Biocommunicability

THE NEOLIBERAL SUBJECT AND ITS CONTRADICTIONS

IN NEWS COVERAGE OF HEALTH ISSUES

In this mostly middle class, broadly educated, information-acquiring country, often the most effective dollars government spends pay for the dissemination of public health information. In an affluent society, which has banished scarcity and presents a rich range of choice[s], many public health problems are optional—the consequences of choices known to be foolish. —George Will, "The Food We Eat Someday May Kill Us"

Charles L. Briggs and Daniel C. Hallin

The decisive postmodern guarantee is access to the technologies of communication.

-Toby Miller, "Introducing . . . Cultural Citizenship"

How does one inhabit the mediated body? Biopolitics and biosociality form crucial loci for exploring contemporary subjectivities, rationalities, technologies, forms of embodiment, forms of care for the "self," and schemes of self-surveillance and self-regulation.¹ Recent scholarship suggests that biopolitics and citizenship are co-constitutive: constructions of citizenship and how individuals and populations get interpellated by them shape access to health and vice versa.² Sanitary citizenship-the ways that states read bodies and bodily practices and assess the biomedical knowledge of individuals and populations-constitutes an increasingly important site for regulating and rationalizing access to privileges of citizenship.³ Becoming a "carrier" of an infectious disease or getting designated as being "at risk" provides a sign of biopolitical pathology. Diseases that have been connected with inequality and citizenship for two centuries, such as cholera and tuberculosis, now take their place as "reemerging" maladies alongside "emerging" diseases like HIV/AIDS and "Asian bird flu."⁴ Displacement of organs from poor to rich, bodies of color to white, is promoting a transnational regime of biovalue as well as transforming definitions of body, self, life, and death.⁵ Participation in clinical trials and access to pharmaceuticals-and biopolitical representations of pharmaceutical marketing-are now transforming categories of "risk" and biological difference into calls for inclusion, creating global markets of bodies for experimentation, and shaping practices of consumption.⁶ The restructuring of Medicare around the idea of consumer choice

Social Text 93, Vol. 25, No. 4, Winter 2007 DOI 10.1215/01642472-2007-011 © 2007 Duke University Press produces a conflation of the ideas of citizen rights and consumer choice.⁷ In wealthy nations at least, the question is now less one of separating ill and healthy populations than the government of life itself, the intense capitalization of our efforts to maximize our corporeal existence, present and future, especially as it unfolds at the level of the molecule.⁸

If biopolitics shapes definitions and practices of citizenship, gender, race, sexuality, pleasure, and danger, how does this modeling capacity jump scale from laboratories and hospitals and forge broad social and political effects? We suggest that biomedicine could not achieve such productivity without fusing with an important segment of the culture industriesthe news media. As Nikolas Rose puts it, "it has become possible to actualize [the] notion of the actively responsible individual because of the development of new apparatuses that integrate subjects into a moral nexus of identifications and allegiances in the very processes in which they appear to act out their most personal choices";⁹ these apparatuses include, very centrally, the mass media. We suggest that if biopolitical technologies are indeed transferred into regimes of governmentality, citizenship, and the production of subjectivities, a crucial and relatively unexamined site where this process occurs lies in the discursive practices of the news media, with their pedagogical power for reinscribing categories and their performative potential for shaping new ones.

Rose's reference to "the notion of the actively responsible individual" refers to a set of social changes that involve not only a greater role of the mass media, but also, very centrally and very closely connected with this change, a greater role of market mechanisms. A key site of neoliberal "reforms"— or as Rose prefers to call it, the shift toward "advanced liberalism"—has been the extension of market relations more deeply into health care through the privatization of health care institutions; the intense capitalization of medical technologies, especially those based in genetics; the displacement of nonmarket relationships of citizenship, state paternalism, charity, and professionalism by market relationships; and a transfer of the burden for keeping one's self healthy onto individuals. Neoconservative columnist George Will celebrates this transfer in the column quoted in an epigraph to this essay.

In this essay, we explore the construction of the "actively responsible individual" through public discourse about health in one key site within the news media, the metropolitan daily newspaper. We argue that newspaper coverage of health issues is indeed structured around a particular conception of the neoliberal subject, the patient-consumer who actively and responsibly seeks health information and produces health by regulating his or her choices accordingly. Public health is defined predominantly in terms of the proper education of such subjects, and the provision of the flow of information they need to exercise their choices. At the same time, the neoliberal subject often appears in media discourse as hybridized with passive subjects who need to be infused with authoritative knowledge or are frustrated and overwhelmed; and his or her relation with the biomedical authorities often appears as an antagonistic rather than a harmonious and entirely natural relation. The health care field is among the last areas of social life to be fully penetrated by market relations, and its incorporation into the market often provokes a degree of resistance or ambivalence not found in other areas of social life. The same, in fact, is true of the other institution at issue in this study, the news media, which were also among the last frontiers conquered by the market, and among those fields where market relations come into particular conflict with competing ideological frameworks.¹⁰ If news coverage of health represents a key site for understanding the production of the neoliberal subject addressed by scholars of "biosociality," it also represents a key site for understanding the barriers to that production and the contradictions of neoliberalism.

