

## ARTICLE

# Drugs and early modernity

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**Abstract**

For centuries, medicinal and recreational drugs have evoked both utopian visions and darker themes: slavish obsession, physical dependency, altered mental states, and the feedback loop of labor and consumption. This article surveys recent work on the history of drugs from the 15th through 19th centuries, arguing that these works collectively demonstrate the importance of drugs and the drug trade in how we think about larger topics such as imperialism, globalization, modernization of commercial and political regimes, and the relationship between the individual and the marketplace. The search for new drugs—and, with them, new varieties of mental and physical experience—was not just a preoccupation of many early modern individuals. It was, arguably, a defining feature of early modernity itself.

## 1 | INTRODUCTION

An enchanted sleeper who lay down in a cavern outside London in 1490 and awoke in 1690 might have marveled not only at the existence of new colonies across the sea but also at the bizarre customs that now pervaded daily life. English ale had been joined by an array of drinks with exotic names: *cha* or tea from China, *cacaua-atl* or chocolate from Spanish America, coffee sold by Jewish merchants from an aggressively expanding Ottoman empire. There was a terrifying new disease, called the French pox and said to be spread by “venery,” that was cured by an equally unfamiliar bark from a place called Mexico. New foods with heathen origins: corn, tomato, peppers, and yams. In the taverns, a bewitching drink called gin. From the alchemists, a new medicine—laudanum, some called it—that permitted a different kind of enchanted sleep. And everywhere, men who sucked through clay tubes, emitted choking clouds of blue smoke from nose and mouth and pronounced this to be healthy and sociable.

This was not merely a change at the level of material culture, and it was not only our imagined sleeper who was bewildered by the rapid rise to prominence of the category of substances that, by the end of the 17th century, had come to be called “drugs.” The proliferation of new drugs and new forms of sensory experience prompted fierce debates about human nature and societal organization. “[If we knew] the mechanical affections of the particles of rhubarb, hemlock, opium and a man, as a watchmaker does those of a watch,” John Locke wrote in his *Essay on Human Understanding* (1690), “we should be able to tell beforehand that rhubarb will purge, hemlock kill, and opium make a man sleep.” If the action of drugs upon the mind and body could be fully understood, perhaps the human faculties could be expanded or altered in fundamental ways. When he set down his “desiderata” of phenomena that he hoped natural philosophers in the future would discover, Locke’s friend Robert Boyle included “potent Druggs to alter or exalt imagination, waking, Memory, and other functions, and appease paine, procure innocent sleep, harmless dreams, &c.”<sup>1</sup>

Another entry made it clear that his musings were based upon Europe's recent encounters with new stimulants and intoxicants from across the seas, including a by-now-familiar Chinese leaf: "Freedom from Necessity of much sleeping, exemplify'd by the Operations of Tea."

Drugs have proven good to think with from the time of Boyle and Locke to the present, offering a useful shorthand for both utopian visions of human perfection and for darker themes: slavish obsession, physical dependency, altered mental states, and the feedback loop of labor and consumption. In short, the search for new drugs—and, with them, new varieties of mental and physical experience—was not just a preoccupation of many early modern individuals. It was, arguably, a defining feature what we *mean* by early modernity.

Yet the disciplinary silos that envelop much of the scholarship on drugs and their histories have led to a confusing state of affairs. For cultural theorists, "drugs" tends to figure as inherently addicting substances, typically policed by legal regimes, and hence as apt metaphors for any number of contemporary societal addictions and systems of control.<sup>2</sup> For researchers in the natural sciences, by contrast, <sup>"drug"</sup>drug has a different but almost as nebulous connotation, either as an addictive substance that activates the reward system of the brain via the release of neurotransmitters like dopamine or serotonin, or as any type of pharmaceutical or natural product that exerts an empirically verifiable alteration in health. Most muddled of all is the understanding of drugs and drug history in the popular press and in political debates, where an inability to agree upon well-defined terms and lack of knowledge has frequently led to blatant distortions and untruths.

<sup>How, then, should</sup> **How should** scholars think about drugs? How and when should we deploy the term? And what can the historical trajectories of the concept of drugs tell us about contemporary issues relating both to science and medicine, and to issues of addiction, ecological change, globalization, and modernity itself?

