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Broadening the Marketing Concept: Service to Humanity, or Privatization of the Public Good?

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Hindsight allows us to see today why social reforms proposed in the 1960s enjoyed the unique possibility of adoption: Both the political right and left were suing for change in existing arrangements of public administration. The watchword of the age was freedom. For the left, freedom meant from the authority of institutions such as schools, families, legal codes, and cultural norms. For the right, freedom meant the liberation of commerce from regulation. (Laissez faire was not a new idea; however, it had fresh wind at its back because of the communist threat. The "command economies" of the Eastern bloc were seen as a conduit to tyranny, a "road to serfdom," as Friedrich Hayek put it.) The common goal was to break the domination of impersonal forces in society.

Academic marketing participated in the new synthesis that emerged from the coalition against impersonal authority. The discipline was a hybrid of social–cultural and economic–commercial thought. Its charter was to mediate the gap between individuals and their needs on one hand and producers and their capabilities and requirements on the other. Seen from the point of view of its champions, marketing was on both the individual's and the corporation's side in the battle against the forces of the impersonal. In the view of marketing humanists, if I can suggest this term to mean those who see marketing as a wholly positive force in society, the success of marketing's most consequential discovery, the brand, signaled the triumph of the personal, particular, expressive, meaningful, unique, identity-endowed, and humanized over undifferentiated mass commodities. Brands, like other elements of marketing, succeed by virtue of a concurrence between corporations and their public that needs are satisfied in the cooperative venture between the

two. The prevalence of marketing humanist optimism was based on this accord and contributed to the profession's view of itself in the 1960s as "a societal force" (Bartels, 1974).

It was into this context that two marketing academics—who themselves represented the formerly contrasting sides (Philip Kotler was an economist, Sidney Levy a hybrid psychologist/anthropologist)—framed a proposal to extend marketing ideas gleaned from business enterprises to the non-market domain of public administration. The authors depicted a confrontation between the forces of the impersonal and the personal:

> Modern marketing has two different meanings in the minds of people who use the term. One meaning of marketing conjures up the terms selling, influencing, persuading. Marketing is seen as a huge and increasingly dangerous technology, making it possible to sell persons on buying things, propositions, and causes they either do not want or which are bad for them. The other meaning of marketing unfortunately is weaker in the public mind; it is the concept of *sensitively serving and satisfying human needs*. This was the great contribution of the marketing concept that was promulgated in the 1950s, and that concept now counts many business firms as its practitioners. The marketing concept holds that the problem of all business firms in an age of abundance is to develop customer loyalties and satisfaction, and the key to this problem is to focus on the customer's needs. (Kotlera and Levy, 1969: 15; italics in the original)

In the public imagination, particularly following the publication of Vance Packard's book, *Hidden Persuaders*, marketing epitomized an impersonal, threatening force, "a huge and increasingly dangerous technology" (Kotler and Levy, 1969). The view of marketing Kotler and Levy wished to promote, by contrast, was of a human, personal, and sensitive discipline working in humanity's interest. Under the influence of the marketing concept, they averred, corporations had left behind their self-centered production orientation and assumed the lofty purpose of sensitively serving and satisfying human needs. Now it was time for public sector enterprises to follow suit so that they too would at last serve the needs of their constituents and clients.

Posing marketing as leverage for the personal against the impersonal was a strategic reframing of the more traditional opposition between those forces held to exist in the service of the pubic good and those organized for the pursuit of private gain, namely, capitalist firms or corporations. Viewing marketing as a handmaiden to greedy corporations, Kotler and Levy wished to tell us, was an erroneous view of marketing. The marketer's true calling is to serve mankind, and marketing is a tool, a technology, even a science geared to the work of satisfying human needs. As such, it could be transferred, or "broadened" to all areas where human needs required attending to, not just commercial consumer products.[1]

The extensive privatization and commercialization Western economies underwent in the three decades following the 1960s (Carrier, 1997; Gray, 2000) helped bring marketing managerial models increasingly into wider spheres of relevance. State-run sectors of the economy were recast as private enterprises and governmental and nonprofit organizations that could not be privatized because profit was not extractable from their operations came under increasing pressure to nevertheless think like businesses (Williams, 2006). Marketing models gained standing as just one component in the effort to disabuse public sector enterprises from non-market driven models. General management, finance, governance, as well as marketing were all broadened to the social sector at the same time. Eventually the pretense of "personal good, impersonal bad" was dropped. The claim—indeed under America's first MBA president, George W. Bush, the marketing byword—became "private good, public bad." This extended in every conceivable direction: Social security bad, private investment good. Public health care bad, private health care good. Regulation bad, free market good. Government bad, corporations good. The supposed autonomous workings of the market and the expertise of business managers, if only we were to turn our wealth and our institutions unquestioningly over to them, would bring universal prosperity and, trickling down from that, Social Good.

Marketing, again, purports to span the two camps. On one hand, the discipline owes its existence to the insight that the untouched mechanism of supply and demand does not directly provide people the satisfactions they need and want; the role of marketers is to translate across the demander/supplier divide. Peter Drucker says, "In marketing . . . we satisfy individual and social values, needs, and wants—be it through producing goods, supplying services, fostering innovation, or creating satisfaction. . . . Marketing is thus the process through which economy is integrated into society to serve human needs" (1958: 252). For Drucker and others with a humanist view, marketing's beneficent contribution is to act as a bridge to a utopian future when the visible hand of marketing can recede from the scene, having performed its worldly function, after which the market can take over the role of providing for human needs without human interference.[2] On the other hand, the staunchly individual, self-interested, maximizing, rational decision-taking homo economicus of neoclassical theory has survived more or less intact as a model for human nature underlying most marketing research and practice (Applbaum, 1998, 2004)—a point of view also reflected in Kotler/Levy's article.[3]

It is not my central purpose here to explore these philosophical antinomies, but only to point out that between 1969, when Kotler and Levy published their treatise, and today, much of what once fell under the category of public interest, whether in the social or the private sector, yielded either to private ownership or to thinking like businesses. Marketing contributed ideas and practices to this broadening. Our question therefore is not whether the marketing concept

has been broadened (it has), but (*a*) What particular addition has marketing made to the privatization model? (*b*) Has this effect been significant (*c*) In what ways has it been salutary and in what ways deleterious to society's interest?

The example I explore is from health care, and in particular the creation and distribution of pharmaceuticals, which constitutes roughly 18 percent of the global health budget, and is growing faster than health expenditure overall.[4] In the United States, annual per capita spending for pharmaceuticals in 2008 was nearly $850. If we add in expenditures for medical device industry, these numbers are much larger.

Beyond the magnitude of private and public spending devoted to it, health care is an ideal example to discuss for two reasons. First, whether it is mainly privately held, as it is in the United States, or publicly administered, as in most of the world, health care is at heart an enterprise in the public interest. Prescription pharmaceuticals are called ethical drugs because, unlike most other goods, their distribution is vital to human welfare, and violation of that welfare, either through intentional compromises made to the safety of drugs or through the attempt to unnaturally limit or expand their distribution in the interest of profits, is considered unethical. The degree of oversight of pharmaceuticals, even in the United States where regulation has been greatly attenuated, is evidence that they are considered social goods of a unique kind. At the same time, pharmaceuticals are first-order commercial entities. Because of the cost and esoteric process of development they are heavily proprietary. Pharmaceutical pills are branded products, objects of trust and hope, intimate, compact, and transportable. They circulate widely if not effortlessly on the wings of medical science, and are thus also vehicles of globalization. If we had to select among all objects the best symbol to represent the meeting of public interest and private commodity, a pill would be it.

