

Tobacco

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Abstract

Anthropologists have long studied tobacco, what is today the world's greatest cause of preventable death. Their publications have garnered modest attention, however, even as the academy is increasingly interested in global health, transnational commoditization, pharmaceuticals, and the politics of life and death. We take stock of anthropology's tobacco literature and our discipline's broader appetites. We review how colleagues have studied health issues related to tobacco and engaged with theory and policy pertaining to the production, consumption, and regulation of drugs. We assess ways scholars working at the interface of anthropology and cigarettes have analyzed gender and ethnicity, corporate predation and industry-related harm, governmental management of disease, and the semiotics of misinformation. We discuss why anthropology has not more broadly and ardently engaged the study of tobacco. And we identify areas for further research capable of illuminating more fully tobacco's analytical potential and toxic effects.

INTRODUCTION

The anthropology of tobacco is a chronologically deep and thematically diverse subfield. In recent decades, sparks of intellectual fervor have defined this area of inquiry; a hard-working group of anthropologists has studied tobacco from various perspectives. These efforts remain poorly integrated into the discipline and have gained little notice, even though the academy is increasingly interested in global health, transnational commoditization, pharmaceuticals, and the politics of life and death. While reviewing the tobacco literature, we question why this is so. The *Annual Review of Anthropology* published five articles to date with the words “HIV” and/or “AIDS” in titles, whereas this will be the first overview of anthropological scholarship on tobacco appearing in the *ARA* and the second known Anglophone review (Singer 2004).

In the twentieth century, tobacco corporations insinuated themselves into societies everywhere. Annual production and consumption of cigarettes has increased from 20 billion to more than 6 trillion sticks since the late nineteenth century. Epidemiologists have clarified numerous effects of these trends. Cigarettes killed roughly 100 million people over the past century. Today, tobacco smoke is the single greatest cause of preventable death worldwide. Although smoking declined and tobacco-control measures took hold in several countries over the past decades, the global demand for cigarettes is likely to kill 1 billion people over the next 100 years. The majority of these deaths will be in developing countries, where the industry imbues smoking with positive social meanings, recruits adolescent smokers, and leverages political influence to limit public health efforts and maintain free-market environments for this harmful product (World Health Organ. 2008; see also Proctor 2004a).

To avoid reproducing a silo effect within our discipline, where tobacco seems less/more relevant to an understanding of global health, politics, and economy than other vectors of harm, we must take stock of anthropology's tobacco

literature and its broader appetites. Long attentive to tobacco's wide geographical distribution, anthropology was slow to acknowledge the cigarette's analytical potential or its toxic effects. Until rather recently, anthropologists interested in health issues and tobacco often focused on local contexts, highlighting practices construing tobacco as medicinally efficacious. In the 1980s, a few scholars brought ethnography to bear on public health issues related to tobacco, engaging with theoretical and policy issues related to the production, consumption, and regulation of drugs. We survey those studies and others on the semiotics of misinformation, the ethnography of contextual factors that influence why people smoke in different settings, the production of gendered and ethnicized smoking patterns, corporate predation and industry-related harm, cultivation of desire and addiction, and governmental management of disease. We also expose a body of little-known work carried out for tobacco companies. Some anthropologists have self-consciously tried to shatter the misinformation regarding tobacco and disease produced by Big Tobacco. The opposite, though, has also been the case.

Inasmuch as anthropological scholarship on tobacco has been increasingly reaching across academic disciplines, anthropologists must be more than collaborative when confronting tobacco in the years ahead. They must claim a larger role in research, policy debates, and social theory building and better diagram connections between tobacco and scientific production, state formation, the political economy of industry, and the subjective experience of dependent consumers and communities.

THE SACRED

Archaeology and the Ethnology of Healing

The science of smoking-related disease that arose in the early twentieth century (Proctor 1999) did not identify a problem never before recognized or considered for sociopolitical intervention. Nonetheless tobacco

experienced rising tides of positive valuation until the late twentieth century, even in academic circles. Early anthropologists often smoked—photos of youthful ethnographers such as Lévi-Strauss, pipe in hand, litter the academic archives—and many a fieldworker encouraged ethnographic others to use tobacco, as exemplified by Malinowski's (1922) remembrance that native informants regarded him as a “nuisance. . . mitigated by donations of tobacco” (p. 6). Gifting tobacco to access research subject populations is also memorably highlighted in *The Nuer*, where Evans-Pritchard recounts exchanging tobacco with an informant for the provision of kinship terms.