## 2 | DEFINING DRUGS

For many scholars working in the fields of literature, anthropology, and critical theory, drugs have functioned as emblems of an ever-expanding global consumer society, which is addicted not only to specific narcotics but to literature, pornography, television, food, politics, and other "fetishes" (Herlinghaus, 2013; Min, 2011; Neilson & Bamyeh, 2009; Pietz, 1985; Race, 2009). For instance, in their introduction to the 2003 volume *High Culture*, Anna Alexander and Mark S. Roberts write that drugs "conquered the earth and established... pathways between peoples of different worlds, from the tribal to the modern" while "[drug] addiction emerges directly alongside modernity" (Alexander & Roberts, 2012). For Jayoung Min, "the mystified value of a drug" as a "stigmatized commodity" makes it "the very essence of what Marx calls a magical commodity, or commodity fetish" (Min, 2011). This point of view was perhaps most famously developed by Jacques Derrida, who identified *la drogue* as representing both a Western conception of the other, namely, "Oriental ethics and religion," while also arguing that drugs stood at the core of "literary modernity" as exemplified by such figures as de Quincey, Coleridge and Balzac (Derrida, 1993). Drugs have thus figured prominently in Marxist and poststructuralist interpretations of the rise of capitalist consumption and the fragmented modern self. Arguably, this has been the primary lens by which drug history has been viewed by humanists from the 1980s to the present (Boothroyd, 2006; Hickman, 2004; Smith, 2015).

The notion of drugs as recreational, addictive substances to be bought and sold in consumer markets stands at the core of these interpretations. Yet drugs—both the term itself and the category of substances it refers to—have a richer and deeper history than this scholarship might imply. The word drug is of medieval vintage, entering Germanic and Romance languages in the 14th century, perhaps via the Middle Dutch word for goods stored in dry vats (*drogevat*). Since this time, it has remained similar in sound and meaning across several languages, from the French *drogue* and the Spanish and Portuguese *droga* to the English drug. In all of these languages, drug/droque/droga appears to have undergone a lexical shift that occurred between the 16th and 18th centuries. Today, the term can mean either "a natural or synthetic substance used in the prevention or treatment of disease," or "a substance with intoxicating, stimulant, or narcotic effects used for cultural, recreational or other non-medical purposes."<sup>3</sup> We buy medicines from a drug store,



**FIGURE 1** Detail of the frontispiece woodcut from Francis Spilsbury, *The friendly physician. A new treatise: containing rules, schemes, and particular instructions, how to select and furnish small chests with the most approved necessary medicines; and full directions how to apply them* (J. Wilkie: London, 1773). Credit: By permission of the Wellcome Library, UK

and narcotics from a drug dealer. In the early modern period, by contrast, the term drug had a range of meanings that extended beyond these two poles, signifying everything from medicinal herbs to spices, dyes, incenses, pigments, animal parts, minerals, perfumes, and even metals.

During the early decades of the 16th century, the scope of the word began to change as it gained associations with foreign spices, medicines, and poisons. The increasing search for new medicinal and psychoactive substances christened a new profession—the druggists, *drugistes*, or *droguistas*—and a new literature condemning what one Elizabethan preacher called “our continuall desire of strange drugs” (Harrison & Edelen, 1968).

The metamorphosis of the word “drug” in the 16th and 17th centuries mapped directly onto the global expansion of European empires and trading companies. When early Iberian navigators sailed in search of the Indies, for instance, they sought not only gold, silver, and slaves but also *especiarias* (spices) and *drogas*. By 1539, in the first medical book printed in English, Thomas Elliot was grouping together spices and drugs yet also differentiating them, noting his era’s growing “traffike of spyce and sondry drouges” (Elyot, 1937). Twenty-four years later, Garcia de Orta’s *Coloquios* (De Orta, 1563) announced its subject matter as “medicinal simples, and drugs [drogas], and other medical things of the Oriental Indies” (De Orta, 1563). De Orta’s work featured prominent mentions of intoxication, recreational use and

even hallucinations caused by psychoactive substances such as opium, cannabis, and datura. From the time of de Orta onwards, drugs appear to have become increasingly associated with “Oriental” intoxication and with commerce with non-European peoples in the 16th and 17th centuries.