Biocommunicability and the Place of Communication in Governmentality

To analyze the role of communication in governmentality is to explore how effects of power emerge from everyday ideological constructions of how information is purportedly produced, circulated, and received, how individuals and institutions participate in this process, and how statements are infused with authority and value. We refer to this productive relationship between discursive ideologies or practices and social relations as *communicability*.¹¹ For discursive acts and practices that focus on health and medical issues, we refer to it as *biocommunicability*, thereby adding to the contemporary lexicon of biopolitical analysis that includes *biosociality*, *bioeconomics*, *biocapital*, and *bioavailability*.¹²

This perspective stands in contrast to the functionalist approach, based in information theory and concerned with the effectiveness of the transmission of messages produced in the domains of biomedicine and public health to individual patients or the mass public, which dominates most research in health communication and practices of health education and health promotion.¹³ The perspective we call biocommunicability draws on several theoretical approaches. European critical discourse analysis envisions discourse both in Foucauldian perspective, as practices that produce the objects to which they purport to refer, and through Bourdieu's practice theory, as infusing symbolic forms with value, siting their acquisition within particular institutions, controlling access to them, and naturalizing The term communicability suggests volubility the ability to communicate readily and be understood transparently and microbes' capacity to spread. their categories and inequalities ("misrecognition").¹⁴ Michael Silverstein suggests that discursive practices produce subjectivities and inequalities through the ongoing ideological construction of discursive events as they are unfolding. He argues that these cartographies of communication involve "cultural essentializations (frequently naturalizations)" that are mapped, in part, with reference to "ritual centers of semiosis" that help create economies of value.¹⁵

We also draw on the post-Habermasian literature, specifically Michael Warner's attention to the way discourses create the publics that appear in those discourses as preexisting. Warner suggests that this process requires that "the pragmatics of public discourse must be systematically blocked from view."¹⁶ This public (re)production process rather seems to involve the ideological construction of ongoing discursive practices—rendering some dimensions visible and construing them in particular ways, erasing others, and imagining subjectivities, social relations, and forms of agency. Our work has affinity with that of Roddy Reid, who explores the creation of neoliberal subjects in antismoking campaigns, and that of Eric Klinenberg, who examines the ideological construction of the public health catastrophe that resulted from the 1995 Chicago heat wave.¹⁷

Communicability is a central dimension of self-regulation-individuals structure schemes of self-surveillance and self-control, in part, by interpellating themselves vis-à-vis categories, subjectivities, and discursive relations that seem to be presupposed by communicative processes. The term communicability puns on various senses of the word. It suggests volubility, the ability to communicate readily and be understood transparently, and microbes' capacity to spread. We add a new sense in which communicability is infectious-the ability of communicative ideologies to find audiences and locate them socially and politically. When we speak of biocommunicability, we mean to draw attention to the ways in which the constitution of social subjects is embedded in ideologies about the "flow" of information and of discourse, about who constitutes biomedical knowledge, who is authorized to evaluate it and to speak about it, and through what channels it is assumed to flow. Like contemporary forms of biopolitics, communicability produces a sense of freedom for some subjects, the right to acquire any knowledge that might pertain to one's self and to receive it in whatever fashion one chooses, and for others the feeling of exclusion, subordination, and constraint—the sense that "information" is not directed at or accessible to them.

We take from the concept of governmentality the idea that discourses constitute subjects and produce effects of power and freedom, locating subjects within social hierarchies; in this way we seek to differentiate our work from traditional approaches in health communication that assume reception by "an actively choosing subject, employing the rational purchasing behaviour of homo economicus" and explore the "effectiveness" of the transmission of information between "experts" and "consumers," assuming that information to be neutral and apart from structures of social power.¹⁸ Discourses do not automatically produce social subjects, however, nor do they necessarily produce, reproduce, or naturalize hierarchies of power neatly and without contradiction. Discourses themselves are produced by a variety of social subjects; in the case of our study they include biomedical researchers, public health officials, journalists and newspaper readers, among others, interacting in ways that mutually constitute the discourses of biocommunicability we explore here. Our study is centrally concerned with these actors and involves interviews with journalists and news "sources" as well as "reception analysis" focused on news audiences. In subsequent papers we will deal more fully with this material, focusing on race, social movements, and pharmaceutical corporations in news coverage of health, and with the social processes of production and reception of health news. This essay analyzes the structure of health news discourse. Discourses are also not seamless, consistent, totalizing, or even fully coherent. They embody contradictions and ambivalences, and the particular contradictions of biocommunicability in the age of neoliberalism are a central focus of this essay.

We develop the concept of biocommunicability here by reporting the results of an extensive discourse analysis of health care coverage in one metropolitan newspaper, the San Diego Union-Tribune (U-T). Media analysis is now complicated by the fragmentation of the media, and any study necessarily represents only a portion of the media landscape. Television network news was once the most universal medium, but its viewership is much narrower today; news coverage of health is heavily dependent on pharmaceutical company advertisers interested in reaching its aging audience, and it is therefore not an ideal choice to represent health coverage more generally. Local television news is the most widely watched, but the logistical problems of analyzing it are daunting, given the lack of archives and indexing. The daily newspaper remains second after local television as a source of news¹⁹ and also serves an important intra-elite function. In this sense, the newspaper is an important arbiter of what counts as legitimate public discourse. We chose to focus on a local paper to make it easier to research discursive practices as well as texts, through interviews with reporters and sources. The U-T has a paper circulation of more than 444,000 and 1.2 million electronic users.