Not surprisingly, anthropological writings on tobacco long remained concerned mostly with cataloging the where and how of usage rather than with the why of complex relationships among history, culture, power, and harm (Lévi-Strauss 1973). In his 1907 essay, Cooper discussed tobacco against a rich history of colonial economics, transnationalism, and fraught affection for/resistance to tobacco's popularization among post-Columbus British. More typical of the largest and earliest literatures within the anthropology of tobacco are scores of archaeology reports documenting clay pipes' unearthing at individual dig sites, describing their stylistic variability, and treating them as proud markers of culture groups' distinctiveness (Emerson 1999, Gebauer 1972).

Religious Healing and Indigenous Identity

Somewhat thinner bands of text have addressed how varieties of *Nicotiana* were used medically and ritually across the Americas in the Pre-Columbus period. An extensive leaf trade linked regions, and hundreds of consumption methods existed, including various ways of smoking, chewing, drinking, and inhaling, as well as ocular ingestion, transdermal decoctions, and intestinal ingestion by enema. Tobacco was used to treat many ailments such as diarrhea and pain, as a disinfectant, and as toothpaste (Schwarz 1921, Simms 1904). These uses and

meanings crossed the Atlantic in the mercantile period, resulting in European physicians touting tobacco as a panacea (Cooper 1907).

A band of ethnological literature stretching from the late 1800s compares tobacco use across distinct indigenous groups (Kroeber 1941, Linton 1924, Lowie 1919). Core themes are origin myths, oral traditions, lexicons, and the cosmology of smoke (Gilmore 1929, Kimura 1950, Wiener 1925). Much of this literature discusses shamanism (Elferink 1983, Johnson 1988, Linton 1924, Lowie 1919), describing for example that tobacco was the key ingredient in a “hallucinogenic complex” shared by most Native American groups (Wilbert 1993), that in parts of the Amazon tobacco was the only ritual intoxicant (Baer 1995, Wilbert 1975), and that the word for shaman arises from words for tobacco, intoxicate, or return (Rosengren 2002).

Colonial Contact and Trade

Studies using anthropological methods to address colonial contact and tobacco trade began popping up in the early 1900s (Prince 1917). For instance, Barbeau (1944) shows that, from the late 1600s onward in Canada, tobacco was used to curry goodwill with native hunters. In such accounts, tobacco is treated with solemnity, characterized unquestioningly as “precious,” part of a “pure” life (Prince 1917), and as giving “solace and a comfort to white man and native” (Barbeau 1944).

Starting in the 1970s, scholars began to interrogate the colonial trade structures more critically. Kosmin (1974) and Baud (1995) describe long-standing tobacco growers forced into a “vicious circle,” cases of Rhodesian and Dominican tobacco farmers pressed into proletarianization, in which their well-honed agricultural practices are “first fed then later strangled by capitalism” (Kosmin 1974). Similar histories document the exploitation of peasants in the creation of colonial and/or national tobacco monopolies in Southeast Asia (Boomgaard 1999, De Jesus 1998, Ibrahim 2010) and sub-Saharan Africa (McCracken 1983). With added nuance, Babalola and

Heald highlight pitfalls of applying simplistic economic or functionalist theories to make sense of community responses to market penetration by European tobacco capital in southern Africa (1989). Likewise, Read (1978) offers a thoughtful ethnographic corrective to Marxist overreach in his analysis of Australian aboriginals' transformation when they, desperate to find tobacco, joined a colonial outpost and became wage laborers.

That dangers inherent to tobacco itself went unaddressed in such studies of colonial and market contact is unsettling, especially for ones written up after the 1964 U.S. Surgeon General's Report. Missing is serious acknowledgment of the harmful qualities of tobacco or that colonial and financial alliances hooked local residents on tobacco smoke and thereby imperiled them both economically and biosocially (Brady 2008).