### 3 | THE EARLY MODERNITY OF DRUGS?

Are drugs, then, not modern, but distinctively early modern, in the sense that both the term itself and its societal role emerged in tandem with the rise of colonial exploitation, state formation, and global trade in the three centuries after Columbus?

Perhaps the most comprehensive history of drugs to date, David Courtwright's *Forces of Habit*, framed the drug trade as a manifestation of “mature capitalism's limbic turn, its increasing focus on pleasure and emotional gratification, as opposed to consumers' material needs” (Courtwright, 2001). Yet it was actually in the age of empires—when capitalism was far from mature—during which Courtwright argues that “the psychoactive revolution” emerged on the world stage, buoyed by colonial elites' recognition that psychoactivity was a valuable resource. The late 19th and early 20th century epoch of prohibition, opium dens, cigarette monopolies, physicians shooting up cocaine, and tank commanders on amphetamines may figure most prominently in popular consciousness, but it was the centuries proceeding this era of visibility that actually made drugs and the drug trade into a global force.

Some of the most interesting work on early modern drug history has come from scholars interested by the Enlightenment and the emergence of a public sphere. Brian Cowan, for instance, has made a compelling argument that one of the most popular drugs to become global in the early modern period—coffee—played a foundational role in establishing new forms of sociability amid secular, public spaces (Cowan, 2008). Jordan Goodman, Mike Jay, and David Lord Smail have placed particular emphasis on stimulants like coffee, tea, tobacco, and (debatably) sugar, pointing to the widespread availability of these “excitantia” in the 18th century as marking a new era of individualistic, pleasure-seeking consumption (Goodman, Lovejoy, & Sherratt, 2007; Jay, 2010; Smail, 2008). C. A. Bayly's *Birth of the Modern World* built on his earlier work on “charismatic substances” in colonial India to argue that substances—like psychoactive drugs—whose allure crossed cultural boundaries played a key role in stimulating the growth of “early modern globalization” (Bayly, 2004). Smail linked the rise of stimulating drugs during the Enlightenment to the parallel popularity of printed pornography and novels, all of which offered new, artificial methods of evoking a dopamine release in the brain. Finally, for Axel Klein, the rise (in the 19th century) of legal regimes for policing drug and alcohol use grew out of a post-Enlightenment emphasis on “the rational autonomy of the self-determining individual.” Because intoxicating drugs threatened to “occlude” rationality “by a synthetically produced mimicking of pleasure,” they also threatened the makeup of a nation state and marketplace ostensibly composed of rational actors, be they the Leviathan imagined by Hobbes or the members of a revolutionary Third Estate (Klein, 2008).

Others have taken a more commercial angle. Harold Cook's concept of an emerging “medical marketplace” in the 17th century whose participants became increasingly receptive to medical novelties and nontraditional practices has been particularly influential in this regard (Harold J. Cook, 1986; Harold J. Cook, 2007). More recently, Cook and Timothy Walker devoted a special journal issue to the drug trade in the Atlantic world, which argued that the trading of medicinal drugs between cultures and ecological zones figured as one of the most significant forms of exchange in the early modern world (Harold J. Cook & Walker, 2013). Nor was the economic impact of the early modern drug trade restricted to long-distance routes. As the economic historian Patrick Wallis has argued, increasing demand for “exotic” drugs in the 17th century led to new forms of advertising and branding within European commercial districts, making the apothecary shop one of the earliest progenitors of the modern shop space as we know it (Wallis, 2008). Likewise, Joe Gabriel has pointed to the significance of proprietary drug formulae in developing the concept of intellectual property (Gabriel, 2014).

Taken together, recent scholarship makes a strong collective case that the transformation of medical culture and consumption in the 16th through 18th centuries was a key component of economic and social modernization. On the

level of long-term demographics, the broader availability of effective medicines like antimalarial cinchona bark had a major impact on disease mortality and, by offering a new form of defense against malaria for populations without resistance conferred by the sickle cell mutation, helped lay the groundwork for the European “scramble for Africa” (McNeill, 2010). Likewise, the role of women and household work in the creation of medical remedies meant that the emergence of a global consumer market for novel drugs played an important role in establishing the economic independence of women. This was true not only of female consumers of drugs, but also of female-owned apothecary shops and female herbalists, midwives and herbgatherers who served as both laborers and knowledge sources for natural philosophers and physicians (Leong, 2008; Rankin, 2013).