Our study included a quantitative content analysis of all the health coverage in the U-T from January through July 2002, a total of 1,205 stories. We mention this analysis briefly here but focus more fully on

a discourse analysis applied to this sample plus dozens of other news stories we gathered from the *U-T*. The discourse analysis had a specific focus intended to concretize the concept of biocommunicability. Much of the academic literature on health coverage focuses on the content of the information provided. At its best, this literature is critical, pointing to corporate marketing strategies, reporters' lack of time and knowledge, space constraints, competition for audiences, terminological difficulties, problems finding and utilizing sources, commercialism, and the marginalization of social activists as factors that block or distort the transmission of health information.²⁰ This literature, however, usually presupposes received models of biocommunicability, thereby reproducing a range of problematic assumptions.

Our approach, by contrast, was to analyze the way each news report projected biocommunicability: the way it mapped the process by which health-related information is produced, circulated, and received. It was striking to us how central this mapping was in health care reporting, and we will explore the significance of this fact as the analysis continues. Consider the following example, a syndicated article that ran in the *U*-*T* under the headline "Actress Fights, and Beats, RA with New Drug Therapy":

Rheumatoid arthritis has afflicted humans for centuries; old paintings show people with distinctively RA-deformed fingers. . . . But until recently, "all of the useful treatments have been stolen from other specialties," says Dr. Israili Jaffe, a rheumatologist at Columbia's College of Physicians and Surgeons. . . .

Today, disease-modifying antirheumatic drugs have revolutionized treatment. . . .

Ten years ago Kathleen Turner didn't know what she had when her feet and elbow started hurting. . . . Finally diagnosed through a simple blood test for rheumatoid factor, she "didn't know the questions to ask," Turner says. Gathering the facts piecemeal, she says, "I figured if this happened to me, a lot of people are suffering."

To fill the gap today, she is backing RA Access—www.ra-acces.com or call (888) 373-3700—sponsored by Immunex and Wyeth-Ayerst. The patient-friendly site details RA from diagnosis to drugs and diet, and offers advice on managing emotions as well as a daily schedule that includes pain. Also available: the Arthritis Foundation, (800) 283-7800 or www.arthritis .org.²¹

From the beginning reference to old paintings to the closing Internet address, this article is centrally concerned with the production and flow of knowledge and information. Each article includes a projection of biocommunicability, generally mixing descriptive and prescriptive modalities, teaching audiences how health-related information is, should be, and should not be transmitted and received. Each constitutes a pedagogical project, constructing a map of hierarchically ordered sites and subjectivities and of the purported flow of health information between them and interpreting the observed or potential medical impact of these circuits.

Although each article included a unique cartography of biocommunicability, we found three predominant types of ideological projections, which, we argue, exist in complex relations of interdependent tension. We refer to these models of biocommunicability as *biomedical authority, patientconsumer*, and *public sphere*. Due to limitations of space, we will discuss the first two here, leaving the important but less commonly occurring projections of health and media activism for a separate essay.²²

Doctor Knows Best: Biomedical Authority/Passive Patient Reception

The assumption that medical science produces objective and highly specialized technical knowledge sets the medical realm off from many other realms of discourse, where more populist, relativist, or democratic communication ideologies prevail. The biomedical authority model of biocommunicability imagines a natural, necessarily linear trajectory that moves through space, time, and states of knowledge and agency, starting from the production of knowledge about health, its codification into texts (reports, scientific articles, pronouncements by public health officials, and so on), the translation of scientific texts into popular discourse (through health education, statements to reporters by health professionals, and media coverage), its dissemination through a range of media, and its reception by "the public."

A common type of article in this modality is generated by news reporting of the release of major research findings: "UCLA researchers said yesterday they've created the first test that records the onset of Alzheimer's disease. The test, which identifies Alzheimer's markers in a person's brain, could improve early diagnosis and lead to more effective treatment, said Dr. Stephen Bartels, President of the American Association of Geriatric Psychiatry."²³ Standard elements include mention of the major medical journal publishing the article (or other source), a summary of the findings, quotes from authors and from other "experts," and policy recommendations. When the article is generated by a local reporter (rather than coming from national news services), the reporter may also use quotes from local health professionals to bring the information "closer" to readers. Another version of this model can be found in the health advice column. "Type 2 Diabetes," writes Jane Brody, "... requires a kind of intervention that only Health

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the potential and actual victims can provide: making better food choices, getting more exercise and - most important of all - avoiding excess weight or taking it off. . . . One third of the people who have this disease do not know they have it."²⁴ The article goes on to give patients advice on how to calculate their body mass index (BMI). The mode of exposition is didactic, and most of the information is presented without attribution, simply as fact—a rather unusual practice in journalism. In this sense, the voice of biomedical authority addresses the members of its audience directly, and the journalist's mediating role remains in the background. The article does quote one endocrinologist to establish the authority of the information, and it cites a study by the Department of Health and Human Services. Patients seldom speak in these articles, and there is hardly ever a humaninterest angle, but many articles include a photograph of a patient and/or one of the quoted professionals. Laypeople are sometimes interpellated as eavesdroppers, listening in on a conversation that does not yet include us, sometimes instructed in the didactic mode of the advice column, and sometimes, like the photographed patients, as waiting to see how local physicians will bring this new knowledge to us.