THE PROFANE

In the past half century, antitobacco politics were radically amplified in parts of the world owing to the biosciences mounting interrogation of smoking, to new alliances among science, government, and civil society, and to the sheer magnitude of the public health catastrophe. The tobacco industry responded with various strategies, including redoubling marketing campaigns to legitimize smoking and funding pseudoscience to foment doubt about tobacco's toxicity (Benson & Kirsch 2010, Brandt 2007). These strategies elicited criticism from public health scholars but hardly an ill word from anthropologists. Marshall (1981) and Black (1984) found it "remarkable" that anthropology and related fields continued into the early 1980s to largely ignore the deleterious effects of tobacco use. In his 1981 article, which appeared in an alcohol studies journal likely rarely read by anthropologists, Marshall outlines structural processes long promoting the tobacco industry and calls for detailed ethnographies of the "relationship between tobacco use, illness and mortality" (p. 891).

Usage, Addiction, and Cessation

More anthropologists have since profiled ways people use cigarettes and respond to health promotion, how factors such as ethnicity, age, and gender influence one's exposure to smoking initiation, and the ways tobacco use is linked to specific kinds of reward structures and forms of affiliation and distinction. Augmenting these streams have been ethnographic descriptions of cigarette smoking framed vis-à-vis views of wellness (Mock 2000), social exchange (Kohrman 2008), and substances such as marijuana (Lipset 2006) and betel-nut (Reid 1985, Strickland 2002). Such single-authored qualitative efforts are outnumbered by studies drawing on quantitative, interdisciplinary, collaborative methods, partly because of increased funding from agencies such as the U.S. National Institutes of Health and the Robert Wood Johnson Foundation. Research teams examining cigarette use have considered topics from social class (Stellman & Resnicow 1997) to genetics (Swan et al. 2003) and the use of alcohol (Cameron & Jones 1985). Nearly all these studies approach cigarette smoking as acutely addictive; some consider how biological habituation is shaped by employment (Longo et al. 2001), norms (Hosking et al. 2009), and diverse cross-cultural expressions of dependency (Quintero & Nichter 1996, Shadel et al. 2000).

Regarding youth smoking, anthropologists tend to focus on how the social environment textures why kids do/do not use tobacco (Johnson et al. 2003, King et al. 2003). Field studies among youth in regions of Africa, for instance, highlight misinformation about smoking, cigarettes' ready availability, and poor policy enforcement (King et al. 2003, Rudatsikira et al. 2007, Townsend et al. 2006).

When it comes to occupation, scholars such as Moore et al. (2006, 2009) document unintended consequences of smoke-free ordinances, including increased threats to the safety and image of female bar employees. Cunradi et al. (2008) document relationships among gender, rank, and smoking in the U.S. military, finding that cigarette use is a common

coping mechanism for trauma and that it correlates with depression and alcohol use (2005).

In terms of gender, anthropologists have discussed how commercial tobacco production places men at greater risk of being a smoker (Alexander & Alexander 1994, Kohrman 2004, Waldron et al. 1988). Kolasa & Hulanicka (2005) present smoking data from Poland correlating to early menstruation, and Goldade et al. (2008) study links between breastfeeding and cigarette use among low-income mothers in the United States. Ernster et al. (2000) and Kaufman & Nichter (2001) describe women's high risk of smoke exposure, discuss how companies such as British American Tobacco market "female cigarettes" in places such as India, resulting at times in protest by activists, and argue that gender needs to be a key element in tobacco-control policy. Elsewhere, Mimi Nichter and colleagues (2006, 2004) show that women in North America smoke in groups to mitigate negative perceptions and are drawn to cigarettes by a more complex set of gendered institutional and social factors than is commonly theorized (Stromberg et al. 2007).

