered by talk therapy, such as uplift and reassurance. Such drugs might be seen as ways of mass producing the placebo effect, in contrast to the laborious and time-consuming cultivation of the same resource in the therapist's office. According to the now proverbial phrase "listening to Prozac," the drug itself talks. Not that antidepressants are by any means the only drugs to channel the power of the placebo. In a well designed study of asthma treatments, when both the drug and placebo groups were exposed to a TV ad for Singulair (montelukast) and other slanted cues, "the placebo group improved so much that there was no measurable benefit of montelukast" for asthma control.[8] Notably, while the encouraging messages did yield psychological benefits—an improved feeling of control over asthma symptoms—they had no effect on actual lung function.

A seminal study of psychotherapy freely admits that important benefits of that practice resemble the benefits of placebos and makes an argument fully consistent with the finding that sundry schools of therapy yield similar results. According to Jerome Frank, good psychotherapy, whatever its theoretical slant and procedural details, serves to breathe encouragement into a discouraged patient. "To be effective, any therapy must first combat patients' demoralization and heighten their hopes of relief. All forms of psychotherapy do this implicitly, regardless of their explicit aims."[9] In effect, psychotherapy exploits the power of suggestion identified by Guze as a formidable confounder "beyond scientific control." But an influence as powerful as suggestion cannot be monopolized, and advertising makes maximal use of it. Ever since direct-to-

consumer advertising of drugs became legal in the United States in 1997, the airwaves and other media have been saturated with pharmaceutical ads; and whereas different schools of psychotherapy share common factors and (if Frank is right) a common aim, ads for all sorts of medications follow a common strategy of uplifting the consumer and kindling "hopes of relief." By tapping into the power of suggestion and surrounding its products with inspiring messages, Pharma offers psychological rewards without the bother of psychotherapy per se.

Also according to Frank, an effective psychotherapy calls for "a rationale, conceptual scheme, or myth that provides a plausible explanation for the patient's symptoms and prescribes a ritual or procedure for resolving them" (p. 42). An ad explaining that depression results from a chemical imbalance and recommending a certain branded pill to correct it—and doing all this in a warmly suggestive manner—serves this very function. "Chemical imbalance" provides an appealing, highly credible, economical explanation or pseudo-explanation of the symptoms in question. So fashionably explanatory is the chemical-imbalance theory at this moment that it figures in ads for drugs addressed to conditions as disparate as social anxiety disorder and premenstrual dysphoric disorder.[10] It's as if the notion of a chemical imbalance served as a sort of nonspecific, multi-purpose explanation, by analogy with the nonspecific power of the placebo. The reason DTC ads are minimally educational—providing little or no information, for example, about numbers needed to treat—is that education isn't their purpose.[11] Their purpose is to woo the consumer/patient, not least by their way of framing the target disorder. Raising hopes and attaching them to the advertised

product, they mobilize the power of expectations, another name for the placebo effect. If the ads were as educational as the pharmaceutical industry sometimes maintains, they would inform the consumer that a disorder like depression can also be treated with psychotherapy. Instead, they compete with psychotherapy.

Given that Frank's study is titled *Persuasion and Healing*, it comes as no surprise that the author views psychotherapy as akin to the ancient art of persuasion, rhetoric. "Psychotherapists and rhetoricians of every kind hold out the hope that the activities they recommend will lead to enduring improvement in personal well-being" (p. 68). That unwelcome side effects serve to *convince* blinded subjects in clinical trials of antidepressants that they are receiving drug and not placebo, as noted above, suggests that even a drug can act rhetorically. The exemplary rhetorical act is to convince. Of course, DTC ads—the rhetoric of the drug industry—are also in the business of convincing. For advertising purposes it's less important for the chemical imbalance theory to be valid than to seem intuitive to the consumer, just as, according to Frank, interpretations offered in psychotherapy "need not be correct, only plausible" (p. 48). (Rhetoric, says Aristotle, concerns itself with things that could be otherwise, things qualified with uncertainty.) Stating that "a chemical imbalance could be to blame" for social anxiety disorder, a Paxil ad manages to avoid presenting a theory as more than a theory while at the same time playing directly to our liking for "plausible" explanations.[12] The principle that our wellbeing depends on balance is after all intuitive enough to have powered long-lived medical theories such as the four-humor system and the yin-yang system. And by conveying the impression that antidepressants restore

balance—thereby restoring the selves we actually are—DTC ads also allay the fear that psychoactive drugs might make us someone we are not.[13]