Another reason that health care is the ideal sector in which to measure marketing's contribution to public good—the claim at the heart of the broadening concept—is because marketing proposes that its unique contribution to both humanity and to the scientific study of it lies in its expertise in assessing and meeting human needs. Medicines and health care constitute a final frontier for marketing application because our needs in that province of experience are, in result of our mortality, infinite. Good health is the very template upon which the concept of need might rest. However, it is not just our mortality at stake in health care, but the quality of our lives while we live them. Marketing concerns itself with this "unmet need" facet of health and health maintenance, while biomedicine has lately paid less attention to this aspect of health care, focusing instead on disease-specific interventions. Pharmaceuticals and health care thus lie precisely at the juncture between private and public administrative methods, motives, and conceptual models of

service to humanity, such that we can estimate whether the application of marketing principles to it is appropriate and useful.

Pharmaceuticals: From Sales to Marketing

Preface—Rival views of the history of pharmaceutical marketing

The historiography of marketing is replete with minor disputes over when modern marketing concepts took root. A similar debate in miniature may be taking shape in the history of pharmaceutical marketing. On one side are those who claim, as I do, that the late 1980s and early 1990s marked a break with what preceded it, insofar as at that time marketing became a total institutional fact in the industry. Marketing and R&D (research and development) were largely combined under the direction of marketing; the driving orientation became the pursuit of product/brand/patent equity through strategies of extension and control; and the application of customer segmentation (in which physicians rather than end users were the main target) became routine. The reintroduction of direct-to-consumer (DTC) advertising coincided with this periodization, contributing further to the marketing focus of firms.

The fruit of this application of marketing principle was the emergence of blockbuster drugs, designated as drugs whose annual sales exceeded $1 billion. The profits from blockbusters came to rival that of all the other drugs combined in a pharmaceutical company's product line. Blockbusters accounted for 6 percent of the overall pharmaceutical market in 1991. This figure tripled to 18 percent by 1997, and in 2001 occupied fully 45 percent of the market.[5] The top ten drugs alone, constituting less than a quarter of 1 percent of drugs available in a growing pharmacopeia, accounted for over $60 billion in annual sales in 2006.[6] The rise of the blockbuster focus in the industry, in my view, reflects and drives the current competitive and organizational structure of the industry.

The counter to the theory that something new had occurred around the year 1990 is held up by examples of modern marketing techniques having been employed in the industry already in the 1950s. There are several engaging accounts of this (Healy, 1997, 2002; Rasmussen, 2004; Greene, 2007). One persuasive notion is that a conceptual development in medicine and public health prepared the ground for a new approach to expanding the market for pharmaceuticals. The conceptual development in question was the shift in focus from the treatment exclusively of visible disease (old medicine) to the management of risk (new medicine). In keeping with the growing faith in the scientific superiority of quantitative measurements, in medicine too epidemiological studies changed how medicine was practiced. Practitioners became reliant on statistical tabulations of risk and on the use of

guidelines and rating scales with which to evaluate the patient sitting in front of them.

The initial impetus behind this shift, according to Jeremy Greene, was the detection of the relationship between hypertension and cardiovascular disease. The relationship was discovered not in clinical or laboratory investigations, but by epidemiological studies. Or rather, not even quite epidemiological studies as actuarial ones. It was insurance companies that originally invented the annual checkup, which they did to screen risks and to help set rates. They discovered that elevated blood pressure was a risk for cardiovascular disease. The competitive pursuit of pharmacological agents to treat high blood pressure, the development of sales organizations to convince doctors to prescribe these medicines, and the pressure exerted by the industry on public health authorities to set treatment guidelines are, regardless of how we choose to evaluate the medical outcome of these activities, classical tales of marketing evolution in the industry.

The saga of "prescribing by numbers" (Green, 2007) rather than by symptom (since hypertension is not felt by the individual), and the marketing edifice this gave birth to, begins as early as the 1940s. By the 1970s, with the addition of "pre-diabetes" and hypercholesteremia to the list of health risks measured by epidemiologists rather than clinicians, the opportunity for unprecedented expansion of drug use came into full view. Greene describes the editor of *Drug and Cosmetic Industry* magazine, Milton Moskowitz, arguing the potential for infinite expansion of drug use based on the examples of Diuril (the antihypertensive) and Orinase (for management of type II diabetes) already in 1961:

> Diuril and Orinase, Moskowitz argued, were two examples of a new form of pharmaceutical marketing that refused to accept the incidence of disease as a fixed market or a zero-sum game. Any disease was a potential market for a drug, but chronic diseases such as diabetes and hypertension were growth markets that could continue to expand—as long as the screening and the diagnosis could be pushed further outward to uncover more hidden patients among the apparently healthy. In the infinitely expandable universe of chronic conditions, in the logic of preventive pharmacology, Moskowitz saw unlimited growth capacity for the pharmaceutical industry. (Greene, 2007: 87)

Therein lay the start of a trend that would reach full realization much later: expansion strategies based on the deployment of scientific evidence as a marketing tool for convincing physicians and consumers that increased consumption of pills would lead to improved health.

The resolution of the two historical views lies in the recognition that when the marketing concept is properly applied, its realization is actualized

simultaneously in a formulation of consumer need as well as an institutional structure that reflects that need so to best be able to meet it (Kohli and Jaworski, 1990). For readers unfamiliar with marketing theory, this may seem a bit abstract. In fact, it is not very different from what can be explained by means of a simple example. If the need in question is a fast meal, the restaurant serving that meal has to be organized in such a fashion so as to deliver it. The kitchen, the skills of the chef, the layout and atmosphere of the dining area, the ingredients, the size and training of the restaurant staff, the location and access of the restaurant, and so on must all mirror or conform to the product being delivered. Try to serve fast food to a line of people at a five-star restaurant, or a five-star meal out of the kitchen of Burger King, and you get the idea.

The case of pharmaceutical markets and companies is similar. The needs of the consumers of the company's products and the organization to deliver it must be matched. The difficulty of accomplishing this harmonization in an industry where consumer needs, distribution channels, stake-holding constituencies, and products are as complex as they are is one of the most important reasons why the adaptations I speak of below become necessary. Since I am speaking of consumer needs on the one hand and institutional arrangements to meet them on the other, I split these into two separate discussions.

PART I: ABSTRACTION OF CONSUMER NEEDS

Why should prescribing by numbers have been uniquely suited to fostering the growth of marketing activities in the firm? Prescription by numbers conforms loosely to a pattern I have elsewhere called the abstraction of needs and the mining of presumed latent needs. This abstraction helps globally expanding firms overcome the problem of the specificities of consumer preferences:

> Successful expansion depends upon the power to standardize one's product and marketing. . . . The need to respect individual and cultural differences through marketing adaptation—the ultimate factor at stake in customer orientation—is resolved by a practical consensus to incorporate higher and therefore more inclusive levels of abstraction in the consideration of consumer needs. . . . The application of this *customer need abstraction*, in which rather than listening to what customers say they want, the marketer determines by his or her own means what the customer would actually like, is effected by means of marketing-inspired models of consumer behavior. (Applbaum, 2004: 81)

As a material aside, we can see from Kotler/Levy's own work that expansion through abstraction is a standard formula in marketing thought. In Kotler/Levy's broadening program, there were two needs being abstracted. The first was the service component of public administration. If museums, churches, universities, police departments, charities, libraries, labor unions, YMCAs, and

the defense department were to drop the narrow version of their missions Kotler/Levy say (e.g., universities = "to educate the three Rs"; churches = to "produce religious services," etc.) and instead promote more abstract goods (e.g., universities = "to serve the social, emotional and political needs of young persons"; churches = their "basic product . . . is human fellowship") with the use of marketing tools, then they would be more successful at serving their consumers and constituencies.