Anthropologists interested in promoting public health have also paid attention to the association of smoking and ethnicity. Working with Native Americans, ethnographers have analyzed high rates of chronic illness as a consequence of modern consumption patterns (Pego 1995) and emphasize culture as a potential basis for behavior change (Daley 2006, Sisk-Franco 1996). Others show aspects of "acculturation," such as English language use, modern lifestyles, and family formation, correlate with smoking behavior among Hispanic and Asian American adolescents in the United States (Baezconde-Garbanati 2001, Unger et al. 2000). Yet others have clarified for tobacco-control scholars the value of qualitative case studies for understanding better the role of culture, relevant social, institutional, and behavioral contexts, and subjective experience (Nichter 2003) and, more practically, have helped to develop and promote culturally sensitive cessation programs

(Castañeda et al. 2008, Mohan et al. 2006, Nichter et al. 2009a, Nichter & Proj. Quit Tob. Int. Group 2006). Despite concentrations of work on tobacco use vis-à-vis gender, age, ethnicity, and other social variables, rarely have anthropologists considered how such factors help dampen public response to tobacco-induced harm. Kohrman (2007) has described in one publication that gendered patterns of cigarette exchange depoliticize tobacco-induced morbidity and mortality in China. More work is needed along these lines, in addition to how biases against the elderly, and misconceptions that tobacco-induced disease affects only old people, help to sustain Big Tobacco's ongoing market freedom around the world.

Critical Medical Anthropology

The 1990s saw tobacco studied through the lens of "critical medical anthropology," reflecting a wider turn in the subfield. New themes came into focus because this paradigm emphasizes how power structures shape health conditions and examines those conditions in view of capitalist systems (Baer et al. 2003). Anthropologists began considering more fully linkages between the multinational tobacco industry, international financial and trade institutions, and the spread of Western-style commercial cigarettes as commodities associated with being global, modern, and cool. Tobacco was no longer just local custom, but also part of a "global death march" (Ravenholt 1990) tied to political and economic globalization and Westernization. Singer & Baer (2008) argue that the tobacco industry and the global trade regime are a causal chain in disease. Tobacco is one of several "killer commodities," they write, and depends on harming populations and undermining public health.

Pivotal in this critical turn, Stebbins's work focuses on multinational tobacco capital in Latin America, where neoliberal policies led to the privatization of national tobacco monopolies, lower industry costs, and the obstruction of public health efforts (1994, 2001). Policy recommendations developed on the basis of

this work are an exacting critique of the idea that control measures alone can curb tobacco's global spread. Stebbins emphasizes the need for economic development to strengthen basic infrastructures of developing countries and make them less dependent on foreign direct investment from, among other industries, tobacco interests.

Other seminal work in this critical paradigm came from Mark Nichter (Nichter & Cartwright 1991, Nichter & Kendall 1991), who in the 1990s began to challenge institutions of global health in a set of articles that examined World Health Organization (WHO) priorities and programs. Nichter showed that the WHO's handling of children's health neglected tobacco's overwhelming contribution to the global disease burden, in particular how it imperils children exposed to secondhand smoke and predatory marketing. That the WHO ignored these aspects of children's health betrayed problematic thinking at the highest levels of health research and policy, mirroring our concerns about the disproportionate focus on infectious disease and global pharmaceuticals in medical anthropology.

NEW DIRECTIONS

Critical Industry Studies

Recent work has continued to expand our understanding of the tobacco industry as a vector of harm. A defining part of a growing critical industry studies approach involves analyses of corporate strategies and public relations. Recent work by Benson (2008b, 2010b) examines the paradoxes of corporate social responsibility (CSR) when it comes to an inherently harmful product and the ways that public health regulations focusing on consumer education benefit tobacco companies because they limit corporate liability and give the false impression that tobacco products are now safer. A new Web project by Kohrman (<http://tobaccoresearch.stanford.edu>) exposes that cigarette manufacturers have been funneling CSR funds into sub-Saharan Africa's

HIV prevention programs in recent years, forcing us to ask how else the industry uses philanthropy to divert attention away from tobacco products and policies.

Thrasher has been a prolific critical industry studies scholar. Working in the United States and Latin America, he has focused on techniques of health communications, mainly how the public vilification of Big Tobacco leads to increased critical awareness among existing and potential smokers, less industry loyalty, more accurate beliefs about risk, and significant reductions in tobacco prevalence (Hammond et al. 2006, Thrasher et al. 2004). Such "denormalization," Thrasher et al. (2008, 2009) argues, is especially effective for influencing high-risk adolescents and should be promoted by the WHO in developing countries (2009, 2008).

