Introduction

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First Principles

With the advent of the randomized clinical trial in the mid-twentieth century, the placebo effect mutated from a traditional resource of medicine into a confounding factor and, simultaneously, a potential object of theoretical interest. The transformation was marked by Henry Beecher's historic paper "The Powerful Placebo" (1955), with its finding that an average of 35% of the subjects in an array of studies responded to placebo as to an active medication, a figure that ignores alternative explanations for improvement such as the natural course of disease.[1] But while some have argued that the placebo effect dwindles almost to zero if correctly measured, over the decades since Beecher it has withstood all challenges, proving its ability to influence subjective experience and—more recently—to induce actual physiological changes.

Beecher's interest in placebos went back to his experience as an army doctor in World War II, when, lacking morphine to treat the wounded, he was reduced to injecting them with water. Exactly why this worked no one really knows, nor of course can the situation be replicated experimentally, but in all likelihood the strong expectation of relief and the evocative nature of the medical ritual itself contributed. Both expectation and "the power of context"[2] have since been identified as sources of the placebo effect, and both are of interest to this study.

As the RCT established itself as the definitive test of efficacy, medical research turned in that direction, and as the results stacked up, the placebo came to resemble a super-pharmaceutical capable of mimicking the effects, including even the side effects, of all kinds of drugs per se. Little wonder public fascination with the placebo effect centers on this virtuoso performer to the exclusion of background factors. But there is much more to the placebo effect than pills. If a placebo is inactive in itself, then its efficacy, if any, must

arise from the context surrounding it, including in the first instance the medical encounter.

> How should an intervention (e.g. a saline injection) produce an effect if it is objectively without a specific effect? There now seems to exist a consensus among placebo researchers that what we call placebo effects is a heterogeneous class of psychobiological events attributable to the overall therapeutic context. The placebo intervention by itself should not produce any effect (otherwise it would not be a true placebo); it completes a complex therapeutic situation.[3]

Even the prescription of a pill takes place in a rich setting, a "complex therapeutic situation." But once we begin to see the placebo effect as in good part a social proceeding, we become aware that it does not stop at the doctor's door.

Our membership in a group can color our experience quite as much as a pill can; in fact, our notion of what a pill can do for us may well have been socially formed in the first place. We tend to expect the benefits others seem to experience. Recently the German Medical Association encouraged its own membership to use placebos more freely in clinical practice, and to recommend them to patients not as medications per se, which would be grossly deceptive, but as agents that have been shown to work with *other patients*.[4] (The same careful form of words, an equivocation that is also a direct appeal to our social nature, has been used in studies of the placebo effect.) This book looks into ways in which our affiliations with others support the placebo effect, or its nocebo equivalent, and extend its operation well beyond the clinic. Some might call the derivative experience of the placebo effect—as when a person reports benefits from an inert pill said to work with others—a secondary event, but I see no reason to privilege some other event as true and primary; it is not as if we were patients first and members of society second. Some speculate, indeed, that the placebo effect is social in origin, likely to have evolved "from social grooming in apes and altruistic behavior in early hominids. An individual who trusts a member of his own social group, whether a shaman or a modern doctor, has surely an advantage over those who lack this mental disposition."[5]

By consensus, it was the investigation of animal magnetism—a universal fluid postulated by the shaman-like medical doctor Franz Anton Mesmer (1734-1815)—that first pin-pointed the placebo effect. In keeping with the model of the placebo effect as a phenomenon activated by the context in

which it occurs, I will argue that the felt power of the theorized fluid derived from the theatrical rituals of Mesmerism, but secondly from the power, the "magnetism," of the Mesmer movement.