The hazard of the above recommendation to the specific goals espoused by those organizations aside, Kotler/Levy's article can as readily be taken as a treatise of marketing advocacy, for in it the attempt to reposition marketing itself into a more abstract provider of services is only thinly veiled. This is the second need that could use a makeover by means of an abstraction. They cite Levitt (1960) to bemoan the failure of the marketing imagination due to literalism. The exemplar is a cosmetics company that should see its basic product "as beauty or hope, not lipsticks and makeup." With the broadening of marketing application to nonprofit sectors, we can infer, its practitioners would get a makeover: Marketers would be purveyors of beauty and hope, not lipstick and makeup. That the authors had marketing advocacy (or the promotion of marketing) and not just marketing humanism on their minds is evident from the vehemence with which they wish to negate "the indictment in Vance Packard's *Hidden Persuaders* and numerous other social criticisms, with the net effect that a large number of persons think of marketing as immoral or entirely self-seeking in its fundamental premises" (Kotler and Levy, 1969: 15). Broadening the application of marketing to the social sector, the authors hoped, would defuse the growing negative public image of their profession.

In the case of pharmaceutical marketing, the abstraction of symptoms to invisible markers that would be measured at a distance from patients and clinics allowed the industry to redefine their work as being not just the treatment of disease but the management of risk associated with becoming sick. More importantly, from a commercial point of view, curative treatments tend to be of short duration, whereas the management of risk is ongoing. The goose that lays blockbuster eggs is not cure, but maintenance and prophylaxis. Antihypertensive medications are forever; premenstrual dysphoric disorder and hormone replacement therapies are intended to blanket the individual's lifetime; cholesterol-lowering medication, with the incipient endorsement of the American Academy of Pediatrics, may soon be successfully marketed as a cradle-to-grave protection against cardiovascular risk. Slowly this logic overtook the rationale for drug development in many sickness categories: osteoporosis, gastritis, arthritis, type II diabetes, irritable bowel syndrome, insomnia, allergies, and pretty much all psychiatric disorders including ADHD, bipolar disorder, depression, obsessive compulsive disorder, and

dementia. Many of these are measured abstractly either because they conform to epidemiological rather than medical inspirations to diagnosis (i.e., you do not feel sick when your triglycerides are high), or because the symptoms are calculated against a rating scale that objectifies the patient from a distance, as when a patient who reports to her primary care physician that she tends to blush, or has experienced poor appetite lately, or is low on energy, or is simply not feeling as fun-loving as she used to is prescribed an antidepressant (Currie, 2009).

David Healy, psychiatrist and pre-eminent historian of psychopharmaceuticals, says:

> Rating scales are increasingly being imported into clinical practice, based on the argument that they will reduce variability in the clinical encounter and make that encounter more scientific. Healthcare practitioners are encouraged to administer depression or other behavioral rating scales when seeing patients. As a result pharmaceutical companies now run symposia at major professional meetings aimed solely at introducing clinicians to rating scales. . . . For example, at the 2007 American Psychiatric Association meeting Pfizer supported the symposium "From Clinical Skills to Clinical Scales: Practical Tools in the Management of Patients with Schizophrenia." The practical tools discussed were rating scales, the use of which would draw attention to how the company's drug was superior to others in the field. (Healy, 2009: 26)

Through the abstraction of risk numbers and rating scales, pharmaceutical marketers have found undreamt of reserves of unconscious and invisible signals that they have appointed themselves to construe as "unmet needs" that they are appointed to meet.[7] Few people today question the validity of this paradigm of discovering and treating sickness, much less notice that the incidence of most of the above-named sicknesses has mysteriously expanded manyfold in recent decades. Often, where we find lifelong or maintenance therapy risk management, the research that resulted in discovery, estimation of prevalence, and then treatment was not inspired by medical, scientific, or epidemiological curiosity but by "condition branding," a subset of pharmaceutical marketing devoted to heightening consumption for one's drug (Angelmar et al., 2007).

Condition branding may sound technical or innocuous. We have become convinced, not coincidentally through industry propaganda, that disease awareness campaigns might do much good, in that sick people previously untreated might thereby go to the clinic and get treatment. What a growing critical health studies literature has shown, however, is that condition branding quite often does not begin with the determinations of medical science, after which marketing conveys information and purveys solutions. Instead, the industry builds its expansion platform on small truths—that some people

have clinically significant premenstrual dysphoric disorder (PMDD), restless leg syndrome, or social anxiety, for instance; or that some people are at particular risk for cardiovascular disease and should be treated prophylactically with medicines; or that some populations at large are undertreated for depression. These instances become the kernel of truth on which multibillion dollar forays in tendentious science is launched, packaged, and promoted by "key opinion leader" (KOL) doctors to their peers and to the public as being far more prevalent, indeed blockbuster, truths.

Critics call this practice "disease mongering," described as:

> . . . the effort by pharmaceutical companies (or others with similar financial interests) to enlarge the market for a treatment by convincing people that they are sick and need medical intervention. Typically, the disease is vague, with nonspecific symptoms spanning a broad spectrum of severity—from everyday experiences many people would not even call "symptoms," to profound suffering. The market for treatment gets enlarged in two ways: by narrowing the definition of health so normal experiences get labeled as pathologic, and by expanding the definition of disease to include earlier, milder, and presymptomatic forms (e.g., regarding a risk factor such as high cholesterol as a disease in itself). (Woloshin and Schwartz, 2006)

The logic of the abstraction of consumer medical needs as a vehicle for disease mongering reaches its pinnacle in relation to fields of medicine, such as psychiatry, where the nosology and treatments available remain ambiguous and emergent (Hacking, 1999; Applbaum, 2009). In these cases, marketers are free to market needs and position products to serve them without having to obey the strictures of scientific determinations. As Healy pointed out over a decade ago, "Although there are clearly psychobiological inputs to many psychiatric disorders, we are at present in a state where companies can not only seek to find the key to the lock but can dictate a great deal of the shape of the lock to which a key must fit" (Healy, 1997: 212). A more recent empirical investigation by Healy and Lenoury (2007) of bipolar disorder appears in Box 12.1.[8]

Analogously, in a study called "Alzheimer medications and the anthropology of uncertainty," Annette Leibing traces the expansion in Brazil of the use of pharmaceuticals for treatment in dementia. This expansion is not based on the demonstrated efficacy of existing drugs for halting cognitive deterioration, which they cannot do, but on redefining the disorder to include "non-cognitive symptoms and notions like quality of life or functionality" (Leibing, 2009: 188). There may be little evidence that the drugs provide benefit on these important but nevertheless non-scientific measures either, but this does not affect the marketing-stimulated trend toward increased prescriptions. FDA warnings of the lethality of one common class of these drugs (atypical antipsychotics—in

Box 12.1 HEALY/LE NOURY'S CASE STUDY IN STRATEGIC MEDICALIZATION: BIPOLAR DISORDER*

Early 1990s: Abbott Laboratories meaninglessly differentiates the compound sodium valproate, an anti-convulsant in use since the 1960s, to semi-sodium valproate.

This trivial distinction was sufficient to enable the company to gain a patent on the new compound. Depakote was approved by the FDA on the basis of trials that showed this very sedative agent could produce beneficial effects in acute manic states. Any sedative agent can produce clinical trial benefits in acute manic states but no company had chosen to do this up till then, as manic states were comparatively rare and were adequately controlled by available treatments. Depakote was advertised as a "mood stabilizer." Had it been advertised as prophylactic for manic depressive disorder, FDA would have had to rule the advertisement illegal, as a prophylactic effect for valproate had not been demonstrated to the standards required for licensing. The term mood stabilizer in contrast was a term that had no precise clinical or neuroscientific meaning. As such it was not open to legal sanction. It was a new brand. In addition to branding a new class of psychotropic drugs, the 1990s saw the rebranding of an old illness. Manic-depressive illness became bipolar disorder. Lilly, Janssen, and AstraZeneca, the makers of the antipsychotic drugs, olanzapine (Zyprexa), risperidone (Risperdal), and quetiapine (Seroquel), respectively, sought indications in this area, and the steps they have taken to market their compounds as mood stabilizers illustrate how companies go about making markets.