The Paxil ad in question bears the caption, "Your life is waiting," which drives home the message that it's the disorder that changes us from the person we really are; the drug simply returns us to our rightful selves. Shown in the ad are an ordinary business meeting in one panel and "what it feels like" in another; what it feels like is a torture session, with a party representing the reader seated under an interrogation lamp, tied into a chair with thick ropes and surrounded by accusing others. Thus the vividly depicted feeling of being blamed gives way to the soothing suggestion that what's really at fault is your chemistry—"a chemical imbalance could be to blame." The idea is presented as a reasonable possibility and nothing more, presumably because to claim more could get the manufacturer in trouble.

Additionally, though, advertising that insisted too strongly on the chemical imbalance theory could defeat its own purpose by protesting too much, thereby making the idea less self-evident. As this implies, sometimes less persuasion is more. A therapist who tried too hard to be encouraging could find him- or herself becoming argumentative. Conversely, ads espousing the chemical imbalance theory can convince me that I'm not to blame for my problems even if they make no explicit claim to that effect, and perhaps just because there's no need to make one. Another ad for Paxil, this time as a treatment for Generalized Anxiety Disorder, notes that patients with GAD "may suffer for up to 10 years before diagnosis and treatment, often believing that anxiousness is part of their personality." The implication that anxiety stems not from

their personality but their chemistry is so plain and obvious that it doesn't have to be spelled out.

Talk therapies, we might say, alleviate blame the long way, by working it through in one manner or another. However, in the form of self-help books—books that by definition spell out every last thing—clinical psychology has evolved its own way of delivering a blame-absolving message to the marketplace. With its advocacy on behalf of a reader oppressed by others' judgments, the genre vilifies blame itself. The guilt that gnaws at us from within is nothing more or less than blame internalized. Readers are reassured that they are all right and that guilt is a trap and a fallacy. "There's nothing wrong with who you are," declares Phil McGraw, the popular therapist, characteristically addressing the reader in the second person.[14] McGraw harangues tirelessly, often sounding like a revivalist and always protesting too much. "Both psychotherapists and such rhetoricians as evangelists and demagogues," writes Frank, "seek to influence discontented or disconnected persons" (p. 67). There's a strong evangelical streak in McGraw's orations and maybe a note of the demagogue as well.

Ads that espouse the chemical imbalance theory of depression, bipolar disorder, SAD, GAD or PMDD don't have to preach, harangue and lecture about the iniquity of blame because the theory itself summarily absolves the consumer of blame. In effect, such ads outplay the competition. Self-evidently, I'm not to blame for my problems if they stem from a defect of brain chemistry. The theory is all at once compellingly simple and seemingly authoritative, and no insistence is needed to bring out its implications. They speak for themselves. The most effective argument is one you don't

even have to make. On the jacket of Allan Horwitz and Jerome Wakefield's important study of the medicalization of sadness is the image of the side of a building painted with the statement, "Depression is a flaw in chemistry not character."[15] Antidepressant ads make the same point without invoking the touchy word "character" and with a professionalism that makes an argumentative billboard look like graffiti by comparison.