Researching how tobacco production became embedded in different parts of the world has also animated anthropologists and historians working at the interface of public health (Wallace 2006, Wee 2002). For example, Shechter (2006) chronicles the rise of tobacco as a luxury item in colonial Egypt and the formation of national brands as revenue streams for the state. In the context of sub-Saharan Africa, Peters (2004, 2006) examines the formation of the colonial tobacco economy as a backdrop for understanding resource scarcity, economic insecurity, and intensified class differentiation among rural residents.

Although studies in the United States have tended to frame tobacco farming as an insular, timeless commodity culture (van Willigen & Eastwood 1998), Benson (2012) examines how the tobacco industry promoted this image to rally the allegiance of southern growers amid structural adjustments and defend the tobacco business in terms of preserving heritage. Recent ethnography on U.S. agriculture exposes the historical and continued dependence of tobacco companies on stressed family farms, exploited undocumented farm workers, and lax labor and environmental regulations (Benson 2008a,b; Griffith 2008; Kingsolver 2007; Stull 2009; van Willigen et al. 1985). Anthropologists working closely with tobacco growers have studied

occupational safety, health problems, and the subjective experience of growing a harmful product (Arcury & Quandt 2007, Benson 2010c, Villarejo 2003). Internationally, there is also a growing literature on the problems of farmer indebtedness, pesticide exposure, and deforestation in tobacco-producing countries (Geist 1998, Geist et al. 2009, Shipton 2010) and evidence of the involvement of child labor, as recently documented in Indonesia (Amigo 2010) and in Malawi (Otañez et al. 2009). In Brazil, field researchers have reported increased suicide incidence among farmers related to financial debt and pesticide poisoning (Faria et al. 2006, World Health Organ. 2004).

All this work amounts to scholarship that exposes a widening range of health and social problems for which the tobacco industry can be held directly accountable. It helps incite critical awareness about industry predation and has the potential to build public health alliances in rural regions where the industry relies on and works hard to cultivate dependencies and loyalties of farmers (Benson 2010a, Otañez 2009). Tobacco companies today prefer, even endorse, public health policies that narrowly focus on educating consumers about health risks because they frame smoking as a matter of informed adult decisions and neglect a broader approach to controlling these supply-side harms and health problems.

Critical Cultural Studies

Paralleling the focus on industry structure, strategy, and impact has been a critical cultural studies movement. Taussig (1989) briefly discussed the Marlboro Man in an article on commodities and culture. Anthropologists since then have continued to examine the social meanings embedded in tobacco product advertising, noting especially that tobacco companies have often coded smoking as masculine, homosocial, and signifying female freedom and/or transgression, dangerously parlaying social and demographic changes around the world into market opportunities (Nichter et al. 2009b,

Seimon & Mehl 1998). In an award-winning essay, Jain (2003) shows that the semiotics of marketing menthol cigarettes to African Americans emerged in the context of the civil rights movement, framing blacks' dignity with their right to consume products and services of quality and creating intersecting agendas by linking smoking to meanings of fairness and upward mobility. But most research examining the public culture of tobacco has come from outside anthropology, including contributions from literature, history, media studies, philosophy, and the general field of cultural studies (Gilman & Zhou 2004, Keane 2002, Klein 1993, Romaniello & Starks 2009, Tinkler 2006). The vast literature on tobacco and public health produced by Glantz and colleagues in San Francisco has also included attention to public culture, such as consideration of the tobacco industry's influence over cinema (Mekemson & Glantz 2002).