In the tradition of the inquest into animal magnetism, investigators in recent decades have conducted intriguing experiments on the placebo effect, many of which concern pain. But because pain in the laboratory—pain studied and controlled—differs from pain of unknown origin capable of exciting anxiety and even terror, the results of such studies might not apply extramurally even if the trickery that is so much a part of placebo experimentation were admissible in medical practice.[6] Conversely, some forms of the placebo effect do not really lend themselves to simulation. Precisely by removing subjects from the social world at large and placing them in controlled conditions—often isolated from one another[7]—in the interest of methodological rigor, experiments shut off channels in which the placebo effect normally operates. This book views the placebo effect more broadly, in keeping with the importance of social context. In a neglected classic of the placebo literature it is documented that surgical patients whose windows looked onto "a small stand of deciduous trees" recovered more quickly than strictly comparable patients in the same hospital who looked onto a brick wall.[8] Let that more open view represent the view of the placebo effect itself taken here. Because my purpose is not to generate findings that can be translated into practice—though many of the findings of placebo research could never be translated into ethical practice either—I will consider some fictional portrayals of the social character of wellbeing and illness, even of dying. My assumption is that the subtlety and richness of literature more than make up for its deficiencies as data. The scientists who investigated the strange medical fashion of Mesmerism in pre-revolutionary France, thereby identifying what we now know as the placebo effect, concluded that its power source was none other than the human imagination. If the placebo effect plays in some way on the imagination, it seems fitting to consult works that know the realm of imagination from within—works *of* imagination—in a study of it.

I understand the placebo effect as an experienced benefit derived not from the actual composition of a medication or treatment but from its imputed or reputed properties, the rite of its administration, or "the power of context."

The Social Component of the Placebo Effect

If the placebo effect depends on belief, so great was belief in the Greek medical tradition in much of the Mediterranean world in medieval times that physicians who inherited and spoke for the tradition stood at the head of their local community and were sought after by kings and caliphs. "It was the general outlook of a highly bookish age with its deep veneration for scientific attainments which entrenched the position of the medical art in popular conscience."[9] In time, however, such bookishness attracted skepticism and ridicule, as the portrait of the Physician in the *Canterbury Tales* depicts the man's book-knowledge, or show of such, as a tool of a lucrative trade; or as the wise Lady Folly in Erasmus's *Praise of Folly* prefers uncertainty and bewilderment to the delusions of academic knowledge. To Lady Folly, the doctor who commands esteem by engaging the beliefs of the community is simply a charlatan.

> Among . . . many different disciplines, those are most highly prized which come closest to common sense, that is, popular folly. . . . "The doctor of medicine alone is worth all the others put together." And within this profession itself, the closer a man comes to an ignorant, arrogant, inconsiderate quack, the more highly he will be esteemed even by princes seated in lordly estate. For medicine, especially as it is now practiced by most doctors, is nothing but a branch of flattery, like rhetoric itself.[10]

But according to the compendious *Anatomy of Melancholy* by Shakespeare's contemporary Robert Burton, a physician cannot help his patients unless he inspires belief. "'Tis opinion alone . . . that makes or mars physicians, and he doth the best cures, according to Hippocrates, in whom most trust."[11] If the best physician is trusted by the most people—one thinks of Maimonides with his extensive practice, shining reputation, Hippocratic lineage, and presumably deliberate exploitation of the placebo effect[12]—even "opinion" in this case seems to refer to a belief generally, not just privately held.[13] It does not make things simpler that the word "opinion" in Burton's time had disturbing connotations of popular delusion.[14]

The physician who woos and wins the opinion of the community can be shown as a confidence artist, a master of benign deceptions, a good practitioner, or even all at once, as in this comment put to paper in the mid-eighteenth century:

> The principal quality of a Physician, as well as of a Poet (for Apollo is the God of Physic and Poetry), is that of fine lying, or flattering the patient. . . . And it is doubtless as well for the Patient to be cured by the Working of his Imagination, or a Reliance upon the Promise of his Doctor, as by repeated Doses of Physic.[15]

Yet if most of our ailments pass, the lying physician may be speaking the truth despite himself, and if wellbeing has something to do with integration into the community, the physician may do some good by speaking the community's language.[16] The ambiguity of the figure of the socially adept healer—now a Maimonides, now a fine liar, now a quack—prefigures the ambiguity of the placebo effect itself, covering as it does a spectrum of responses ranging from actual bodily changes induced by paradoxically inactive agents to the dubious benefits of sham medications. In turn, the ambiguity of the placebo effect leads investigators to claim that "Positive emotions and ideas can help to heal the body through the powerful placebo effect," only to subjoin that "the actual effects of [optimism] are difficult to prove or disprove"[17]; or to label psychotherapy as "the quintessential placebo" only to deny that it is in fact nothing but a placebo.[18]