First, each company has produced patient literature and website material aimed at telling people more about bipolar disorder, often without mentioning medication. . . . Among the claims are "that bipolar disorder is a life long illness needing life long treatment; that symptoms come and go but the illness stays; that people feel better because the medication is working; that almost everyone who stops taking the medication will get ill again and that the more episodes you have the more difficult they are to treat."

A second aspect of the marketing of the drugs uses celebrities such as writers, poets, playwrights, artists, and composers who have supposedly been bipolar. Lists circulate featuring most of the major artists of the nineteenth and twentieth century intimating they have been bipolar, when in fact very few if any had a diagnosis of manic-depressive illness.

A third aspect of the marketing has involved the use of mood diaries [Eli Lilly, AstraZeneca]. These break up the day into hourly segments and ask people to rate their moods. . . . Most normal people will show a variation in their moods that might be construed as an incipient bipolar disorder.

A fourth aspect of the current marketing of all medical disorders involves the marketing of risk. In the case of bipolar disorder, the risks of suicide, alcoholism, divorce, and career failure are marketed.

Fifth, direct-to-consumer advertising. . . . Viewers are encouraged to log onto bipolarawareness.com, which takes them to a "Bipolar Help Center," sponsored by Lilly Pharmaceuticals. This contains a "mood disorder questionnaire." No drugs are mentioned. The advert markets bipolar disorder.

The sixth strategy involves the co-option of academia and is of particular relevance to the pediatric bipolar domain. Satellite symposia linked to the main American Psychiatric Association meeting could cost a company up to $250,000. The price of entry is too high for treatment modalities like psychotherapy. There can be up to forty such satellites per meeting. Companies usually bring hundreds of delegates to their satellite. At the 2003 meeting, an unprecedented 35 percent of the satellites were for just one disorder—

bipolar disorder. Fifty-seven senior figures in American psychiatry were involved in presenting material on bipolar disorder.

Until recently manic depressive illness was a rare disorder in the United States and Canada involving 10 per million new cases per year or 3,300 new cases per year. Bipolar disorder is now marketed as affecting 5 percent of the United States and Canada—that is 16.5 million North Americans, which would make it is as common as depression and ten times more common than schizophrenia. Clinicians are being encouraged to detect and treat it. They are educated to suspect that many cases of depression, anxiety, or schizophrenia may be bipolar disorder and that treatment should be adjusted accordingly. And, where recently no clinicians would have accepted this disorder began before adolescence, many it seems are now prepared to accept that it can be detected in preschoolers. Where one might have thought some of the more distinguished institutions would bring a skeptical note to bear on this, they appear instead to be fueling the fire. Massachusetts's General Hospital (MGH) has run trials of the antipsychotics risperidone and olanzapine on children with a mean age of 4 years. A mean age of 4 all but guarantees 3- and possibly 2-year-olds have been recruited to these studies.

* Based on Healy and Le Noury (2007).

which the term "atypical" is itself apparently a marketing brand and not a scientific term (Tyrer and Kendall, 2009)), in combination with the mounting evidence that their use provides no advantage to non-pharmacological therapies, did not dissuade Leibing's physician informants from adopting the medications as the first line of long-term treatment. She explains the influence of pharmaceutical marketing in bringing this change about:

> One of the best-known atypical antipsychotics in the treatment of Alzheimer's disease is risperidone—produced by Janssen Pharmaceuticals, which has been actively involved in the creation and promotion of the new category BPSD. . . . Janssen provided an unrestricted grant for a consensus conference organized by the International Psychogeriatric Association (IPA) in Landsdowne, VA in 1996, the event that was central to the development of the new category BPSD. "The development of the Consensus Statement on Behavioral and Psychological Symptoms of Dementia (BPSD) represents a first step towards recognizing that *these are core symptoms of dementia* and that it is as essential to study and treat them as it is to study and treat any other aspects of dementing disorders," wrote one of the organizers (Finkel, 1996, emphasis added). A second conference followed in 1999, resulting in more publications (IPA, 1996*a*, 1996*b*, 1996*c*, 2000, 2002). Afterwards updated educational materials were regularly mailed to all IPA members, in an effort which gradually changed the way health professionals understand and define dementia. (Leibing, 2009: 191)

One of the interesting features of Leibing's case is the contradictory combination of increased backing of and reliance on bioscientific treatments of Alzheimer's disease at the same time that the drugs are promoted to treat less neuroscientifically specifiable aspects of dementia. "There is a lack of

definitions and validated measurements of functionality, and their relation to drug efficacy," she says (Leibing, 2009: 192). The drugs have dubious efficacy in preventing cognitive deterioration, so they are promoted to treat behavioral problems associated with dementia. On one level there is the truth of scientific evidence; on another, competing level, there is marketing rationale.

This is not to say that drug companies invented BPSD, or that it is an unimportant dimension of Alzheimer's, or that the promoted drugs will never show an effect in relation to BPSD. The question rather is whether the manipulated push for scientific validation of the drugs for use in BPSD is resulting in drained budgets and enthusiasm for non-pharmacological therapies that may be much safer and more important for helping to manage people suffering from the disease, or for affording them palliative care that at the same time helps reduce the burden to their family members. Pharmaceutical companies are always competing for share of pocket (i.e., of private and public health budgets) against non-pharmacological approaches to treatment, and they have at their disposal staggering budgets with which to promote their point of view.

Pharmaceutical marketers concern themselves with two activities: Determining unmet needs and making profits by selling drugs that meet those needs. In many cases, the products available are inadequate to the task because the science is undeveloped. Investor and executive greed for profit, however, operates by a different clock than medical progress. The show must go on. If drug companies are to prosper even in scientifically lethargic times, a rationale for sale must be found and pushed through the system. Broadening the definition of a disorder to focus drugs on more abstract needs (quality of life vs. cognitive function, in the case of dementia) enables the selling to continue. For dementia, as for many psychiatric disorders, the measures for improvement in social function are subjective, placebo effect rich, and nonspecific. Most of us can be mystified in this process, because we do not understand what the FDA's actual function is and how drugs are approved. For present purposes, Healy can again be our guide:

> A difference between active drug and placebo that is statistically significant is taken to indicate that the drug "works." Regulators approve such drugs, drug companies market them as effective, and clinicians prescribe them. But if the trials are sufficiently large, even a minor difference of one or two rating scale points can be made statistically significant. As a result of this, a drug, which is a little bit sedating or tranquilizing, will show up as "working for depression" if the rating scale includes sleep or anxiety items. On this basis it would be possible to prove nicotine, benzodiazepines, anti-histamines, methylphenidate, or other treatments for ADHD, and most of the antipsychotics, and a number of anticonvulsants, to be "antidepressants." Indeed, many of these diverse agents have RCT evidence of benefit in depression. (Healy, 2009: 18)

It is unsurprising that the unmet need should surround quality of life issues (for the sick person as well as his family), since this is a marketing specialty. The abstraction of customer needs in this way is normative to marketing thought, and many of the marketers and sales personnel at Janssen may have no perception that they are denuding public health budgets and acting against both private and public interests.