At one time, the hierarchical model of biomedical authority was overwhelmingly dominant in public communication about health. Research by Nancy Lee shows that health reporting in the mid-twentieth century typically admonished laypeople to rely exclusively on their family physician for health information.²⁵ Admonitions to trust medical authority still appear today, though often in different forms and contexts. "Health hoaxes . . . zip around cyberspace like flies around fresh meat," warns one article splashed across most of the front page of the Currents section of the U-T. The article goes on to detail "the phony health scares exposed on a hoax-debunking Web site of the federal Centers for Disease Control and Prevention (CDC)" and to advise readers about Web-based sources of health information properly inserted within established channels of dissemination of biomedical knowledge.²⁶ Other articles warn of unapproved medical practitioners across the border in Mexico, or focus on "phony medical clinics thriving in immigrant communities."27 The hierarchical model of biomedical authority is probably more frequently found in articles on nondominant populations, who are often assumed to remain outside the circuits of information that define the model of active governmentality. Rose argues that advanced liberal democracies are dominated by "an ethic in which the maximization of lifestyle, potential, health, and quality of life has become almost obligatory, and where negative judgments are directed toward those who will not, for whatever reason, adopt an active, informed, positive, and prudent relation to the future."28 In characterizing people as biocommunicable outsiders, reporters extend logics that

justify health disparities by suggesting that targeted populations fail even to acquire the knowledge that would permit them to fashion themselves as biomedical citizens.

While the hierarchical model remains a powerful influence on almost all health care coverage, however, it is not the dominant model today. Most of the time it appears alongside, and sometimes in tension with, other models of communicability; at times it is present essentially as an absence, as a nostalgic contrast to neoliberal models of biocommunicability. In its classic form, this model projects a circuit of communication in which medical knowledge is produced by specialists and transmitted to patients by their primary-care physicians. If it works as intended, it is not a *public* process, and has no significant place for journalists as nonspecialist mediators. Health education campaigns modify the traditional model in part by inserting mass media into it—a modification often motivated, as in the example above, by the concern that the normal process is not functioning for part of the population or that the unhealthy effects exerted by nefarious advertisers and ignorant or ill-willed reporters need to be countered through the same media. The linear, "hypodermic," or "process" model of communication has continued to inform health education and health promotion, even as audiences come to be seen as active, selective, and heterogeneous "consumers" of health information.²⁹ But the central role of mass media in health communication today attests to the increasing marginalization in the age of neoliberalism of the benevolent patriarchal authority symbolized in an early era by the image of the family physician.

The Patient-Consumer Model

The shift toward neoliberal ideologies, practices, and institutional arrangements is apparent in the growing predominance of another communicable scheme. The article quoted above, "Actress Fights, and Beats, RA with New Drug Therapy," is a good illustration of the way the biomedical authority model is modified and partly displaced in the era of neoliberalism. The biomedical authority model is certainly evident in that story. The first half of the article, filled with quotations from a rheumatologist at a research university, details what biomedical science has learned about RA. (Overall, about 45 percent of the sources cited in the stories in our sample were biomedical researchers, public health officials, and physicians, a bit more than 50 percent if we include pharmaceutical company representatives.) The article projects an image of scientific progress with technologies that have "revolutionized treatment" and directs readers to Web sites where they can have access to authoritative information.

But in contrast to the "doctor's orders" model, here the celebrity patient appears—and speaks—in a central role as an active seeker of information, one who moves from "gathering the facts piecemeal" to managing her own treatment and eventually becoming an advocate for RA patients more generally.

Patient-consumer communicability significantly shifts relationships between health professionals and publics. Rather than imagining passive receivers of authoritative information, the patient-consumer model casts laypeople as individuals who make choices in the absence of their physicians and the presence of the media. Articles often pedagogically map the rational information acquisition/decision-making process that patient consumers are to undertake. Sue Levin's "Virtual Woman" column provides a model of the patient-consumer who signals her compliance with the governmental obligation to systematically seek biomedical information by actively formulating her questions; Levin maps how the ideal patientconsumer should position herself vis-à-vis health information. "T. W." asks: "DEAR VIRTUAL WOMAN: I am debating whether or not to give up coffee. I hear conflicting reports about how bad it is or isn't for you. Where would you suggest I go online for more information?"³⁰ The question presupposes the importance of the Internet, increasingly portrayed as patient-consumers' leading source of information. Here T. W. can obtain "conclusions—in English, not medical-research jargon" or, if she prefers, technical information. The Web sites, and the journalists who guide her to them, will apparently provide all the information that she needs to make a rational, informed choice. No mention is made of doctors. Instructing cancer patients on how to make choices among competing treatments, columnist Jane Brody of the New York Times urges patients to obtain information from multiple sources, assertively ask pointed questions, and assess the reliability of information: "Is it from an expert, the Internet, a support group, your sister-in-law?"31

The model of the active patient-consumer appears in a particularly strong form in the special "Currents: Health" section, which appears in the *U*-*T* every Tuesday. A 2005 front page of a typical Health section is titled "Better Births: Expectant Mothers Are Doing Their Research to Find the Best Hospitals and Physicians." "Like the Juns," the article reads, referring to an expectant mother quoted in the second paragraph, "many expectant mothers are abandoning the idea that you deliver at whatever hospital your doctor works. They are going online, talking to friends and doing research to figure out which facility suits them best and then finding a doctor who works there."³² No physicians or biomedical researchers are quoted; the voice of biomedical institutions is embodied not in medical experts but in hospital administrators and public-relations officers. Patients

"realize they have a choice and the right to get the care they expect," says one such administrator; and the article comments on competition among hospitals to reach "women who make most of the health care decisions for their families." The article is accompanied by a box listing "Birthing Center Options, Accommodations," and a list of information resources, including Web sites, books, and magazines. Here the biomedical voice and the invisible presence of the reporter merge in communicable projections of neoliberal health policies-medical care is oriented toward consumers making rational choices among available options and demanding fulfillment of contracted services. The model of biomedical authority appears almost in reverse form: the process begins with patient-consumers who seek information from health-care providers, and it is the patient-consumers who seem to frame what constitutes relevant and adequate knowledge. The journalist's role is not to help medical authorities communicate to an ignorant public, but to help consumers exploit the range of options apparently open to them. The goal is not simply avoiding illness but maximizing freedom, well-being, quality of life, and the future of one's children.