Placebos per se range from saline injections and sugar pills to unnecessary antibiotics, from active drugs prescribed at sub-active levels to drugs that outperform inert pills only trivially, as with antidepressants in most cases. If people are drawn to antidepressants because they seem to work, perhaps it is also true that they seem to work because so much belief, hope, scientific prestige, popular mythology, moral ardor, and financial capital have been invested in them that they became, in all, a kind of movement;[19] from 1988 to 2008 their use in the United States quadrupled.[20] It is known that the benefits of antidepressants are largely an artifact of the placebo effect. By general agreement, a primary mechanism of the placebo effect is expectation, as when we experience a certain benefit because we anticipate it. But we may anticipate it not because we ourselves have enjoyed it before, but because we learn, imagine, or assume that others have. In the pages to come I look from different angles at this predisposition to feel what others feel, or are reputed or believed to feel. Perhaps the first to take notice of it was Montaigne: "I would rather live among people who are healthy and cheerful: the sight of another man's suffering produces physical suffering in me, and my own sensitivity has often appropriated the feelings of a third party. A persistent coughter tickles my lungs and my throat."[21] But was this Montaigne's peculiarity?

Evidence that it was not comes from the observation of Robert Boyle—one of the founders of modern science—that a hysterical woman witnessing another suffering a fit was often "infected with the like strange discomposure."[22] Exactly the same observation was made over a century later by a doctor who collaborated in the first research in England on the placebo effect.[23] Yet the social component of our experience—our felt response to the experience of others, whether we witness it or learn of it—is largely overlooked in the now-voluminous placebo literature. A recent paper on "Patients' Direct Experiences as Central Elements of Placebo Analgesia" reviews studies where patients treated with a placebo are told of the relief others derived from it; that is, the paper unwittingly introduces reported experience into "direct" experience itself. (Indeed, in one of the reviewed studies the patients are actually told about the *practitioner's* experience treating their symptoms.) In each case the patients tend strongly to report the same benefit that was reported to them.[24] Similarly, it seems that many ask a doctor for antidepressants after learning of others' experience with them—so-called word of mouth endorsements.

While controlled experiments bear at best a rough resemblance to life at large, studies where subjects learn in one way or another of others' responses are closer to life than studies that seal subjects in an information vacuum. And much as the words of others enter into our own—for "in real life people talk most of all about what others talk about—they transmit, recall, weigh and pass judgment on other people's words, opinions, assertions, information"[25]—so too are the responses of others likely to tint ours. As it happens, research into the placebo effect in the late eighteenth century targeted two medical fashions powered by pamphlets, newspaper reports, word of mouth, public wonder—the flow of charged information. As I will argue, under the influence of these public sensations many reported bodily sensations exactly like those others seemed to have, even though both fashions turned out to be medically baseless. A few years later, in 1811, occurred the first recorded usage of the word "placebo" in the sense of a medicine prescribed to humor the patient. True to the social character of the placebo effect, however, patients may report (and conceivably experience) improvement in order to gratify the doctor,[26] just as the doctor may prescribe a placebo in order to appease the patient.

An oft-cited example of the placebo effect is the stimulation coffee-drinkers derive, or seem to derive or in any case report, from deceptively labeled decaffeinated coffee. No doubt the drinkers expect stimulation from

caffeine, but where did the expectation come from? Maybe from their own experience, maybe not. Coffee-drinking, after all, is a social act surrounded with anecdote, such as tales of students who stay awake for nocturnal study sessions by charging with caffeine. "People hear about, observe, and experience coffee-drinking in specific contexts, embedded within sociocultural networks of meaning,"[27] so that I know of the effects of caffeine by reputation and rumor as well as first-hand experience. Socially speaking, it is not so mysterious that I should seem to experience the effects the world around me ascribes to caffeine, even though it is not present. In that coffee-houses where newspapers were read and opinions exchanged (and where doctors met)[28] were focal points of the public realm as it took shape in eighteenth-century Britain, coffee is in fact historically associated in a strong way with the circulation of information.[29] And hearsay or reputation itself can tinge our sensory experience, as when headache sufferers give high ratings to a placebo packaged as a famous brand of aspirin they have never taken.[30]