Where the marketing concept is applied correctly, as I suggested earlier, the consumer model finds its correlate in the institutional involvement of the firm. In the conventional view of marketing development, there are several differences between the marketing-led and the sales-led organization: sales executives tend to think in terms of sales volumes rather than profits, short-run rather than long-run objectives, individual consumers rather than market segment classes, and fieldwork rather than desk work. Marketers, by contrast, think of long-run trends, threats and opportunities; customer types and segment differences; and how to institute effective systems for market analysis, planning, and control (Kotler, 1991). Let us see how this contrast is reflected in the organizational orientation of the contemporary pharmaceutical firm.

PART II: INTEGRATION OF MARKETING AND R&D

In pharmaceuticals, the sales-led organization would be one in which products are developed in the lab, and sales personnel would take these to the field, a process that would be drawn as: **Research** → **Development** → **Sales**. Later, perhaps, one might substitute "marketing" for sales. Finally, in a more marketing-enlightened age, the process would evolve into: **Market Research** → **Research** → **Development** → **Marketing**.

In this later model (like the first, an idealization), market researchers gather data at clinics, hospitals, and among consumers and then use this data to select among research proposals for drugs with the greatest market potential. The laboratory personnel need not be bothered with marketing considerations per se. They might take their orders from those who have the market's needs clearly in mind, but their scientific work would not otherwise be affected. This was apparently the model employed in the case of many historical cures, and it remains the image the pharmaceutical industry projects to the public about how it operates. But this species of process has in fact ceased to apply. For in the current time crunch, this model is not commercially sustainable.

Today, as the most cursory glance in the trade literature reveals, all attention is fixed on length of time under patent during which a firm can exclusively sell and accrue profits for a drug. Since a patent is taken out upon the formulation of a molecule, and several years stand between then and when the drug is developed, approved, and brought to market, companies seek to shorten the time between patent registration and product launch. The clinical research

phase and the approval process can hardly be made shorter than it has been already.

The new thinking is that if marketing is started prior to the launch itself, the non-sales time of the drug can be leveraged to improve profitability during the commercial phase of the drug. This is described as "pre-commercial planning and marketing." Pre-commercial planning and marketing is the attempt to compress the sequence by involving scientists and incorporating their research capacities directly into the marketing process. This is where the institutional integration of marketing and R&D comes in.

Beginning in the 1990s, pharmaceutical marketing executives began speaking obsessively about the integration of marketing and R&D. The first may have been William Steere Jr., who was promoted from marketing to the CEO-ship at Pfizer in 1991. Greg Critser quotes Steere's priorities for the company upon assuming command. There were three. "The first one was get marketing and research closer together. The second one was get marketing and research closer together. And then he said the third one was get marketing and research closer together" (Critser, 2005: 91).

The procedural details of this transformation—and a transformation clearly was what was entailed—would have to be worked out by the cooperation of teams at various locations in the company. A typical management consultant to the process explains, "Pre-commercial marketing requires the collaboration of multiple brand stakeholders, including clinical affairs, preclinical, regulatory, legal, medical affairs, and marketing. Everyone involved should have an understanding of the broad commercial issues that will or are likely to affect the product when it reaches the market, as well as the elements that create value for a product."[9]

In 2002, at a round table entitled "When Worlds Collide: The Unleashed Power of Marketing/R&D Collaboration," one executive said,[10] "At Takeda we believe that the opportunity is integrating early and through target product development profiles, making sure that everyone is going in the same direction." He offered the example of Trovan as an ideal case when such integration was achieved.[11] Another executive said, "At AstraZeneca R&D people started to embrace more of the entrepreneurial mindset and understand customer needs better"—in other words, the institutional reorganization under the direction of marketing. "We struggled initially, but it eased once the R&D folks truly understood what we were all working toward, which is 'value enhancement.' We were all trying to figure out how to have an impact on the bottom line." And an executive from Wyeth pharmaceuticals concluded, "You can't have a blockbuster without [integration]."

In these and many more comments we hear that integration of marketing and R&D is the first important step toward what marketers in many consumer goods industries call *value creation*. Since the internally created value has to

mirror what external stakeholders will value also, its counterpart is *value demonstration*. Value creation/demonstration therefore mirrors the distinction between the internal/external stakeholder divide. In other words, if *creating* value is the focus of the pharmaceutical company team, with implications for how therapies are identified and researched, the complementary task is *demonstrating* that value to the world outside the company.[12] This distinction is more analytical than practical. The organizational approach to creating value internally in fact bears a strong resemblance to demonstrating value to external stakeholders. These include regulators, physicians, and insurers who must be brought "on board" in the drug-marketing process. In theory and practice, value creation and demonstration work best when they are absolutely simultaneous and perceptually coincident in the minds of all stakeholders, internal and external. Management consultants speak of the collaboration of internal team members and external experts. Insofar as the internal and external actors both need to be convinced of the value of the gestational product so as to maximize its commercial potential, the responsibility of marketing extends similarly across this divide. The internal team, which includes sales, "regulatory," "publication planners," and in-house physicians employed as marketing personnel, extends seamlessly into the non-company public.

The practical implications of this is that even from the outset the entire team, including lab researchers, is devoted to demonstrating the efficacy and safety of the product yet to be born. The new flow chart becomes: **Value creation/ demonstration (Marketing Research) → R&D → Marketing Control**.

In a prelaunch strategy map drawn by Francoise Simon of the SDC Group consulting company and, coincidentally, Philip Kotler, already before Phase I trials, "thought leaders," meaning influential doctors, are identified and developed. Simon and Kotler estimate that thought leader development accounted for 20 percent of marketing costs and was rising (2003: 147). By comparison, direct-to-consumer advertising in 2004 accounted for only 14 percent of pharmaceutical spending. Thought leaders can, in the preclinical stage, "communicate unmet medical needs and shape the design and endpoints of Phase I and II clinical trials." Thus, depending on how successful the thought leaders are at generating interest among doctors and people at large, and accounting for consumer (to include physicians') attitude information, the clinical trials can be altered accordingly. Thought leader participation in successive trial phases is itself part of the procedure aimed to ensure awareness and adoption at the time of launch.

Simon and Kotler continue: "Opinion leaders drive the second-most crucial premarketing component, that is, publications. There is a close correlation between successful launches and aggressive publication programs" (2003: 147). This is referred to as "value through data." In this procedure, publications are "brought out" to begin the awareness campaign and to initiate a

Box 12.2 MERCK CORPORATION: REORGANIZATION FOR MARKETING CENTEREDNESS*

Merck is a good example for showing the changeover in the industry to marketing predominance both because of the company's size and reputation, and because Merck appears to have been reluctant to relinquish its traditional science-directed organizational culture for one directed by marketing.

Until about 1990, Merck was considered the most research-driven company in the industry. They had a 70 percent drug approval rate at the FDA, as against the industry average of about 50 percent. They were hardly strangers to aggressive sales; however, marching orders came from Merck Research Labs (MRL), and the divisions were separate, with sales and marketing where they belonged: in the field, away from the laboratories.

Profits in the pharmaceutical industry have traditionally been far higher than industrial averages, and because pharmaceuticals are vital to the public interest, special regulatory attention has been focused upon pricing and competition in the industry since the late 1950s. In 1984, the Hatch–Waxman Act permitted generics to cut into patented drug profits. At the same time competition, including from smaller start-ups, reduced the amount of time successful drugs could enjoy cash cow status. Managed care organizations became wiser at restricting their formularies and bargaining over the price of drugs purchased in volume. Most importantly, competitors such as Pfizer were stepping up their investments in sales and marketing. To keep profits high, Merck felt it had to do the same.

The intrusion and then market-share triumph of Pfizer's me-too cholesterol drug, Lipitor, over Merck's Zocor (Merck had pioneered the category with Mevacor), was a compelling signal to the company that marketing was king. Sales forces throughout the industry more than doubled during the 1990s. Also in the 1990s, restrictions on direct-to-consumer advertising were lifted. This positively affected the firm's possibilities for expanding its market base, and brought marketing considerations to higher status in the company.