The neoliberal model of active governmentality also appears in a strong form in human-interest features, often happy stories in which patient-consumers face difficult problems, seek information, and make the right choices. "Walls felt numb as a Lubbock doctor ticked off options," reads a story reprinted from the *Houston Chronicle* dealing with a couple deciding about surgery for an infant with a heart defect. The article revolves around the parents' process of seeking information and making a choice and ends with a successful surgery, the father "temporarily free" of the agonizing search for information, and the mother blurting out about the infant, "She is beautiful."³³ Human-interest angles are common enough in health reporting: almost 17 percent of the sources cited in the stories in our sample were patients and their families and friends. This was actually the most common source category, ahead of academic biomedical researchers at 13 percent and physicians at 11 percent.

In both these genres—the consumer genre and the human-interest genre—the neoliberal model of biocommunicability appears in a highly positive form, as a happy world where biomedical science produces a cornucopia of choices which enable consumers to realize healthy lifestyles. Health news is one of the few categories in the U.S. press where "good news" has been at least as common as "bad."³⁴ This is in part why it is so popular with news organizations, which have themselves shifted toward market-driven models of practice, away from more hierarchical conceptions of news judgments in which journalists, as professionals, make judgments about what citizens need to know to participate responsibly in the democratic process. Much health news fits into the model of "lifestyle jour-

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nalism" or "news you can use," attractive to news organizations because it is cheap to produce-much of it is syndicated material-and because it addresses readers as consumers, easing the integration of advertising and editorial content.³⁵ In these genres, health reporting clearly naturalizes the neoliberal model of biocommunicability and, more generally, of biosociality. The ideology of consumer choice and individual responsibility often manages to incorporate and redefine the older model of biomedical authority in projecting a utopian world in which medical science and biomedical institutions serve the consumer by producing abundant information and choices, while the market serves the cause of public health, as consumers' responsible choices lead to healthy lifestyles. "Advanced liberal rule," as Rose puts it, "depends on expertise in a different way . . . relocating experts within a market governed by rationalities of competition, accountability and consumer demand."36 At the same time that news coverage of biotechs and pharmaceutical corporations appearing in the business sections of newspapers constitutes a quintessential embodiment of "bioeconomics," health news framed in the patient-consumer model of biocommunicability in general participates in the capitalization of biopolitics.

George Will's syndicated column on obesity, quoted at the beginning of this article, expresses in more explicitly ideological terms the utopian version of the neoliberal patient-consumer model. Will praises the Office of the Surgeon General as "sometimes . . . the government's most costeffective institution"³⁷ and presents the news-reading public as a composite of active governmental subjects, "middle class, broadly educated," each engaged in a search for news that he or she can use in making rational choices whenever the need arises. Will models patient-consumer rationality by asking his readers to use a formula to calculate their BMI. Seeking information and enjoying multiple options defines citizenship for Will, which strongly implies individual responsibility for health problems, seen as "the consequences of choices known to be foolish." The state plays a limited role, consistent with neoliberal visions of efficiency-providing patient-consumers with "public health information [that] encourages moderation."38 Those who are not middle class, are outside of an information flow obviously not addressed to them, or who do not experience neoliberal society as a "rich range of choice" are invisible-as they are also in the U-T's report on childbirth options, and indeed almost always in the Tuesday Health section. In suggesting that the scarcity of health care resources has been "banished," Will erases the 17 percent of the U.S. population without health insurance and the persistence of racial imbalances-"Hispanics" under sixty-five are two and a half times as likely to lack coverage.39

Multiple Models of Biocommunicability and Their Contradictions

In a famous 1963 article, economist Kenneth Arrow wrote:

It is clear from everyday observation that the behavior expected of sellers of medical care is different from that of business men in general. . . . [The physician's] behavior is supposed to be governed by a concern for the customer's welfare which would not be expected of a salesman. In Talcott Parson's terms, there is a "collectivity-orientation," which distinguishes medicine and other professions from business, where self-interest on the part of participants is the accepted norm.⁴⁰

Arrow enumerates several reasons for this "collectivity orientation," including interest in others' health (most clearly illustrated by the case of communicable disease), ethical concerns about inequalities of access, and, crucially, information costs. For economists, health-care markets are "imperfect" because consumers cannot reasonably invest the time necessary to assess the choices they have to make, choices that depend on specialized knowledge. This is an important reason we traditionally rely on professional responsibility and state regulation (such as medical licensing) rather than market mechanisms. As Arrow, writing before the dominance of neoliberal models of health care, put it, we rely on a "generalized trust" in physicians' expertise and commitment to patient welfare; "the very word, 'profit,' is a signal that denies the trust relations."