It sometimes happens that a drug's presumed effect runs contrary to its pharmacological one. In the case of alcohol, for example, "the pharmacological effect . . . is to decrease sexual arousal. However, consistent with common expectations, the belief that one has consumed alcohol results in *increased* sexual arousal to erotic stimuli."[31] From the folklore surrounding alcohol I derive the fanciful notion that it heightens sexual arousal. Steeped in this sort of common knowledge, I may come to experience an effect other alcohol-drinkers are presumed to enjoy, even though it is the presumption rather than the alcohol that drives it.

Or consider the finding that "people taking red or pink placebo pills tend to feel stimulated, and those taking blue pills tend to feel more sedated, regardless of active ingredients."[32] One doubts these reported experiences trace back in each and every case to the pill-taker's actual history with red and blue pills respectively. The fact is that in the world around us, these colors have a certain emotional valence—red connoting heat, passion, energy (as in a sports car's red line), blue associated with coolness and languor (as in the blues), melancholy, or even steadfastness ("true blue"). Moreover, the original experiment with pink and blue placebos was complicated with social factors that seem to have gone unnoticed in the literature. Though blue is no more strongly associated with languor than red with passion, the "blue" response was much stronger—possibly because responses were measured after the medical students who served as the study subjects sat through an hour-long lecture.[33] Not only can a lecture be a sedative in itself, but the

drowsiness of some members of the audience can readily communicate itself to others.

Groups, Fashions, Movements

Cases of sensations transfused from one person to another are well known to both medical and social science. In a public place—say a school or a train station—someone seems to scent a noxious gas and falls ill, whereupon bystanders fall ill in turn and the phenomenon cascades, with one person after another sickening as a result of exposure to mysterious vapors that turn out not to exist. But there is no law of nature or human nature dictating that only sensations of illness can pass in this way. Spectators of the physical "crises" induced by the charismatic Mesmer when he fixed subjects with his gaze might well have felt similar forces shooting through their bodies. Yet if we had to be on hand to witness the sensations of others in order for them to affect us, the social sources of the placebo effect would be more limited than in fact they are. For we also respond to reports about others, as indeed the stories that surrounded the Mesmer phenomenon must have added immeasurably to its mystique.

Only because the experience of our very bodies is subject to social influences can the placebo effect act in this way. Among the evidence that our sensations are so subject I would include notes left by the eighteenth-century physician Johann Storch, in the German town of Eisenach, concerning the ailments of his female patients. Speaking of a flux in their ears, of womb cramps in their mouth, the women described many bodily experiences all but incomprehensible to us but to them as intuitive as the social medium of language itself. They experienced their ailments alike just as they spoke about them in similar ways. To listen to the women is indeed to learn a new language:

> The complaint about an inner flux was one of the most frequent reasons why women turned to the doctor. . . . The flux is a strange thing. It described a host of things. "Flux" is the name for pains a woman felt inside from matter flowing in her body. The women also spoke of "flux" when something flowed from their bodies. The word "flux" combined a subjective experience with a complex meaning. The women suffered from an inner flux, but at the same time they were fearful that this flux inside them could be "struck in," be driven back, become stuck. They suffered from the flux and from the fear that it might disappear.[34]

Like flux itself, the women's ailments seem flowing and indeterminate, so much so that without settled ways of talking about them they might be unable to pin them down at all. Today we would be more inclined to speak of mood fluctuations than flux, although these too are highly ambiguous virtually by definition. The inherent ambiguity of our self-interpretations, to say nothing of mood changes, gives the placebo effect a field to operate in. If not for the equivocality of such events, the placebo effect would have much less to work with. In 1963 a meta-analysis of 67 drug studies tabulated such side-effects of placebo treatment as "depression of the central nervous system" (the most common of all), "heaviness of limbs," "mental confusion," and restless legs, events no less obscure, perhaps, than flux in the ears, but more credible to us because more familiar.[35]