Dialogues with Science and Technology Studies and Studies of Pharmaceuticals

For several years now, tobacco marketers have been adopting tactics common to the pharma industry. The main diacritic of this transition, as described by Benson (2010b), is the availability of new tobacco products said to be "safer" than conventional cigarettes. Tobacco companies have designed supposedly safer tobacco products to continue their ongoing ideological work of allaying consumer anxieties and encouraging tobacco users to switch to a reduced-risk product rather than quit. The pharmaceuticalization of tobacco involves the marketing of tacit health meanings and values. One tobacco product, it is implied, should be used to replace another to treat nicotine dependency and minimize disease risk factors. This process also involves a major policy shift. In the United States, tobacco products recently came under the aegis of Food and Drug Administration (FDA) regulation, meaning expanded warning labels, mandatory ingredient disclosures, and more product information for consumers. This policy has

nothing to do with proven tobacco-control methods, such as excise taxes or public smoking bans. Instead it puts the burden for health management, once again, onto the individual consumer, as in direct-to-consumer advertising in the pharmaceutical industry (Appelbaum 2006, Dumit 2002, Petryna et al. 2006).

These shifts reflect broad trends in the marketing of other products including food and beverage. Corporations use the very health problems that their commodities generate as a market opportunity for selling harm-reduction products or therapies for newly medicalized conditions. As consumption practices lead to higher levels of disease there is an expanded market for pharmaceuticals that treat chronic diseases. Meanwhile, the use of misleading product descriptors such as “low fat” and “lite,” pioneered by Big Tobacco in the postwar decades, is more prevalent than ever for foods and beverages. Rather than developing a robust system of public health prevention and economic regulation to contain the growth of disease, Western countries under the influence of powerful industries have largely left health promotion to product designers and marketers.

This bespeaks the need for more research by anthropologists working in areas of science and technology studies. The field is ripe for inquiry that extends the work of anthropologists such as Koenig, who studies how the emergence of a neurogenomic understanding of nicotine addiction is likely to induce changes in popular, clinical, and public health views of smoking favorable to the tobacco industry (Gundle et al. 2010). Anthropologists should interrogate how corporate and academic researchers use science and discourse to configure consumption as a technoscientific practice, such that products like tobacco, potato chips, bottled water, or nicotine gum are “optimized,” to cite social theorist Nikolas Rose, for the health of the consumer (2001). As such, we encourage anthropologists to study the consumption of “drug-foods” (ranging from nutritional supplements to energy drinks to long-term medications) (Nichter 2008).

Global Public Health Government and State Formation

During the past century, corporations have not been the only behemoths promoting cigarettes and undermining tobacco-control activists. The other key leviathans have been governments. Many cigarette factories today are or were until recently run by state tobacco monopolies, and at present, taxes from tobacco fund large portions of intrastate and national government budgets around the world. The story scholars tell of emergent health crises in almost every country must include a careful accounting of government agents and how they have nurtured tobacco industries, created bureaucratic dependencies on cigarettes, and undermined tobacco-control efforts. A few anthropologists studying tobacco over the years have, of course, highlighted alliances among governments, international trade regimes, and cigarette merchants (Stebbins 1991), but until recently none interrogated those connections closely and at length. Anthropologists showed little interest in producing ethnographies of state and transnational bureaucracies of any kind until the late 1990s, and governments have never been eager to have ethnographers study tobacco administrators. Meanwhile, as tobacco-control efforts intensified at the turn of the millennium, many in anthropology were conceptualizing power based on a narrow reading of Foucault’s writings as having little to do with sovereignty and pivoting instead around the logics of “making live and letting die” (Foucault 2003, p. 247). Better grasped by many in the field now is that, at the end of his life, Foucault (1991, 2003) lectured fervently about sovereignty’s significance, in particular how it can mutate and remain ascendant by simultaneously promoting life and death.

As such, we see tremendous opportunity for the anthropology of tobacco to advance social theory and encourage steps more effective at disrupting tobacco’s harm. Bringing anthropological methods to bear on how within or across states some governments interdict while others promote cigarettes can offer productive fodder

for current theoretical work on the ways mass promotion of life and death by the state are mutually dependent and frequently mobilized today under the rubrics of international development, public health, and consumer fulfillment (Agamben 1998; Banerjee 2006; Fassin 2007; Kohrman 2007, 2008).