## 4 | DRUGS AND THE HISTORY OF THE SENSES

Yet what were the apothecary shops actually selling? As Paul Freedman noted in *Out of the East: Spices in the Medieval Imagination*, medieval Europeans posited no clear line dividing foods and medicinal drugs (Freedman, 2008). Foods were thought of as substances that could powerfully alter the functioning of body and mind, and medicines were often goods, like nutmeg or brandy, which were as at home in the kitchen as on the apothecary's shelf. By the early decades of the 16th century, the word *droga* was being commonly applied to exotic medicinal imports from the New World and Asia, but in a manner that failed to differentiate between drug and spice. In a 1525 letter, for instance, a Portuguese factor in Cochin named Manuel Botelho sent the crown a list of available *drogas* that included cinnamon, mace, nutmeg, and cloves.<sup>4</sup>

Indeed, one could argue that this blurred boundary between the realm of the medicinal, the recreational, and the culinary continues to exist—that the history of drugs is merely a subset of a larger history of food and consumption. Much of the work that crosses over between food history and drug history has examined large scale transformations on a planetary level, such as transplantations of new crops or social transformations incurred by commercial exploitation of specific plants (Dean, 1997). More recently, however, historians have emphasized the ways that the materiality and sensory characteristics of foods can interact with individuals' interior lives and sense of self, opening up a space for a more extensive dialogue between the histories of drugs—which evoke subjective responses and sensory changes by their very nature—and foods, like sugar, which arguably are capable of similar effects (Bersselaar, 2011; Pilcher, 2016).

Sugar stands at the core of this work on the boundary of food and drug history precisely because it occupies a liminal space between the two categories. Important works like Marcy Norton's *Sacred Gifts, Profane Pleasures* have built on Sidney Mintz's concept of sugar as a “food-drug” (Carney, 2010; Mintz, 1986; Norton, 2008). By studying two other consumables that moved between the shelves of the grocer and the apothecary—chocolate and tobacco—Norton was able to show how commodities did not exist in isolation from one another or from the larger culinary and social practices that they featured in. Instead, substances like tobacco and chocolate functioned as parts of what archeologists call “packages” or “assemblages”: groupings of new behaviors, material objects, and plants or animals, which move from culture to culture in tandem with one another.

The history of taste and the senses also offers interesting opportunities for scholarship that blurs the boundary between the study of medicine and science, drugs, and food. Much of this work has focused on the sensory experiences of consumption and the various forms of social display that accompany it (Brewer, 2013). But taste has also had a role to play in more straight-ahead histories of medicine and science. The history of the important antimalarial bark cinchona, otherwise known as Peruvian or Jesuit's bark, was in part shaped by its exceptionally bitter taste. In other cases, the changing smell, taste, and visual appearance of drugs as they were shipped via maritime trade routes led to problems with identifying and selling them (Cagle, 2015). The medicinal properties of early modern drugs were often difficult to disentangle from their sensory characteristics, but the act of attempting this differentiation—through scientific experimentation and careful sensory observation—itself played an important role in both early modern commerce and natural philosophy (Cook, 2007).

## 5 | CONCLUSION

What, if anything, do the various strands of early modern drug history assembled here have in common? Naturally, the works mentioned in this essay take multiple approaches and often seek to answer different questions. But I believe we can draw some broader conclusions from this recent scholarship. One takeaway is the broad consensus that drugs were important in shaping what we mean when we speak of “early modernity” and “the early modern world.” Paying closer attention to the global dimensions of the trade in drugs and medicines thus has implications not only for the history of science and medicine but for how we think about early modernity as a disciplinary category. If we accept that the transformation of medical culture and consumption was a key aspect of the emergence of modernity, then it follows that this was inherently a global process, not one sited in Europe alone, or even necessarily guided by European or Western actors. Although scholars have already made cases for an “early modern Atlantic world,”—not to mention an “early modern Africa” and “early modern India”—the history of substances like tobacco, alcoholic spirits, and opium offers a concrete example of a set of goods and practices that truly did move between these very different regional spheres (Richards, 1997; Cañizares-Esguerra & Breen, 2013).