Media coverage, for the most part, now takes it for granted that market relationships dominate the health-care field, and journalists are positioned as advisers to patient-consumers, helping them manage the burden of information costs created by the shift to neoliberalism and the decline of the ideology of "doctor's orders." If we see health-care reporting as a pedagogical project, a basic lesson is that health care is naturally, inevitably part of consumer society. In many cases, this state of affairs appears harmonious and contradiction-free. At other times, however, heroic stories of patient-consumers successfully negotiating burdens of choice share space in the news with a strong undercurrent of frustration on the part of patients and of nostalgia for the "residual value," in Raymond Williams's terms,42 associated with the "doctor's orders" model of all-knowing, accessible, and "collectivity-oriented" biomedical professionals who once enjoyed our "generalized trust." When Brody, for example, in the column cited above, passes on the advice (from a physician who also survived a form of Hodgkin's disease) to "ask pointed questions" and to be assertive, even if "some doctors may resent such an inquiry," she is assuming the relationship between patients and biomedical authorities is not necessarily a rela-

tionship of trust. Medical authorities may give conflicting advice or may be incompetent, inaccessible, or resistant to the active role the neoliberal ideal assigns to the patient. Brody, who has clearly adopted the neoliberal model, suggests that self-interest will lead her readers along the same path; physicians, however, are projected as being stuck back, in many cases, in doctor's-orders biocommunicability. "When the decision has to be made in the context of conflicting advice and the outcome differs from what the family hoped for, there's a huge amount of guilt because the final decision was left to the patient and family," Brody's source observes. The story on actress Kathleen Turner similarly notes that she began her search for information on rheumatoid arthritis after "a podiatrist told her to buy 'bigger shoes.' An orthopedist, stumped for an answer, recommended exploratory surgery. She declined." References to conflicting studies are a staple of health coverage today. "Here's some medical news you can trust," said a 2005 Associated Press front-page story.43 "A new study confirms that what doctors once said was good for you often turns out to be bad-or at least not as great as initially thought." Another front-page story ran under the head, "Patients often have the burden of deciding on treatment."44 This kind of reporting reflects not only the decline of the old hierarchical model of biocommunicability, but also the ambivalence of the neoliberal model, where the burden of choice and the absence of certainty can as easily seem "terrifying" (as Brody's source puts it), as liberating.

Consumer reporting involves a cluster of genres, some uncritical and celebratory, some positioning the journalist in the "watchdog" role, defending consumers' rights by giving them access to information other actors prefer to conceal. Thus the U-T editorializes against the California Medical Board's opposition to state legislation requiring it to disclose convictions and completed investigations of physicians: "California patients ought to be entitled to the information they need to make informed decisions when it comes to their medical care."45 Health professionals are denied the status of privileged and trusted purveyors of scientific information and imagined as service providers who should be evaluated like any other class of vendors. "Drug Companies' Wine-and-Dine Ways Reported" portrays physicians themselves as consumers of health information proffered by drug companies in exchange for free meals, tickets for events, travel, and cash payments. While the physicians quoted in the story tried to characterize the material passed along as "the latest research," the article suggests that these exchanges are "glorified sales pitches."46 When physicians themselves are characterized as consumers of information, even the neoliberal model seems incapable of forestalling the sense that fundamental principles of biomedicine and biocommunicability were violated. The neoliberal model

appears as fully natural and unproblematic only to the extent that it is able to incorporate the residual model of trust in science and professionalism, when consumer choices can be imagined as based on information that comes from objective, disinterested sources. Journalists waver among several stances, sometimes assuming the trustworthiness of biomedical information, sometimes striving to fill the gaps that result from its unreliability, scarcity, or excess—as in the case of stories on Internet health "rumors" or on conflicting studies—and sometimes acknowledging the frustration of consumers or professionals with the persistence of those gaps.

The media advise readers on how to manage the pressures of the patient-consumer role; often they individualize the contradictions of the neoliberal system and help to facilitate its operation by advising patients how to be proper consumers. "San Diego County has a message for people who crowd busy emergency rooms with simple ailments such as colds, earaches or bladder infections," begins one U-T article, under the headline "A Warning Is Issued on Emergency Room Use." "If it is not a true medical crisis, go to an urgent-care center or community clinic instead."47 Here the hierarchical model of biomedical authority is transferred to a neoliberal health-care system where minimizing cost is as important as maximizing health. The U-T transmits to the public instructions from medical professionals and the state on how to behave as a "responsible consumer" in an environment of scarce medical resources: the form of the information flow is hierarchical, and patients are imagined paternalistically, as ignorant and irresponsible, while the content of the advice transmitted assumes market relationships. Then, toward the end, the article quotes a county supervisor's acknowledgment that "there is a health care crisis" and the concerns of other professionals that the advice of county public health officials would be unrealistic for uninsured patients who might be excluded from urgentcare centers. At this point the contradictions of the neoliberal system spill into the political arena, and the third model of communicability, on which we will elaborate in subsequent papers, that of the public sphere, of citizens producing health-related knowledge and debating issues of public policy, enters health reporting. Even Will's column cannot paper over all contradictions. Will ignores class inequality and finesses the role of the state. But he has a harder time managing the contradiction between market relativism and scientific authority in one crucial respect: denouncing "food fascists" who would spoil the joy of consumer choice, he acknowledges that "there is more than coincidence in the correlation of the increase of obesity and the rise of the fast food industry."