The placebo effect may escape our awareness not because it is too remote but too near, as near as our own moods and pains. The report on the pink/blue pill experiment published in 1972 remarks in passing that it is no coincidence "that the most widely prescribed drugs are those used to treat mild anxiety and minor pain—conditions that either remit spontaneously or respond to reassurance." We are awash in the placebo effect, it seems. Not that nothing has changed over the intervening decades. These days drugs for depression have taken the place of those for anxiety on the sales list, but, perhaps unsurprisingly, these popular compounds exhibit a strong placebo component of their own. (As I will suggest, the very knowledge that one's drug has conquered the marketplace and is being taken by millions of others, as if one were part of a movement, may serve to boost the placebo effect.) Even though the two conditions, anxiety and depression, are associated with one another and difficult to distinguish clinically,[36] it seems one is in the ascendant or in medical fashion while the other is not. Not only has consumer favor shifted over time from anti-anxiety to anti-depression medications, both of them in large part placebos, but it was during these decades of pharmacological revolution that placebos acquired their now-celebrated ability to mimic drugs.[37] Highly responsive to its surroundings, the placebo effect simulated the action of the compounds that had become the darlings of public enthusiasm.

Some would restrict the locus of the placebo effect to dummy medications while others insist it is the art or rite of medical care itself. But a doctor may prescribe an irrelevant treatment with all due care. Ordering vitamin injections that had no particular medical value but nevertheless seemed to help his patients, one doctor would tell them, "I'm going to have you get

some B-12 injections. They have helped many other patients, but I cannot explain to you why they work and I cannot promise you they will work. I can simply say that many patients tell me they feel better and stronger after such a course of therapy"[38]—thereby arousing an expectation that the benefits others enjoy, they will enjoy too. (That injections per se raise higher expectations among American than Europeans suggests that patients even respond to the needle as members of their society. For that matter, people tend to attribute their health problems to the same causes as the groups to which they belong.)[39] In saying that he can't make promises but that vitamin injections reportedly work for other patients, the doctor issues a disclaimer that nevertheless acts as a potent recommendation; the statement itself is an injection of hope. Similar formulas are used in placebo research when the experimenter does not want to lie but also does not quite want to reveal that the treatment in question is medically null, which would defeat the expectation of efficacy. Instances of this genre are cited in the pages to come.

In keeping with "the power of context" and the importance of ritual, we may benefit not only from taking the same medications or pseudo-medications as others, but following the same procedures. Evidence from several clinical trials suggests that subjects taking a placebo on schedule enjoy better outcomes, including significantly higher rates of survival, than the less adherent, even when a number of variables are controlled for.[40] Though the exact reasons for this provocative finding remain unclear, it seems the ritual of pill-taking—following the same procedure as others—does count for something. Similarly, the efficacy of Alcoholics Anonymous may flow less from the specific twelve principles to which members pledge themselves than from the communal nature of the pledge; by committing themselves identically in a solemn and ritualistic manner, members escape their own isolation and form a group that strengthens each and every one of them. As we will see, anonymity also rules over More's Utopia, a showcase of both good health and unanimous ritual.

"In the beginning was not the word but the group," suggests a searching analysis of the placebo effect.[41] In the course of a meditation on the same subject, a doctor notes that some of his patients in the 1960s refrained from alcohol for long periods when they joined not Alcoholics Anonymous but the Black Panthers.[42] So too, for veterans who have sustained psychological injuries in war mutual support may activate a potential for recovery—so-called "healing through community."[43] On the other hand, it remains unproven that support groups can improve survival rates for breast cancer patients; and

while such groups may help men who choose to leave early-stage prostate cancer untreated,[44] the same men would most likely not have become cancer patients in the first place if they hadn't fallen in with the screening movement and sought out testing for a disease that can go untreated. Groups, then, take many forms, not all of them necessarily health-enhancing.[45] As social beings we are drawn to trends, fashions and movements with ambiguous potential, and are inclined to feel what others caught up in these forms of social life appear to.