The WHO's Framework Convention on Tobacco Control (FCTC), the first global health treaty, began implementation in 2005 and now has more than 170 participating national and territorial governments. The FCTC requires that participating governments take programmatic steps to alter the behavior of citizens and to help people avoid smoking, quit, and more generally self-manage risks better. Largely left out of the equation here is supply. The FCTC requires states to do very little to disrupt cigarette production and distribution. Anthropological research has a role to play in disclosing the inner workings of this regime, and we need to leverage such research for improved tobacco-prevention policies (Kohrman 2010).

On the Take

Before concluding, we turn to a little known area of anthropological work, funded by the tobacco industry. This work complicates any simple sacred-to-profane chronology in the anthropology of tobacco studies, and it brings into stark relief key tenets of this review: Anthropology has responded slowly and disappointingly to the cigarette's global ascendance, and a need exists for new anthropological approaches to deconstruct the cigarette economy. In the mid-twentieth century, U.S. tobacco corporations launched then-secretive initiatives to fund academic research, financing scholars to produce knowledge beneficial to market expansion, including that which calls into question or distracts from tobacco's toxicity (Brandt 2009). Industry funding has underwritten a variety of branches of the academy, most heavily those in the health sciences, but also ones at seeming remove from the study of biology, including history (Proctor 2004b).

Among the tens of millions of pages of tobacco industry archives released by recent legal suits, we see that men and women with doctorates in anthropology have carried out research funded by Big Tobacco in the post-1964 Surgeon General's Report era. For example, private researchers with PhDs in anthropology from the likes of Stanford and the Sorbonne have done contract research since the early 1990s, conducting studies of tobacco products and how U.S. minorities, such as Asian and Latino Americans, respond to harm-reduction media. The industry has also strategically funded scholars based at one of the world's most influential universities, Harvard, to produce knowledge-diverting attention from the dangers of tobacco. From the late 1950s through the early 1970s, Harvard University's medical anthropologist Albert Damon (1961) carried out research on behalf of the industry's Tobacco Institute regarding "body build" as a marker for smoking susceptibility and as a "risk factor in coronary heart disease" (1966). Philip Morris U.S.A. provided Sherwin Feinhandler, a lecturer of cultural anthropology at Harvard Medical School, more than a quarter million dollars between 1977 and 1980 to carry out research on smoking customs. Feinhandler has publicly testified that "smoking is an indispensable aid in encouraging positive social behavior" (1982, p. 7), lamenting that "anti-smoking crusaders" are threatening freedom and causing contemporary smokers to become a "ready target for general frustrations, anxiety and discontent" within society (1978, p. 2). Between 1959 and 1990, Carl Seltzer of Harvard's anthropology department received more than 50 payments totaling \$1.7 million from the Council for Tobacco Research (another well known Big Tobacco front). So brazen has been Seltzer in industry-organized publications, speaking tours and films, at every turn contesting the science of smoking and heart disease (Ferretti 1989, Seltzer 1989), that the *Boston Globe* in an August 31, 1980, editorial cartoon pilloried him for colluding with the "Tobacco Lobby." The fact that records show faculty supervisors in anthropology at Harvard

annually signed off on Seltzer's industry grants for a full decade after the *Globe's* widely circulated rebuke and that they solicited other funds from the Council for Tobacco Research during this period to underwrite university projects raises thorny questions about those academicians and North American anthropology more generally (Harvard Peabody Museum 1984, 1986, 1991).

CONCLUSIONS

Such cases of embedded anthropology remind us, albeit disturbingly, that our discipline remains relevant to multiple audiences, capable of studying complex topics from various perspectives. It also reminds us that simply agitating for more ethnographies of tobacco has its perils. Deliberate instances of embedded anthropology are of course the exceptions when it comes to the topic of this review. Streams of anthropologists have carried out nuanced work on tobacco over the years, usually from perspectives far less amenable to industry appropriation. Bringing these streams together under one roof, this review makes clear that anthropology's research profile regarding cigarettes, however multiperspectival, remains too modest and marked by lacunae. Anthropology has been particularly slow to examine cigarette manufacturers, everything from their managerial practices to how they insinuate tobacco products into everyday life, interact with public health and national sovereignty, and work to depoliticize suffering. Our discipline has thereby been leaving vital empirical data on the analytical sidelines when it comes to theory building, and it has been missing chances to contribute in significant ways to a vital public health sector.

