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Author(s): Steven Topik

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Steven Topik

COFFEE AND GLOBALIZATION

Coffee is one of the most widely consumed beverages and most internationally traded commodities in the world in good part because caffeine is the world's most popular drug, a legal drug at that (Weinberg and Bealer 2001, 198; Courtwright 2001, 19). But that has not always been the case. Coffee has followed a circuitous path to legality and to popularity. Coffee's status has owed as much to its social role, viewed as both virtuous and pernicious, as to its pharmacological effects.

The world coffee trade, an artifact of the earlier spice trade, inspired one of the first global markets.[1] Since the late 1400s, cultivation spread out from Africa to Arabia, East Asia, Latin America, back to Africa and to East Asia. Today, it is grown on every continent except Antarctica.[2] Consumption has also spread across the globe from Africa to the Middle East, Europe, North America, Latin America, and, since the middle of the twentieth century, increasingly to Asia, especially Japan, Korea, and the Philippines. However, this has not flattened the world. As a social drug, going global has caused coffee to take on different faces, playing strikingly different parts in heterogeneous social worlds, ethnic and religious identities, in symbolic rituals, in different food complexes and cuisines, and in diverse environmental niches.[3]

Coffee could be thought of as the great pretender because of its historical omnipresence. But it has been more than a historical *Zelig* or a *Forrest Gump*, the simple-minded protagonists of popular movies whose photos were spliced into the crucial events of their day for cacophonous, humorous effect. They were ridiculous, yes, but coffee was not. It was on the table, yes, but it did more than stand by mutely. It has been a historical actor, in the sense that it fits Michael Pollan's "plant's-eye view of the world." Coffee has used humans to transport itself across the world because of its beautiful flowers, the sweet taste

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of its cherries, and most importantly, because of its pharmacological effects (Pollan 2002, xviii).[4] Although not a purely autonomous agent, coffee "beans" arose naturally unlike, say, corn, which Arturo Warman notes "was a human invention . . . nature could not propagate it without the participation of men" (Warman 2003, viii). Coffee appeared on its own with little assistance even from insects, since it is self-pollinating. It may well have required goats, however, to unlock the stimulant of the "beans" by chewing them, as Anthony Wild has suggested (2004, 29).

Eventually, humans became intimately involved in *Coffea arabica's* life. Coffee cultivation, processing, intermediation, marketing, and consumption shaped, as well as reflected, the changes and diversity of the world over the last five centuries. Although a "commodity chain" approach is useful to understanding coffee's role in connecting growers and drinkers, "chain" is too rigid (Topik and Samper 2006). "Chain" smacks of "restraints" and "shackles" when the historical record was much more pliable and protean. Coffee's widespread success derives from its ability to adapt to many geographical, ecological, social settings, and disease regimes and its ability to evolve over time through natural mutations and human assistance. (Coffee gene splicing is only in its infancy.) It has been far more than merely another frivolous "dessert crop," as it is sometimes dismissed. It has helped transform the world economy and societies as it shifted from a rare "luxury and non-necessar[y]" (Landes 1980, 298) to what Brett Neilson and Mohammed Bamyeh term in the introduction to this issue: "common everyday stimulants." During wartime, the U.S. government has even ruled coffee a necessity for the national defense. Coffee became so integral to the U.S. war effort that it became known—and still is known—as "a cup of Joe" named after the symbolic soldier "G.I. Joe."

This symbolic identification demonstrates that coffee has been far more than a simple "commodity." In fact, in the early eighteenth century, "drug" and "commodity" were sometimes considered opposites since "drugs" meant, according to the *Oxford English Dictionary*, "a commodity which is no longer in demand, and so has lost its value or become unsaleable." The dictionary cites a 1731 treatise on horses in Ireland which complains "that they are a drug, but might be improved to a Commodity."

The distinction is not just a question of definition. It is a conceptual

issue. Coffee has had an unstable relationship to humans, going in and out of the commodity phase in the circuit of human uses as it experiences its social life as a thing (Appadurai 1986). Caffeinated commerce certainly has not been a simple unidirectional, predetermined "flow." Indeed, some historians of science have suggested that William Harvey's discovery of the human circulatory system and modern medicine owed a good deal to his addiction to coffee and his observation of its effects on blood movement (Jacob 1998, 63). Coffee was an integral part of a worldwide system. It interacted with and transformed traders, commercial institutions, and states in an unpredictable dance. Coffee consumption in varying settings and rituals has manifested quite different symbolic registers. Coffee cultivation and trading have motivated empires, fueled armies, and provoked revolutions. The social spaces in which it was used were intimately involved in the social constructions of concepts such as the public sphere, gender, religious identity, national identity, status, sociability, sobriety, association, diligence, subversion, ceremony, and convenience (Habermas 1962; Jacob 1998).

As a stimulant and as a precious commodity, coffee has been well suited for inspiring the rise of capitalism, as historians such as Braudel (1973, 183–89), Schivelbusch (1992), and Perlin (1994) have argued. But one should not think of it as an unadulterated progressive agent. After all, it was suffering plantation slaves who first made coffee into a mass drink. Indeed, some of the main proponents of "dependency theory," such as Andre Gunder Frank and Fernando Henrique Cardoso, blamed coffee exports for *under*development and for neocolonialism. For much of coffee's history, coffee-growing countries have been rural and illiterate while coffee-drinking countries and urban coffee-drinking intellectuals led the world into the Age of Enlightenment (Cowan 2005). Contradictions riddle coffee's past; this colonial export crop provoked one of the first revolts for national liberation in Haiti. Coffee exports also brought slavery to Brazil and then, two centuries later, its first elected social democratic president. Clearly, as with many other drugs, the consequences in the producing countries and in the consuming countries differed vastly and changed over time.