The history of drugs in the early modern era also bears upon imperialism, colonialism, and the demise of traditional social and commercial structures. Although there are many potential angles by which to approach these themes, the history of drugs is a particularly compelling one because few fields offer such a clear demonstration of the fact that there were multiple sites of innovation in the early modern world, and that “traditional” or “colonial” regions were in many ways as generative of change as the metropole in Europe. For instance, cinchona, the medicinal drug that has been lauded as the first effective treatment for malaria, was from Peru and was championed by colonial intellectuals long before it became an object of natural philosophical investigation in Europe. Non-European substances such as coffee, tea, and tobacco became beloved items of everyday sociability in this period. Importantly, this transplantation occurred not only within Europe but through the Afro–Eurasian world, and it spanned social classes and genders.

To be sure, not all histories of drugs push this framing of modernity as having multiple points of origin. Rudi Matthee's *The Pursuit of Pleasure*, a wide-ranging history of drugs in Iran from the 16th to the 20th centuries, argued that a “live and let live attitude” toward drugs characterized a traditional Iranian society that was not fully integrated with the market economy (Matthee, 2005). In Matthee's view, modernity involved both “incorporation into a European-dominated trading network” and the formalization of legal controls surrounding consumption and behavior, including drug use—both of which did not reach Iran until the apex of European influence over the country in the early 20th century. Increasingly, however, scholars of drugs in the indigenous Americas, Asia, and Africa have argued that framing non-European medical cultures as traditional and setting them up in implicit contrast to “innovative” European ones creates a misleading binary (Arnold, 2016; Bian, 2014; Crawford, 2016; Mukharji, 2014).

As He Bian has suggested, the drug trade in early modern China has not been written about in the same terms as early modern European medical culture in part because of the concept of “traditional Chinese medicine” which has been misapplied to an era of substantial change and dynamism (Bian, 2014). “The keen attention to drugs in every written prescription, pages of *bencao*, tax registers of local histories, and shop signs of physicians and pharmacists during the Qing found no place in the narrative of global early <sup>add space between “ and Bian</sup>modernity,” Bian writes, “for we are not prepared to see it in cultural forms and products long deemed to be ‘traditional.’” Likewise, in a recent *History Compass* essay, Nandini Bhattacharya surveyed scholarship on Indian pharmacy that has argued that Indian medicine was not a fixed and unchanging traditional practice but a dynamic field characterized by a “vibrant vernacular and regional press... and use of innovative and modern marketing techniques” (Bhattacharya, 2016).

These themes are important not only because they aid in understanding the history of the early modern world, or even because they shed light on the disastrous legal regimes that have developed around drugs and the drug trade since then. They are important because the role of drugs, over the course of the past five centuries, helps us to make sense of the globalized world which we inhabit today—a world where, like a Londoner of 1490 or

1690, we continue to pursue new varieties of experience, <sup>and to search</sup> **and search**, ever unfulfilled, for new *excitantia* in the marketplace.

## ENDNOTES

- <sup>1</sup> Boyle's original list of desiderata can be found at Boyle Papers 8, fol. 208–9, Royal Society Archives. See also Keller, 2012; Roos, 2014.
- <sup>2</sup> For instance, see the scholarly literature on the “pharmakon” in modern culture, such as Gerdes, 2015; Gough, 2008.
- <sup>3</sup> “Drug,” *OED Online*, December 2012, Oxford University Press. <http://www.oed.com.ezproxy.lib.utexas.edu/view/Entry/57982>.
- <sup>4</sup> Arquivo Nacional Torre do Tombo (Lisbon, Portugal) Cartas 876/16, “Carte de Manuel Botelho a D. João III sobre a colheita da pimenta e outrasdrogas,” Cochin, January 21 1525, fol. 2r. This letter is discussed in greater detail (and partially translated) in Subrahmanyam, 1998, 327–28.

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