If psychotherapy seeks to lift the weight of irrational self-blame from the patient's shoulders, ads that proffer appealing chemical explanations of emotional problems can accomplish the same thing more efficiently—not only undoing the issue of blame by undercutting it altogether in the name of science but delivering the message of absolution to millions at once. Just as the chemical-imbalance theory presents a "plausible explanation for the patient's symptoms" to the entire marketplace, an economy of scale allows DTC advertising to deliver an encouraging message without the labor, time and trouble of psychotherapy and without evangelical orations—and enables the medications in question to encapsulate that message, literally. Furthermore, just as psychotherapy challenges the attitude that people ought to get better by their own efforts, drug therapy argues against the claim that with the proper psychological help patients can "master their symptoms voluntarily."[16] If your symptoms result from a chemical defect, efforts to master them are likely to fail simply because they don't get to the root of the matter. Implicitly, DTC advertising uses against the laborious nature of psychotherapy the same line of argument the latter used against a culture that extolled and demanded individual effort.[17]

Of course, DTC advertising can only point the consumer to the drug; in order to actually get it the consumer, or patient, has to have a prescription. A revealing study of the influence of DTC ads on doctors' prescribing practices suggests one more reason to question a strict distinction between the soft practices of psychotherapy and the science of biological psychiatry.

Published in *JAMA* in 2005, the study was based on a simulation in which actors playing someone with either Major Depression or "adjustment disorder with depressed mood" consequent on the loss of a job saw family doctors and general internists with requests for Paxil, requests for unnamed medication, or no request at all. Some of the actors were instructed to say, "I saw this ad on TV the other night. It was about Paxil. Some things about the ad really struck me. I was wondering if you thought Paxil might help." In the event, the doctors prescribed antidepressants at a higher rate (55%) if patients asked for Paxil by name than if they asked simply for a medication (39%). Doctors themselves, it seems, can be influenced indirectly by DTC advertising. Notably for our purposes, the doctors acceded at a higher rate to requests for Paxil coming from pseudo-patients with an arguably nonmedical problem than from those with Major Depression.

According to the study authors, this finding "supports the hypothesis that DTC advertising may stimulate prescribing more for questionable than for clear indications." It's as if the dubious ailment of adjustment disorder needed a boost from the world of advertising to achieve clinical significance. (So generic is adjustment disorder that doctors have been known to use it for insurance purposes in cases where they choose

not to record a truthful diagnosis.)[18] Having recently accepted a voluntary lay-off rather than move with their company to another state—so the cover story went—the pseudo-patients exhibiting adjustment disorder were now under stress, feeling fatigue, and having difficulty falling asleep. In other words, and as the authors of the study point out, they had little wrong with them.

> Standardized patients randomized to portray this condition presented with insomnia and fatigue of short duration and with few signs of cognitive, somatic, social, or functional impairment. Without prompting, physicians examining these SPs were unlikely to prescribe an antidepressant. . . . Although several small trials suggest that antidepressants confer modest benefits on patients with minor depression, there are no data to support their use in adjustment disorder, especially when characterized (as in our study) by a clear precipitant, mild symptoms, and short duration. Thus . . . the prescription of antidepressants in this context is at the margin of clinical appropriateness.[19]

The prescription of highly promoted antidepressants virtually as a tonic or health supplement, and with "no data to support their use," goes contrary to the ethos of evidence-based medicine and seems inconsistent with what Guze meant by biological psychiatry.

In his defense of biological psychiatry as the only psychiatry worthy of the name, Guze acknowledges that psychological interventions have their place but denies that they get at the causes of mental illness. Such interventions treat the sort of problems that reflect "the usual range of human troubles that most people experience without becoming ill. . . . It appears highly unlikely that an intervention strategy designed to reduce or eliminate the troubles, disappointments, frustrations, and pressures of daily living will prove feasible or powerful enough."[20] With the advent of DTC advertising, the casting of the general population as the constituency of psychiatry, and the expansion of diagnostic boundaries, the trials of living come to be treated with drugs that supposedly target their causes in the brain. The prescription of antidepressants for actor-patients whose lives had been shaken, and whose symptoms are everywhere to be found in world at large, illustrates this trend toward the use of drugs to medicate human troubles. In defiance of the distinction between biological and psychological treatments drawn by Guze, drugs are now marketed and used as chemical solutions to problems he placed outside the realm of biological psychiatry.