In 1994, Merck's new CEO, Ray Gilmartin, scrapped the executive vice president of human health position and replaced it with three marketing presidents. Fond of brandable acronyms, Gilmartin introduced PACE, the Product and Cycle Time Excellence model for drug development. In this new structure, marketers were allotted dedicated budgets for Phase V, or post-marketing research. Marketers could now design and conduct their own trials, or "label change studies," with more or less only advisory input from Merck Research Labs, the traditional R&D executives and firm leaders. Basic research is said to have fled the company. Like many of its competitors, Merck was reduced to being a commercializing agent for research conducted outside the firm.

* Much of the above sketch is derived from Gilbert and Sarkar's discussion (2005) in *Merck: Conflict and Change*.

paper trail for future citations. Company sponsored and ghostwritten publications have lately become the centerpiece of public debates over conflicts of interest between pharmaceutical manufacturers and medical research (Healy and Cattell, 2003; Moffat and Elliott, 2005; Smith, 2005; Healy, 2006*a*, 2006*b*; Sismondo, 2007). A substantial portion of the content of leading medical journals originates in corporate publication-planning offices and subcontractors

(Blumsohn, 2006; Lexchin and Light, 2006; Sismondo, 2009*a*), a fact that has resulted in so many instances of malfeasance that Washington lawmakers on both sides of the aisle (Henry Waxman, D-California; Charles Grassley, R-Iowa) have taken up the cause of fighting it. As I was writing this chapter, Merck was discovered to have produced an entire journal (*The Australasian Journal of Bone and Joint Medicine*) mimicking or posing as an independent peer review publication but whose sole purpose was to promote Fosamax (for osteoporosis) and Vioxx.[13]

The point is, Simon and Kotler are not speaking the language of cooperation between marketing and science but of the strategic integration of the two at every step *under the direction of marketing*. Marketing must *own* the pipeline, not react to its outcomes. As one of the executives from the aforementioned pharmaceutical roundtable said, "The companies that do it right don't talk about R&D and marketing. If you can get the key people to all be brand managers—to look for brands rather than just compounds. . . . Branding is about the ownership of ideas. The Cox-2 inhibitors are the most recent examples of owning the science from day one." (Cox-2 inhibitors, of course, refer to Vioxx, Celebrex, and Bextra, all three of which have been associated with unethical marketing practices.) Box 12.2 describes the reorganization of Merck to accommodate marketing integration.

Forms of Value: Consequences of Marketing's Aim to Control the Process

> Clinical trials are the most credible and powerful form of marketing in the pre-launch period. (Simon and Kotler, 2003: 147)[14]

Each time I have explained the integration process, or even shown the above quote to physicians and independent scientists, my audience has been aghast. Why? Simon and Kotler might be amazed to hear this report, as might the pharmaceutical marketers they advise, since they see themselves as being involved only in clever and virtuous business—doing good while doing well, as the saying goes. The explanation lies in the astonishing gap that has opened up between two ways of looking at medicine, representing two mutually exclusive or even opposed systems of value. The distinction is between how medical science views research and how marketers do.

I have spoken of value. Value is the most loaded cultural referent in the world. It is because of its ability to signify all that is important and good to one cultural community and the exact opposite to its neighbor. What is meaningful to marketers, in this case, may be useless or meaningless to science and vice versa. Medical scientific value is not ontologically variable; value consists in a discovery's capacity to explain phenomena verifiably and then be applied

impartially to reduce human suffering from the diseases that afflict us. Marketing value, by contrast, is fluid, relative, and contingent upon perceived utility. Brands are a pure example of marketing value in so far as a brand's importance lies first in the realm of consumer perception, and not in the tangible benefits of the product itself. Marketing value is measured in accordance with its ability to achieve product differentiation, which refers to the process of making one's product offering appear unique and superior to those of one's competitors in the marketplace. In pharmaceuticals, product differentiation means as against other options available in the treatment market, whether these are other drugs, diet and exercise, behavioral therapy, or just waiting.

In the wake of integration of marketing and R&D across the entire face of contemporary commercialized medicine, scientific innovation has suffered. In the words of a 2006 US Government Accountability Office Report to Congress, "Innovation in the pharmaceutical industry has become stagnant." Merrill Goozner, head of the Center for Science in the Public Interest, says, "Three out of every four drug applications involve drugs that either replicated the action of medicines already on the market or were new formulations that at best added minor conveniences for patients and doctors." Another study revises the estimate of non-breakthrough applications to 92 percent (see also Martin et al., 2006).[15] The terms "innovation" and "therapeutic breakthrough" have themselves been aggressively negotiated and compromised in regulatory contexts to accommodate the marketing objectives of blockbuster-driven applicants. Immoderate use of the terms likewise conforms to the public's faith in the industry's inclination and capacity to produce life-saving drugs on a broad, which is to say blockbuster, scale (Abraham and Davis n.d.).

And yet, the relationship between industry and scientific (as against marketing) innovation is more tenuous than ever. In his book, *The $800 Million: The Truth Behind the Cost of New Drugs*, Goozner argues that there has been a misperception about the sources of scientific creativity in the pharmaceutical and biotech industries.

> By recounting the history of several of the most significant new drugs of the past two decades, this book shows that the inception of drugs which have truly made a difference in recent years and which will make a difference in the twenty-first century can almost always be found in the vast biomedical research enterprise funded by the federal government. (Goozner, 2004: 8)

In effect, Goozner is telling us that the public pays three times for pharmaceutical invention. First, through taxes we pay for the primary research conducted mainly in universities and National Institute of Health (NIH) labs. Second, as consumers we pay through insurance and other prescription plans for the commercialization, synthesis/manufacture, and (especially) marketing of the drug. Third, through a scheme of in-advance public underwriting for what

Goozner calls "biohype" research, the public pocket is picked by the influence of six hundred pharma lobbyists on Capitol Hill who secure high prices for their drugs through the ironically specious claim that "without high prices, the innovation that led to new medicine would dry up" (2004: 7).

For pharmaceutical marketers, as we have seen to especially great effect since the early 1990s, pharmaceutical value has often been a marketing proposition, not a scientific one. The high proportion of lifestyle and "me-too" drugs (plus new molecular entities offering no improvement over prior ones), which describes derivatives or salts of existing compounds, being proposed to and approved by the FDA is in my view a direct outcome of the integration of marketing and R&D. The sense of the very expression "me too" is telling. Marketers regard the pursuit of me-toos (and line extension products) as a positive marketing option associated with sub-segmentation of existing markets and the pursuit of brand values. In medicine, me-too products are trivial variations of drugs already on the market, imitative, and therefore the opposite of innovation. There is little evidence for the argument that me-toos offer significant therapeutic options in most classes of medicines (to accommodate different patients' tolerance and receptivity, for instance) (see e.g., Rosenheck et al., 2008; see also Angell, 2004; Avorn, 2004), and the economic arguments that they increase competitively borne innovation and result in lower prices appear at this point to be groundless. Drugs that by design are "meaninglessly differentiated" (Carpenter et al., 1994), such as those in which a molecule is altered to create a new product or to extend a patent but the functional properties of the drug remain unchanged, are valid marketing entities but empty medical ones.[16] This may be a harmless marketing trick in most consumer goods areas, but in medicine the societal and scientific opportunity costs need to be accounted for, including the upward drive of health-care costs resulting from artificially stimulated demand for health-care products.