Anthropology is a product of its times just as much as anything it studies. Contextual factors have nurtured the problems highlighted here, and several factors likely continue to do so. First, there are the structures of research funding, shaping which topics are prioritized. Even though some six trillion cigarettes are now produced every year, having profound effects around the world in manifold ways,

despite one billion people projected to die from cigarettes in the twenty-first century, few research funders emphasize study of tobacco outside of conventional health science domains. Second, there are the widely propagated narratives of Big Tobacco rhetoric. These include ideas such as the tobacco problem is already resolved, that thwarting emergent infectious disease is far more pressing, and that smokers are themselves the witting agents of responsibility for disease. Third, the customary use of tobacco in fieldwork gift exchange and the fact that many anthropologists are themselves tobacco users may also influence which issues seem problematic and research worthy. Finally, the growing and generative dialogue between STS and anthropology may be leading to the unintentional view that pharmaceuticals are more scientific, technological, and thus cutting-edge research objects.

We suggest that the manufacture of a whole range of consumer offerings, from tobacco products to snack foods, cosmetics, and pharmaceuticals, must be considered in terms of technological and scientific design, the cultural marketing of lifestyles, and the moral framing of risk and responsibility. We need to ask questions about which consumables get studied and how they are problematized as being technoscientific, industrial, international, and/or ethical. We must also inquire how certain products come to be seen as pharmaceuticals, others as drugs or narcotics, and still others as foods or vitamins. These questions become more urgent as markets for such products expand around the world, where their distinctions are either upheld by business-friendly certification models such as that of the FDA or left altogether unregulated. The unique strength of anthropology is the examination of tobacco in the fabric of institutions, lives, and identities, balancing an account of micro and macro factors that induce harmful behaviors and dependencies across diverse cultural and institutional contexts. The growing ethnography of drug production and use can also yield richly informed discussions about the politics of representation, moral condemnation, responsibility for harm, and

research ethics similar to those that are already well developed in anthropological literatures on violence, infanticide, slavery, sex trafficking, and other major human problems.

We further encourage greater dialogue among anthropologists working on tobacco, infectious disease, and other issues of habituation. Anthropologists have an important role to play in analyzing relationships between the production of communicable diseases, tobacco, and habit-forming practice, including how they are differently regulated by state governments and global public health agents. We see this in the study of conditions such as tuberculosis and diabetes, where anthropologists are showing that prevalence, prevention, and treatment are influenced by tobacco exposure (Ng et al. 2008, Padmawati et al. 2009). We also see this in terms of alcohol and tobacco, where anthropologists have been making strides to study and theorize coproduction (Hunt & Barker 2001, Nichter et al. 2010, Singer 2001).

Finally, we agitate that more be done in the way of illness narratives. At times, anthropologists have been interested in how smokers feel about their use and fraught experiences attempting to quit (Kohrman 2004). We need a fuller accounting of narratives describing the subjective experience of the diagnosis and treat-

ment process, the phenomenology of dependence, how smokers feel about responsibilities to their loved ones, and the existential complexities of being hooked on a harmful product. Tobacco companies strive to silence smokers and their families who are suffering the effects of tobacco, stigmatizing them as having made bad choices. Anthropologists have vital roles to play to disrupt that silence making.

Several big-picture themes arise from this review article. The comparative anthropological perspective shows that, as a plant, tobacco has long been treated as exceptional (at once harm- and pleasure-inducing) and that alliances among industry and government have been capitalizing on and promoting that exceptionality. Together with historians, anthropologists have increasingly tracked tobacco's involvement in colonialism and globalization. The ethnography of tobacco now consists of richly textured case studies of daily practice set against the backdrop of a critical appraisal of the political economy of trade and international capitalism. One of the most resounding contributions of this emergent literature is its multidimensionality. The anthropology of tobacco provides promising perspectives for both academic and applied work, linking multiple levels of analysis.

DISCLOSURE STATEMENT

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LITERATURE CITED

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