One reason a drug like Paxil seems to make sense even for off-label uses is that it's said to restore a certain chemical balance that itself makes seems to make sense. The chemical-imbalance theory of mental disorders, in particular depression, was already familiar to consumers at the time of the actor-patient study, presumably because it was both aggressively marketed and inherently credible.[21] While many still hold non-biochemical understandings of depression, and many hesitate to take drugs like SSRI's out of fear of dependence or dislike of side-effects, it's clear that drugs are

widely used to treat forms of distress that recently enough might have called for psychological treatments. It's also clear that drugs have co-opted some of the benefits of psychological treatments, above all their explanatory function and reassurance value. To psychotherapists who believe they aid in the quest for "meaning," it must be disturbing to see the placebo effect now influentially referred to as a meaning response.[22]

Criticisms of Pharma by those who favor psychosocial interpretations or interventions sometimes have a resentful note, as if a craftsman were being muscled out of the marketplace by a producer of lesser goods. In some respects psychotherapy *has* been undersold. When drug ads say, "See your doctor," we all know they don't mean your psychiatrist (still less a clinical psychologist who can't prescribe medications).[23] But a better approach to the problem than territorial defense would be to challenge the expansion of diagnosis that has made it possible to prescribe psychoactive drugs to tens of millions to begin with. For while DSM diagnostic criteria were in principle intended to guide the selection of research populations, in practice they have been applied to the population per se.

Unless diagnosis itself expanded to the dimensions of the marketplace, drug makers wouldn't be able to mass-market the placebo effect, and the actor-patient study suggests how such diagnostic inflation is possible. One of the alleged symptoms of adjustment disorder, fatigue, is so common in the general population that in a study by a team including the architect of the DSM diagnostic system, Robert Spitzer, 58% of

1000 primary-care patients reported it on a questionnaire.[24] Sleep problems are comparably generic. (No wonder "symptoms like anxiety, depression, fatigue, and sleep disturbances seem to be found in many kinds of patient, whatever their physical or psychiatric status.")[25] Moreover, the stress reported by the actor-patients was fully appropriate, given that they had recently lost their job. As in this case, the maximization of diagnosis seems to call for the erasure of contextual detail. To a manufacturer interested in selling a medication to the largest possible market, the circumstances that distinguish one case from another represent nothing but noise in the system.

Spitzer is on record as conceding that depression has been massively overdiagnosed under the auspices of the DSM diagnostic system precisely because the context in which symptoms occur is ignored or discounted, as in the actor-patient study. As he notes in a laudatory foreword to a book contesting the redefinition of sadness as clinical depression, "When . . . diagnostic criteria that contain no reference to context are used in community epidemiological studies and screening of the general population, large numbers of people who are having normal human responses to various stressors are mistakenly diagnosed as disordered. . . . The results has been semiofficial prevalence rates that many find unbelievable."[26] Spitzer's successor, the chair of DSM-IV, has become an outspoken critic of both diagnostic inflation and the DSM system that drives it.[27] All of this suggests that an examination of the diagnostic judgments behind the mass prescription of psychoactive drugs is in order. Though DSM-III was inspired by an ideal of scientific psychiatry, the resulting taxonomy and its revisions have been a lot more successful at generating diagnoses than at putting diagnosis on a solid foundation.

As branding attaches a mystique of uniqueness to consumer products that may have little or nothing distinctive about them, the process of medicalization—of which Spitzer and Frances have become critics[28]—entails the elevation of generic problems into specific disorders. It's as if the problems were branded medically. In this sense, the work of branding done in the marketplace builds on the work done in the DSM. Insofar as psychoactive drugs are geared to and marketed for DSM disorders, the DSM diagnostic system is in fact engineered into them from the start, and so too, the psychotherapeutic task of making symptoms make sense begins in the DSM. In another example of an explanatory fiction, DSM diagnoses simultaneously group symptoms into a syndrome and give the impression that the syndrome itself somehow engenders and explains them.