While the public seems not to question the notion that any product that succeeds in the market must be innovative indeed, the reality is that the most successful pharmaceutical products today bear the mark not of scientific innovation but of effective marketing. Pfizer's Lipitor was the sixth statin (cholesterol-lowering medication) on the market, for instance, but with an estimated $1.3 billion invested by Pfizer in 2002 alone (one hundred times the health budget for Haiti in the same year,[17] or roughly the equivalent of the NIH budget for research into Alzheimer's disease, arthritis, autism, epilepsy, influenza, multiple sclerosis, sickle cell disease, and spinal chord injury combined) toward increasing the public's awareness of the dangers of hypercholesteremia, the entire market enjoyed double-digit growth for half a decade.[18] Sales of Lipitor topped $14.3 billion in 2006.

Marketing is designed specifically to further excite people's hopes. In the all-out push to create blockbusters, me-too drugs are billed as breakthroughs and

modest advances are overblown. Thus do we have in the United States an "Overdosed," "Overtreated," "Rx Generation", to refer to the titles of three recent bestsellers. Even for new drugs that do offer improvements, excessive marketing results in inappropriate prescriptions and the consequent deterioration of the drugs' benefit/risk profile in the population. Public safety, health budgets, innovation, and the integrity and autonomy of the medical profession suffer simultaneously even while profits soar and the power of marketers occludes that of the scientists, ensuring the continuation of the current predicament.

In short, in the midst of a teeming sea of new products surrounded by enough hype to raise hopes for the dead, we find fewer and fewer expressions of scientific value—an outright cure for dread disease X, or a frank evaluation of the many-sided approaches to delaying the onset of grave diseases or managing the ones for which our science has not yet discerned a path to cure. Instead, we find in increasing abundance the promotion of marketing-created values and the gargantuan effort to demonstrate these to the different stakeholders whose cooperation is required for the successful launching of the product (Healy, 2006*a*; Applbaum, 2009, 2010)—a procedure Mr Kotler elsewhere advocated under the term "megamarketing" (1986). Marketing and scientific concepts of value can overlap, but they do not necessarily have to. We have watched this split open up precisely in the era of integration. For what is meaningful to marketers in terms of value and usefulness has become often meaningless, sometimes dangerous, and always costly to everyone else.

The widespread contravention of ethics in the industry should be regarded as a symptom of decay that has accompanied marketing's triumph at broadening its definition of value to this domain. Fresh wrongdoings are being called out with disquieting regularity in regards to every stage of drug development and promotion. The briefest list includes campaigns to "ghost manage" the conduct of basic science; to rig clinical trials and to run trials in poor countries where ethical oversight is weak; to conceal safety data from the FDA, the public, and from doctors; to knowingly market medical conditions far beyond their natural incidence; to sway public health criteria for the threshold of disease risk; and to lure some of the nation's most respected doctors into risky off-label promotion schemes (see e.g., Antonuccio et al., 2003; Healy, 2003, 2006*c*, 2007; Elliott, 2004, 2006, 2010; Fishman, 2004; Medawar and Hardon, 2004; Oldani, 2004; Sismondo, 2004, 2009*b*; Ferner, 2005; Lacasse and Leo, 2005; Moynihan and Henry, 2006; Phillips, 2006; Brody, 2007; Lane, 2007; Petryna 2009).[19] Because clinical trials have become the gatekeepers as well as the advertising tools with which drugs are now sold (per the Simon/Kotler epigram), ownership of trials and control over their data are vital to drug companies. The broadness of label indications for a drug is its source of wealth. As a senior executive at Merck comments, "In the past, the molecule was the product, but

now the label is the product" (Gilbert and Sarkar, 2005: 6). For this reason, Healy cautions,

> Clinical trial data are increasingly linked to pharmaceutical companies and this data appears shot through with problems stemming from the non-reporting of trials or ghostwriting of those that are published. [B]ecause of these ambiguities, it is not inconceivable that an ever-closer adherence to what may appear to the best evidence could lead to a deterioration in the health of patients. (Healy, 2009: 18)

Put otherwise, the substitution of scientific truths for marketing ones has profound consequences for public health, because of its reliance upon disinterested scientific data and analysis.

Pre-commercial planning and marketing is one policy among others one could cite to demonstrate how the marketing-driven outlook in pharmaceutical companies today pushes these enterprises toward fulfilling their own efficiencies at the expense of public health. What emerges is a system in which the scientific search for cures and the marketing-led pursuit of meeting unmet medical needs stand not in cooperative tandem one with the other, but in direct competition—a competition that reaches directly into companies such as Merck and drains their once exceptional research prowess. That there is an incompatibility between medical scientific and pharmaceutical marketing-defined medical values may be intuited by the magnitude of the push with which marketing versions of science have to be promoted. In addition to all the publication planning (i.e., ghostwriting), key opinion leader cultivation, and guidelines symposia, there is today in the United States approximately one drug rep for every six physicians.

Reformers focus on the implications for drug costs of this statistic; less commonly is it pointed out that breakthrough drugs that work would hardly need that much marketing. They would, as in Peter Drucker's optimistic scenario, sell themselves. The process describes a vicious cycle: The less innovative the product, the more marketing push becomes necessary. The more marketing there is, the more its budget competes with that of R&D, the less innovation is nurtured. Marc-André Gagnon and Joel Lexchin conclude that the US pharmaceutical industry spends nearly twice as much on marketing as on R&D (2008). The foregoing analysis suggests that this figure must be revised sharply upward because much of what is classified as R&D spending (including competitive drug trials, publication planning, and post-marketing surveys) is devoted to non-exploratory efforts to improve market share or to maintain a hold on profits associated with impending patent expiries. These can be labeled "adjunct-to-marketing" R&D as opposed to "exploratory" R&D activities. Together with me-too drug research, adjunct-to-marketing R&D greatly overshadows the conduct of exploratory science in all the major pharmaceutical companies. Indeed, quibbling over the relative investment

numbers of marketing vs. R&D may be beside the point, because, realistically the two have already been integrated under the direction of marketing.

As an "inside marketing" project, discussion of contrasting forms of value brings us closer to seeking an understanding on the level of system and norms rather than motivations in evaluating contemporary pharmaceutical industry actors. One should dwell less on ethical violations than on the conditions that have given rise to these. Excessive competition, the patent system, and marketing norms each play an integral role. The fact that the instances of pharmaceutical industry corruption that are at present being exposed almost weekly represent legal and ethical violations but not contraventions of good marketing practice alert us to the divergence of value systems. This is why one fails to come across any meaningful self-examination in the industry trade literature. Internal critics agree that misconduct contributes to a poor industry image, which they fear will lead to shrinking pharmaceutical profits in the future. But is this genuinely an ethical argument?

One marketing scholar who purports to be taking an ethical stance argues that the solution to the drug industry's dismal public image and to "the imperfect alignment of private profit-maximizing objectives with public health needs" (Santoro et al., 2005: 4) is more, not less, marketing involvement. "[T]o repair their relationship with society in a sustainable manner, drug companies must learn to think of diverse groups as active partners in the process of drug development and sales" (Santoro et al., 2005: 5). In other words, only once all external stakeholders are acquiescent with the intended program, when even the industry's natural opponents are brought unwittingly "on board," criticism will be neutralized and the industry will be able operate in a frictionless world of limitless drug sales. The tactics for greater inclusion of the drug industry's publics are familiar to students of marketing as "relationship marketing" and "value co-creation" programs, which are extensions of the promotional efforts of the companies to convince the public that the drug company's truth is their truth. The goal is not to bridge the private maximizing vs. public health divide through ethical reform and compromises to corporate power, but to bring back into "alignment" the public's misapprehension of the actual compatibility of the two domains. The problem, in sum, boils down to an image issue that can be corrected through an industry-wide public relations campaign. The incipient arm of the campaign is "industry branding"—a term critics can well be forgiven for seeing as an ominous sign of oligopoly. At the least, it is fair to say that we are witnessing in this approach another instance of marketing advocacy that would drive us further from rather than toward a humanistic outcome.