According to some, underlying the placebo effect is the sense of being in the hands of a superior power, namely the doctor's.[46] While it is natural for doctors to regard themselves as indispensable to the placebo effect and central to the patient's experience, they do not actually have to be in the picture for someone to enjoy the placebo effect (as in the case of coffee with presumed caffeine), and at this moment few doctors are ready and willing to take charge of the patient as implied by the authoritarian model of superior power. The doctor who confesses, "I cannot explain to you why vitamin injections work and I cannot promise you they will work" has not struck a very authoritarian pose. But maybe I can also enjoy a sense of being in the hands of something greater than myself by committing myself to a movement—joining a multitude of others inspired by common aims or passions. (The members of Alcoholics Anonymous have not only joined a movement but, by their creed, have placed themselves in the hands of a higher power—a double source of morale that helps account for the success of the AA method.) Mesmerism, the craze that first inspired investigation of the placebo effect, was nothing less than a movement, and it didn't hurt that the man who gave it its name played the maestro and professed to be in touch with a mysterious elemental power. Some trace the practice of psychotherapy to Mesmer. In that spirit I will pursue an analogy between a current mode of psychotherapy and Mesmerism, but also make the more general case that the popularity of psychotherapy has much to do with its cultivation of the placebo effect, which is the other side of the argument that being carried along by a popular movement can fuel the placebo experience.

Though no longer in vogue, psychoanalysis provides the precedent for talking therapies that are. While the cures wrought by psychoanalysis were never confirmed experimentally[47] and remain open to doubt, the method was sustained by a potent narrative, according to which a patient held captive by unprocessed conflicts from childhood comes to recognize the source of his or her troubles and is thereby cathartically released from them. From

where does this notion of catharsis—the discharge of energy that theoretically transforms us from prisoners of our past to free agents—draw its appeal? The fact is that healing has long been thought to operate by clearing harmful things from the body, whether by means of purging, bleeding, or some other method. The history of healing, it has been said, consists largely of "cathartic methods of treatment."[48] By directing the flow of animal magnetism and inducing cathartic "crises" of his own, Mesmer purported to clear blockages from the patient's system without recourse to traditional medical methods. Like Mesmer, Freud adapted a principle that seems to have recommended itself to human intuition for as long as something like medicine existed. The authors just cited also argue, with evidence, that "until recently the history of medical treatments was essentially the history of the placebo effect."[49]

Rich Representation

Over recent decades many have sought, with reason, to rescue the placebo effect from the cynicism that once surrounded its use as a ploy to placate and deceive gullible patients. But I know of no more robustly straightforward defense of the value of pleasing the patient—and "placebo" means "I shall please"—than Rabelais'.

In contrast to those who portray physicians as flatterers and confidence artists, Rabelais, a physician himself, would have them serve patients in all sincerity by lifting their spirits, just as his own writings are intended to relieve depression and minister to human cheerfulness. Given the literal meaning of "placebo," Rabelais' position that the doctor should above all please the patient constitutes a warrant of the placebo effect.

> A physician, dressed up with the right mien and attire . . . could reply to those who found his role-playing odd: "I have put on such accoutrements not to show off and be pompous, but to please the patient on whom I am making a call, whom alone I seek entirely to please, avoiding all offense and irritation."[50]

The proper use of the placebo effect is not to exploit the patient by inducing belief in sham remedies but to encourage by every fair means. Rabelais makes the transacted nature of the pleasing effect quite clear, whether "such cheering-up results from the perceptions of the patient as he contemplates those qualities in his doctor . . . or whether it results rather from the pouring

of the doctor's spirits . . . into the person of his patient."[51] Either way, each feels what the other does.