Consider the diagnosis of Specific Learning Disorder in DSM-V. A student meets the cardinal diagnostic criterion for this diagnosis simply by writing papers that "make multiple grammatical or punctuation errors within sentences; employ poor paragraph organization; . . . lack clarity." If we agree to classify these garden-variety ENG 101 problems as symptoms, SLD stands as an example of a diagnosis that elevates common symptoms into a whole—a disorder—and at the same time endows the constructed entity with a semblance of autonomous existence. If only because the disorder sounds like something greater than its symptoms, if I were diagnosed with SLD I would get the message that SLD isn't just a label given to my problems; rather it is responsible for them—explains them. The diagnosis of SLD strongly implies that I have a disorder that predisposes me to make the very mistakes that show up in my work; indeed, DSM-V

states that SLD is "a neurodevelopmental disorder with a biological origin," even though nothing is known about the biology of poor paragraph organization and nothing known to biological psychiatry will alleviate such "symptoms."

In discussing the reification of DSM diagnoses, Steven Hyman, the former director of the National Institute of Mental Health, points out that if pathological gambling were designated and accepted as a disorder, affected people might gain "a plausible explanation for their behavior" despite the questionable validity of the category and the arbitrariness of separating compulsive gambling from other excesses.[29] But this isn't really a special case. As the example of SLD suggests, the very construction of a disorder can provide a semblance of an explanation for the symptoms in question, even though a DSM disorder is made up of symptoms. Hyman begins by quoting John Stuart Mill on the temptation to reify: "The tendency has always been strong to believe that whatever received a name must be an entity or being, having an independent existence of its own." If the named object happens to be a highly connotative disorder with the authority of medicine behind it, anyone may well assume this disorder not only exists but acts, that is, produces symptoms. While the designers of the DSM diagnostic system refrained from speculations about cause, disorders themselves can acquire a semblance of causal power, especially if they also acquire a presumptive biological origin.

While biological psychiatry, or the aspiration toward it, may lead to the formulation and promotion of drugs to treat the presumed causes of DSM-defined disorders, the very grouping of symptoms into a disorder initiates the process of

naming, branding and explaining that carries over into the marketplace. Ever since DSM-III, "depressed mood" has been a cardinal symptom of "Major Depressive Disorder." Despite the more or less tautological nature of a diagnostic construct that gives a capital letter to its primary symptom, the disorder of Major Depression seems to explain why I suffer from depressed mood, and the explanation is all the more plausible in that the disorder, like SLD, is theoretically of biological origin. In this way, the process of usurping or co-opting the explanatory function of psychotherapy—the provision of "a rationale, conceptual scheme, or myth that provides a plausible explanation of the patient's symptoms"—began with the construction of diagnoses that seem to account for the symptoms that constitute them. The operative word is "seem."

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[1] Samuel Guze, "Biological Psychiatry: Is There Any Other Kind?", *Psychological Medicine* 19 (1989): 321.

[2] Arthur Shapiro and Elaine Shapiro, *The Powerful Placebo: From Ancient Priest to Modern Physician* (Baltimore: Johns Hopkins University Press, 1997), p. 103.

[3] Stewart Justman, *To Feel What Others Feel: Social Sources of the Placebo Effect* (San Francisco: University of California Medical Humanities Press, 2012), ch. 12.

[4] E.g., Christopher France, Paul Lysaker and Ryan Robinson, "The 'Chemical Imbalance' Explanation for Depression: Origins, Lay Endorsement, and Clinical Implications," *Professional Psychology: Research and Practice* 38 (2007): 412.

[5] Irving Kirsch, *The Emperor's New Drugs: Exploding the Antidepressant Myth* (New York: Basic, 2010).

[6] Andrew Lakoff, "The Right Patients for the Drugs: Managing the Placebo Effect in Antidepressant Trials," *Biosocieties* 2 (2007): 57-71.

[7] The idea of depression as a vicious circle comes from Irving Kirsch.

[8] Robert Wise, Susan Bartlett, Ellen Brown et al., "Randomized Trial of the Effect of Drug Presentation on Asthma Outcomes: The American Lung Association Asthma Clinical Research Centers," *Journal of Allergy and Clinical Immunology* 124 (2009): 436-44.

[9] Jerome Frank and Julia Frank, *Persuasion and Healing: A Comparative Study of Psychotherapy* (Baltimore: Johns Hopkins University Press, 1991), p. 33. *Persuasion and Healing* was originally published by Jerome Frank in 1961.