Jerome Kassirer, former editor of the *New England Journal of Medicine*, offered this simple review of Santoro's volume (2007):

> There is virtually no mention of the pharmaceutical industry's major ethical lapses, such as hiring ghostwriters to write favourable journal articles, rigging study designs to produce favourable results, hiding unflattering results, failing to publish negative findings, promoting off-label drug use, giving bribes and kickbacks in return for promises to prescribe, and intimidating researchers whose results counter a company's interests. There is also little mention of shameless attempts by manufacturers to extend their monopolies, to block the production and sale of generic drugs, to put undue influence on the US Food and Drug Administration (FDA), to buy off large cadres of doctors, to promote drugs to treat social conditions, and to spend more money on marketing than on research—and, at the end of the day, to produce a shrinking list of truly innovative, clinically useful drugs. Inexplicably, with minor exceptions, most of the chapters have little relevance to the ethics of pharmaceutical companies.

The absence of attention in Santoro's volume to the industry's ethical lapses appears less inexplicable once one observes that marketing values are distinct from those of medicine and public health, and that ethics, which for present purposes might be classified under humanistic values, are subordinated to marketing advocacy. It is difficult in this case to see how humanistic and marketing goals can coincide.

Is Marketing Humanism Possible?

In pharmaceuticals, ethical violations, decline in innovation, and skyrocketing costs are combined symptoms of the institutionalization of an overly keen and insufficiently monitored adoption of marketing-driven culture in the industry. Marketing has broadened itself in an uncontrolled fashion and the result is the opposite of what a marketing humanist might hope for.

Can there be a valid marketing humanism? Can the marketing concept be applied to the public interest? Perhaps it can in a limited way, but not as marketing theorists to date have tended to conceive of it. Marketing humanists seem to want to say that marketing is just a tool, unyoked to culturally particular values or theories of human needs and satisfactions. Marketing, they say, is like fire that can be put to use in both creation and destruction. Under shelter of the fire analogy, even the marketing humanist who is willing to concede that pharmaceutical marketing practices have lately not exerted a salubrious influence, will nevertheless say, "Yes, marketing has run amok in this case, like a fire out of control, but it is not the fault of marketing theory but of certain marketing practitioners. Marketing is still nothing more than a conceptual tool."

Conceptual tools, however, *are* theories, if by theory we mean how we exclude unfitting elements in our explanation of reality. No tool can be

universally applied to all tasks, just as there can be no theory or model of everything that is not reductive to nonsense. For instance, only a map that is the exact size of the United States can represent the United States exactly. When you reduce the map to the size of a blackboard or a sheet of paper, you are performing both an act of symbolization, since symbols on the map "stand for" things that are not physically present, and you are imposing one cartographic model or another to achieve your purpose—the criteria by which you exclude data constitutes your theory. Marketing-as-tool is no different, even in the absence of professional self-reflection on that point.

The limitation of marketing-as-universal-tool, and with it the possibility to be broadened to humanistic ends, lies in the discipline's implicit core theory of the human experience. Few marketing theorists and practitioners conceive of the human being in broader terms than that which is signified by the construct of "consumer." Yes, we may all now be consumers of the fruits of capitalist production, but that is not the sum of who we are, nor is it an adequate model for explaining how people have satisfied even their creaturely requirements in other times and places.

Though it should hardly require saying, the point is that not all of our needs, hopes, wishes, fears, beliefs, imaginations, creativities, affections, dislikes, curiosities, greeds, passions, sympathies, values, loyalties, prejudices, traditions, . . . , etc., are reducible or even translatable to that one component of our experience described by the word "consumer" so as to be properly served by a marketer's methods of evaluating and meeting us on those terms alone. The variegated conditions and possibilities of human experience have given birth to a matching range of cultural, social and moral institutions, and traditions, not nearly all voluntary or reducible to lifestyle, choice, and the pursuit of satisfactions in a consumer logic. When marketing humanists come to grasp the true limitations of the consumer model for explaining and satisfying human needs, when they stand prepared, in other words, to recognize the hazards of "broadening the marketing concept" too far, they may cease to appear to the rest of us to be marketing advocates, and may join the ranks of true humanists.

Notes

1. The authors were addressing themselves to an audience of marketing specialists. The paper was published in the *Journal of Marketing*, which in 1969 may have had a broader readership among marketing practitioners than is true today, but it was essentially trade talk, not a forum for philosophy and public affairs. The "marketing insider" orientation is reflected in the split I see in their paper between a

marketing humanist program, on the one hand, and the subtext of self-promotion of the field of marketing itself (or marketing advocacy) on the other.

2. Drucker says: "The aim of marketing is to make selling superfluous. The aim is to know and understand the customer so well that the product or service fits . . . and sells itself." (1973).
3. This is what Kotler and Levy have to say, for instance, about why people give charity—a point of view they hoped would be installed in charities with the broadening of the marketing concept to this domain: "Fund raisers have learned that people give because they are getting something. Many give to community chests to relieve a sense of guilt because of their elevated state compared to the needy. Many give to medical charities to relieve a sense of fear that they may be struck by a disease whose cure has not yet been found. Some give to feel pride. Fund raisers have stressed the importance of identifying the motives operating in the marketplace of givers as a basis for planning drives" (Kotler and Levy, 1969: 14).
4. Organisation for Economic Co-operation and Development web site http://www.oecd.org/dataoecd/46/2/38980580.pdf, accessed March 18, 2009.
5. MCOL website http://www.mcareol.com/mcolfree/mcolfre1/visiongain/blockbuster.htm, accessed June 17, 2008.
6. This estimate is based upon reports published by IMS Health and available at IMS Health Website www.imshealth.com, accessed June 28, 2008.
7. That people may come to identify closely with or feel the reality of abstract measures of their health, such as high cholesterol, is testament to human suggestibility, not evidence of unconscious needs, as some consultants would like us to believe (e.g., Zaltman & Zaltman, 2008).
8. The juvenile studies conducted at MGH spoken about at the end of the text box were conducted by Joseph Biederman (and his colleagues) who is currently under investigation for the $1.6 million in fees accepted from the pharmaceutical industry during the course of these researches. See, for example, http://www.nytimes.com/2008/06/08/us/08conflict.html.
9. L3 HealthCare Marketing Website http://www.l3hm.com/documents/L3_PreCommercialWhitepaper0508.pdf, accessed June 30, 2008, p. 1.
10. PharmExec.com website http://pharmexec.findpharma.com/pharmexec/Current+Issue/When-Worlds-Collide/ArticleLong/Article/detail/29963, accessed October 13, 2008.
11. Trovan later became infamous for the ethical research abuses associated with its testing practices in Nigeria (Petryna, 2005).
12. The emphasis in contemporary marketing theory on "marketing value chains" and on "value co-creation" with consumers is one more iteration of the free will/determinism-like tension between the effort to retain control over defining product value at every stage of the marketing process at the same time—or even by means of—encouraging consumer participation in the value creation process. See Zwick et al. (2008) for a thoughtful discussion of this complex subject.
13. Bob Grant (2009) "Merck Published Fake Journal" TheScientist.Com website http://www.the-scientist.com/blog/display/55671/, accessed July 25, 2009. Ross et al. (2008) explore the consequences of other ghostwriting activities surrounding Vioxx.

14. Simon and Kotler (2003), Free Press, p. 147.
15. Gooznews on Health website www.gooznews.com/archives/000573.html, accessed June 20, 2008. http://yaleglobal.yale.edu/display.article?id=5678, accessed August 7, 2008.
16. Examples of this include Prilosec → Nexium, all of the isomers of antidepressants—desvenlafaxine (Pristiq), escitalopram (Lexapro), and the metabolites—paliperidone (Invega), and numerous others.
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