Our liability to deception was undoubtedly known to Rabelais, as the human appetite for delusion constitutes a commonplace of the satiric tradition and indeed literature in general. Literature, however, laughs and weeps at human suggestibility as medical research will not permit itself to do. It laughs, as in a *Decameron* tale where a group of rogues set up the foolish Calandrino by accosting him one by one and asking him if he is all right; by the third cue that something is wrong, he "was quite certain he was ill."[52] A doctor, the rogues' confederate, then tells him the reason he feels so sick: he is pregnant. Literature also weeps, as when Eve accepts the apple in *Paradise Lost* (the subject of chapter 4). Satan doesn't just extol the supposedly magic fruit but cites his own experience of its uplifting effects; Eve's momentary sense of uplift upon eating it, obviously modeled on the serpent's report, is the placebo effect without the name. If we can be led to confuse alcohol for a sexual stimulant, perhaps "our general mother" could confuse a common apple for a psychotropic one.

I look to literature in these pages, then, because it knew of our propensity for delusion as well as the social character of our experience well before these matters came before the bar of science and were isolated and verified experimentally. But there is another reason.

Two decades ago a paper in *Science* memorably demonstrated a connection between social bonds and health, such that the less socially integrated are even more likely to die: a striking illustration of the medical import of social forces.[53] But how is the nature of a social bond to be assessed? Here the paper is at its weakest, it seems to me. Time and again it refers to the "quality of social relationships" as if that elusive something were as plain as a box on a questionnaire. The information available in forms and surveys about the quality of a relationship—its dynamics and differentiae, its intricacies—is itself of poor quality. A significant contributor to inflated estimates of the prevalence of depression in the United States is the crudity of instruments used to measure it.

So argues a book published a few years ago that takes on the diagnostic system of the authoritative *Diagnostic and Statistical Manual*, contending that a checklist of symptoms for such an ambiguous condition as depression is too schematic and leads to false conclusions. As the authors make clear, the diagnostic question is not which presumptive symptoms of depression exist, but whether the symptoms are in fact indicators of excessive, chronic

or uncaused sadness, a determination that can be made only if the history behind the symptoms is taken into account. By way of illustration they offer some hypothetical cases, one involving the collapse of "a passionate romantic relationship," another the "loss of a valued job," another the receiving of a "life-threatening medical diagnosis" by a loved one, each of which might incite a reaction of profound sadness.[54] But case histories sketched in two or three paragraphs are themselves bone-thin compared to the richness of literary representation. In the literature of the imagination we will find a feeling for detail, for the specificity of cases, and for ambiguity, each of which tends to be missing from abbreviated reports, and all the more from the statistical language in which medical findings are now so often cast.

The most pointed discussion I have encountered of the biomedical influence of social forces occurs, in fact, in a novel. When the aging protagonist of Wallace Stegner's *The Spectator Bird*—a man of bitter meditations, graveyard humor, and Danish ancestry—receives a questionnaire in the mail asking about his self-esteem on the theory "that a decline in self-esteem is responsible for many of the overt symptoms of aging," it sends him into a rage:

> I looked at the questions and threw the thing in the fireplace. Another of those socio-psycho-physiological studies suitable for computerizing conclusions already known to anyone over fifty. Who was ever in any doubt that the self-esteem of the elderly declines in this society which indicates in every possible way that it does not value the old in the slightest, finds them an expense and an embarrassment, laughs at their experience . . .? The poor old senior citizen has two choices, assuming he is well enough to have any choices at all. He can retire from that hostile culture to the shore of some shuffleboard court in a balmy climate, or he can shrink in his self-esteem and gradually become the cipher he is constantly reminded he is.[55]

In time, socio-psycho-physiological studies became the currency of research into the placebo effect, and because I cite many such, I think it best to temper their abstraction with particularity. Before looking into the social character of the placebo effect as it was identified in the late-18th century and then tracking some of its manifestations today, I will therefore examine a few socio-medical transactions in literary works of universal renown. In Book Four of the Odyssey the action of a certain benign Egyptian drug seems scarcely distinguishable from the ritual of its consumption. In More's remarkable Utopia, the action of an also-benign suicide drug seems similarly supported by

ritual. In the twisted world of *Hamlet*, however, it is the poisoner of Hamlet's father who invokes the social nature of wellbeing, espousing conventional social remedies for the young man's melancholy—behavioral antidepressants, we might call them.

Medicine and literature are kindred arts. Apollo presides over both Physic and Poetry, after all.