[10] On chemical imbalance and PMDD see Nathan Greenslit, "Dep®ession and Consumption: Psychopharmaceuticals, Branding, and New Identity Practices," *Culture, Medicine and Psychiatry* 29 (2005): 493. On American psychiatry's abuse of the "chemical imbalance" trope, see Robert Whitaker and Lisa Cosgrove, *Psychiatry Under the Influence: Institutional Corruption, Social Injury, and Prescriptions for Reform* (New York: Palgrave Macmillan, 2015).

[11] Robert Bell, Laramie Taylor and Richard Kravitz, "Do Antidepressant Advertisements Educate Consumers and Promote Communication between Patients with Depression and Their Physicians?", *Patient Education and Counseling* 81 (2010): 245-50.

[12] The ad is shown in Christopher Lane, *Shyness: How Normal Behavior Became a Sickness* (New Haven: Yale University Press, 2007), p. 150.

[13] Nathan Greenslit and Ted Kaptchuk, "Antidepressants and Advertising: Psychopharmaceuticals in Crisis," *Yale Journal of Biology and Medicine* 85 (2012): 156.

[14] Phillip McGraw, *Life Strategies: Doing What Works, Doing What Matters* (New York: Hyperion, 1999), p. 272.

[15] Allan Horwitz and Jerome Wakefield, *The Loss of Sadness: How Psychiatry Transformed Normal Sorrow Into Depressive Disorder* (Oxford: Oxford University Press, 2007).

[16] Frank and Frank, *Persuasion and Healing*, p. 115.

[17] According to Peter Kramer, *Listening to Prozac* (New York: Penguin, 1993), p. 259: "In doing just what psychotherapy aims to do, Prozac performs chemically what has heretofore been an intimate interpersonal function." This assertion reads ironically if you consider that Prozac's effect is mostly placebo and that psychotherapy is a playground of placebo effects.

[18] Nathaniel Pallone and James Hennessy, "Benevolent Misdiagnosis," *Society* 31 (1994): 15-16.

[19] Richard Kravitz, Ronald Epstein, Mitchell Feldman et al., "Influence of Patients' Requests for Direct-to-Consumer Advertised Antidepressants," *JAMA* 293 (2005): 2000. On adjustment disorder see Christopher Dowrick, *Beyond Depression: A New Approach to Understanding and Management* (Oxford: Oxford University Press, 2009), pp. 64-65.

[20] Guze, "Biological Psychiatry": 317.

[21] See France, Lysaker and Robinson, "The 'Chemical Imbalance' Explanation for Depression."

[22] See Daniel Moerman's influential *Meaning, Medicine and the "Placebo Effect"* (Cambridge: Cambridge University Press, 2002).

[23] Greenslit, "Dep®ession and Consumption": 494.

[24] Kurt Kroenke, Robert Spitzer, Janet Williams et al., "Physical Symptoms in Primary Care: Predictors of Psychiatric Disorders and Functional Impairment," *Archives of Family Medicine* 3 (1994): 776.

[25] C. V. R. Blacker and A. W. Clare, "The Prevalence and Treatment of Depression in General Practice," *Psychopharmacology* 95 (1988): S16.

[26] Robert Spitzer, Foreword to Horwitz and Wakefield, *The Loss of Sadness*, p. viii.

[27] Allan Frances, *Saving Normal: An Insider's Revolt Against Out-of-Control Psychiatric Diagnosis, DSM-V, Big Pharma, and the Medicalization of Ordinary Life* (New York: William Morrow, 2013).

[28] Spitzer and co-authors deplore the "medicalisation of normal human emotions" in Gerald Rosen, Robert Spitzer and Paul McHugh, "Problems with the Post-Traumatic Stress Disorder Diagnosis and Its Future in DSM-V," *British Journal of Psychiatry* 192 (2008): 4. See also Frances, *Saving Normal*.

[29] Steven Hyman, "The Diagnosis of Mental Disorders: The Problem of Reification," *Annual Review of Clinical Psychology* 6 (2010): 158.