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Both types of biocommunicability imbue knowledge about health with two features. First, it is constantly on the move, being created, transformed into information, circulated, received, put into action-unless somebody or something gets in the way. Subjectivities are defined not by possessing knowledge per se but in participating in its movement: as producer, translator, disseminator, or receptor. Second, this movement is goal driven, meaning that it should be constantly circulating among individuals, populations, and society (to use three problematic expressions) in a particular direction—toward better health. If the information is scientifically accurate and relevant, movement and ameliorative effects seem to be natural. Knowledge about health is thus much like capital-it must be constantly increasing, expanding its borders, and multiplying its effects. Greg Urban refers to this conception of knowledge, information, and culture as constantly on the move as a metaculture of modernity.⁴⁸ Health information seems to achieve maximum kinetic energy when circulating over the Internet. Its movement seems contingent on the status of biomedical "facts" as "immutable mobiles," information that can go anywhere, jumping between genres, places, people, and scales without changing meaning.⁴⁹ These supposedly stable facts create subject positions imbued with varying degrees of power and agency as people are interpellated or hailed in the process-and then position themselves within these constraints or, less commonly, reject the proffered communicable maps.

Conclusion

Biocommunicability transforms scientific facts into moral facts as reporters assess how well each party is playing its assigned role in keeping information moving, placing blame on those responsible for blocking or misdirecting flows, distorting information, or failing to listen or being unable to comprehend and respond rationally. That these subject positions are ethical positions is especially revealed in reporters' criticism of researchers, state officials, physicians, corporations, and patients who interrupt the proper circulation of biomedical knowledge.

Since we are taught to separate nature from society, science from politics, and the production of medical knowledge from its "circulation,"⁵⁰ we focus on content: is the information accurate? Is it relevant to me? Biocommunicability locates health discourse in a range of contrasting social positionalities and allocates different types and amounts of symbolic capital for each party. But if health news teaches people about how information is (and should be) communicated as well as about health and disease, what exactly are they supposed to learn? Rabinow suggests that the ability of biopolitical knowledge to define identities and social relations creates "biosociality," modes of relating that spring from how we are positioned

in relation to pathogens, risk factors, diseases, therapies, and genes.⁵¹ In mapping biosociality, biocommunicability models it performatively. It is not just our biomedical state-such as sharing the same risk factor, suffering from the same disease, or receiving the same treatment—that links us to some people and separates us from others. Biocommunicability creates forms of biosociality by positioning us in relation to some as fellow occupants of the same positionality and to others as producers of knowledge we consume or recipients of information that we create or circulate. The patient-consumer model does not project the same unilinear directionality or establish as clearly defined a set of hierarchies. Nevertheless, filling the slot of the rational patient-consumer bears different consequences than being "irrational," failing to heed the obligation to be informed, being incapable of understanding information, or simply being out of the loop. We learn about the roles of states and biomedical citizens in relationship to health and information about it: the burden has clearly shifted to the latter.

More broadly, grasping the relationship between communicability, health, and news coverage provides insight into recent discussions of the centrality of circulation to social imaginaries and social life.⁵² Arjun Appadurai suggests "the anthropological study of globalization can move from an ethnography of locations to one of circulations."⁵³ Similarly criticizing understandings of circulation as a mechanical process that transmits previously created meanings, Ben Lee and Edward Li Puma argue for a "rethinking of circulation as a cultural process" and as "constitutive acts in themselves." They suggest that "cultures of circulation," particularly the circulation of capital in the market and of culture in the public sphere, shape the social imaginary of modernity.⁵⁴ Charles Taylor argues that a central feature of the public sphere is the "metatopical" circulation of discourses through genres, spaces, topics, texts, conversations, and people.⁵⁵

We converge with these authors in stressing circulation. Nevertheless, an emphasis on communicability points to pitfalls in giving too much credit to circulation, either as ideology or as practice. Anna Tsing provides a critical corrective in her analysis of notions of "flow" and "circulation" in anthropological work on globalization; as metaphors, these terms add a feel-good aura to globalization and obscure impediments and obstacles to the movement of people, ideas, technologies, capital, and so forth.⁵⁶ In using notions of circulation to analyze neoliberal capital and culture, scholars incorporate widespread tropes and ideologies from contemporary social processes. Using a key neoliberal term to analyze neoliberalism requires a healthy degree of skepticism and appreciation of its complexities in order to avoid reproducing the term's presuppositions. Thus, we

might think more in terms of the *politics of circulation* in order to forestall any easy reification of the concept and avoid collapsing social imaginaries and social practices.

By using the term *communicability*, we have sought to achieve critical engagement with notions of circulation-along with those of production and reception — and their place in shaping notions of knowledge, information, communication, and culture. Rather than totalizing processes that map social life, we have characterized them as assemblages,⁵⁷ fragmentary models that introduce complexities, contradictions, and uncertainties even as they create subjectivities, arrange them hierarchically, and recruit people to occupy them. They are mapped anew in each projection of health discourse even as they incorporate shared models; this constant imbrication of multiple, competing, shifting, and often contested models of communicability renders them sensitive to social/cultural and historical dynamics and enables them to incorporate new pathogens, technologies, subjects, and political economies. At the same time that cartographies are built in close tension with particular institutions, populations, medical technologies, and forms of knowledge, biocommunicable maps are powerful ideological forms, erasing some discursive practices and constructing others in particular ways. They are constitutive, laying out possibilities for determining what counts as knowledge about health, who can produce it, how it circulates, and how it is and/or should be received, without being determinative.

One example from our reception analysis is worth adding to underscore this last point. We showed a Spanish-speaking focus group a story from a local affiliate of Univision, a Spanish-language television network, reporting on a campaign in which Univision was playing a prominent role in informing Latino parents about programs that were supposed to give their children access to free medical care. The story projected a situation in which services were available, but parents failed to exercise their options because they did not have proper information; the state and media would remedy the situation by bringing them that information. Immigrant parents were thus projected as doubly failing in their governmental duties, seemingly not self-motivated to seek out relevant information on health and to secure their children's well-being. The first participant to speak, however, detailed her own experience and that of other members of her social network in accessing precisely the programs described in the segment, having to overcome the arbitrariness and indifference of bureaucrats in order to obtain what were portrayed as easily accessible services. She continued: "On television you see it, but the reality is something else; I heard [about issues of access] because I speak to people, people who have the same problems I do." Other participants recounted their experiences being turned away from the kinds of programs purportedly available to them. Here they rejected their interpellation as uninformed subjects in need of enlightenment, rejecting not only the proffered subject positions but the linear communicable map as well, asserting instead their own communicable cartographies for learning about health services. These kinds of disjunctures are part of the engine of change, modifying dialogues of biocommunicability as other actors - journalists and government officials, for instance-respond to them, differentially, of course, depending on what segments of the community are involved, and accounting in part for the complexity and ambivalence of actual health coverage. Our goal here is not, however, to reintroduce such problematic dichotomies as ideological versus real or hegemony versus resistance; indeed, critiques of dominant cartographies are now a central part of health news-thereby helping to constitute our models of biocommunicability. It is, however, important to draw attention to the difference between rejecting denigrating subject positions and problematic communicable maps as opposed to "resisting" or being "noncompliant" vis-à-vis the biomedical objects they purport to describe.

We have argued that news coverage of health provides a crucial means not only of bringing neoliberal forms of biosociality and biopolitics to mass audiences but of constructing them, detailing the subjective states they require, creating relations between distinct subjectivities. They provide, in short, complex roadmaps for creating neoliberal subjects. The merging of health and capital that is occurring in health care, which is actively fostered by modeling the health subject as a rational, maximizing, selfinterested, autonomous, and self-reliant individual, parallels how subjects are supposed to operate in relationship to the market. Both doctor's orders and patient-consumer communicabilities map public and private spheres, locate classes of actors in relation to them, and detail precisely where they intersect—as researchers and physicians take private bodies and lives and turn them into public discourse and publicly available commodities (particularly through clinical trials) and as patient-consumers turn public information into personal knowledge and bodily states.

Biocommunicability reveals, however, the contradictions and complexities evident in projecting neoliberal governmentalities through mass media. We have argued that communicable maps are multiple, competing, and contradictory, often even within the same article or broadcast. Rather than imposing a single, dominant way of thinking/feeling/being, patientconsumer models often emphasize indeterminacies and contradictions. Readers confront multiple sources of information and competing forms of reception. Even as patient-consumers are exhorted to be rational and the status of scientific knowledge as true, disinterested, reliable, and empiriOne way that stories turn medical into moral facts is by characterizing in a positive light those who successfully keep them circulating through appropriate channels. cally based—ideally—is reasserted, journalists admit that it is often not possible to rationally sort valid truth claims from information tainted by corporate interest, medical error, and scientific controversies and aboutfaces. One way that stories turn medical into moral facts is by characterizing in a positive light those who successfully keep them circulating through appropriate channels and portraying parties who obstruct or misdirect transmission as incompetent or even villainous. Nevertheless, positive and negative roles are often much more ambiguous, uncertain, and shifting than they appear in accounts more fully structured by doctor's-orders communicability. In this way, even as they project the continual movement of knowledge as natural and necessary, reporters project circulation as a complex, uncertain process that ultimately is likely to fail. Even Will, as he praises the state for limiting its health care obligation primarily to providing a vast free-flow of information, projects the widespread rupture of this process in the move from cognition to action.

We do not pretend to have resolved all of these complex issues in this article. Our discussion has largely left questions of intersections between the institutional practices of journalists, health-care professionals (including physicians, researchers, policy makers, and administrators), media consumers, and activists for subsequent treatment. It would also be worthwhile to pursue questions of how subjects are racialized, the role of social movements in health news, and the place of biotechs and pharmaceutical corporations in advertising, marketing, research, and clinical trials-as well as the current proliferation of concerted public critique of big pharma. How coverage in newspaper, television, and radio formats intersects with clinical encounters, health education and promotion, and Internet use similarly calls out for critical scrutiny. Our research in Argentina, Brazil, Cuba, Ecuador, and Venezuela and collaborations with scholars in Mexico suggest that biocommunicable cartographies differ widely between countries, reflecting differences in media institutions, states, citizenship, and health-care systems.

Here we have simply tried to open up a new area of research on biopolitical dimensions of contemporary life. We have pointed to the way that news coverage constructs biopolitical subjects and objects, thereby creating powerful linkages between forms of biosociality, biocapital, and media institutions—without resolving their complexities and contradictions. If the emergence of new forms of biomedical knowledge in laboratories, clinical trials, marketing departments, and other sites is indeed transforming "the politics of life itself," then its projection as "news" warrants scrutiny for its role—along with that of pharmaceutical advertising—in shaping which aspects of this process will jump scale to become central features of public discourses and political imaginaries.

Notes

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