Only on relatively infrequent occasions has coffee been deemed an illicit drug, though its initial attraction in Europe was sometimes seen as subversive. The *Oxford English Dictionary* cites one of the very early

mentions of coffee in English, W. Parry in 1601, Sherley's Trav.: "A certain Liquor which they call Coffe . . . which will soon intoxicate the brain." One of the fathers of the modern scientific method, Francis Bacon, was also one of coffee's early champions. He wrote that it "is of the same nature with opiates" (Cowan 2006, 21). But rarely was coffee outlawed for being an intoxicant.[5] On those occasions that it was proscribed, what was condemned was not caffeine's physiological effects but rather the freedom of coffeehouse talk which rulers considered subversive (Hattox 1985). Other times, it was outlawed by mercantilist monarchs who disapproved of the impact of coffee imports on the balance of trade.

Rarely was coffee thought to lead to immoral behavior. Indeed, it has more often been considered an antidote to other drugs, especially to alcohol, rather than an addicting vice itself (though some religions forbid it because it is seen as unhealthy). Recently, coffee bushes have been championed by the U.S. Department of State and the DEA as a replacement for coca bushes in Bolivia and Colombia. There were also complaints that coffee, unlike many other exotic foods introduced into Europe as aphrodisiacs, "asswegth lust" (Cowan 2005, 25). The 1674 "Women's Petition against Coffee" was an extended diatribe against "the excessive use of that Newfangled, Abominable, Heathenish Liquor called Coffee which . . . has to eunuch our Husbands."

Richard Rudgley (1993, 137) classifies coffee with other stimulants, observing: "The difference between stimulants and other intoxicants is that the effects of stimulants do not, as a rule, preclude their use in the daily life or social life." Rather than being precluded from daily life, coffee has helped fuel modern life. Coffee has been seen as a drug supplying wakefulness; a medicine to prevent digestive ailments and other diseases; a stimulant to intensify labor power, reduce fatigue, and mute hunger pangs; a soberer to spark intellectual clarity and creativity; and a performance enhancer on the battlefield and on the sports field. These properties were attributed to the coffee bean.

Only in 1819 was the bean's secret, the alkaloid *caffeine* ($C_8H_{10}NuO_2$), discovered by Friedlieb Ferdinand Runge. Caffeine is still today far from being fully understood even though it is probably the most studied of all drugs. Courtwright (2001, 19) classifies it as a "psychoactive" drug. As such, it is the most widely consumed drug in the world. As an alkaloid, it has both poisonous and curative properties. Its Janus-faced

role is probably derived from its evolution as a defense mechanism for coffee bushes to protect them from bacteria and fungi. Although caffeine is also naturally present in numerous other plants such as tea, maté, kola nut, and cacao, its name reveals its close association with coffee (café), from which it was first isolated. In the United States today, 70 percent of all caffeine is derived from coffee (Weinberg and Bealer 2001, xvii–xxi). In other countries, however, there has been a substitutability of one caffeinated beverage for another. Hence, early coffee-drinking countries such as Turkey, Iran, and Great Britain became mostly tea-drinkers, while tea-devoted Japan is turning to coffee. Although the psycho-physiological properties of caffeine have attracted humans to coffee from its first use, the "drug" aspects only partially explain coffee's popularity. After all, decaffeinated coffee is quite popular. More to the point, research finds that only about 15 percent of consumers are physiologically addicted to caffeine. Coffee rituals, especially the "wake up and smell the coffee" breakfast and the "coffee break," and other coffee sociability, probably explain more the growth of coffee's popularity. Coffee is largely a social drug, and its sociability has greatly shaped the modern world.

Coffee has been used in the most varied of arenas: Muslim religious ceremonies, aristocratic and bourgeois displays of distinction, intellectual tête-à-têtes, bohemian poetry readings and musical presentations, coffeehouse plotting of political subversion, campfire respites for armies, relief from factories' numbing production lines, office worker sociability breaks, housewives' kaffee klatsches, and yuppie status parlors. For growers, it has also meant contradictory things such as peasant autonomy, colonial subjugation, chattel slavery, oligarchic neo-feudalism, semi-proletarianization, family farms, socialist state farms, and capital-intensive agro-industry (Topik 1998). Coffee has participated in spiritual rituals of transcendence of daily material life, vast mercantile diasporic networks, colonial empires, liberal capitalist trading corporations, state capitalist regimes, and multinational agro-industrial conglomerates.

THE BEGINNING OF HUMAN USE

Although there are at least nine different species that are recognized as "coffee," the first and still most widely used is *Coffea arabica*.[6] (The

second most popular species, *Coffea canephora*, commonly known as robusta, became popular only in the twentieth century.) It is generally agreed that *C. arabica* first appeared natively in Ethiopia. Coffee was a holy sacrament used by indigenous peoples to honor the god Waqa in communal ceremonies. The Oromo accepted Waqa's gift from naturally appearing trees; they did not themselves plant stands of arabica trees. In this sense, in the beginning, coffee was not only not a commodity, it really was not a "crop." It was nature's bounty picked and enjoyed by humans and other animals.

Coffee was also a sort of early sports medicine, a pep pill that had the dual advantages of accessing energy through its caffeine and also quelling hunger pangs. The tribesmen who consumed it were hunters who left on days-long treks. For the hunters, coffee's purpose was to stimulate individual fortitude, not sociability. Coffee, which mainly grew wild, only slowly became a traded commodity. Although some Africans drank coffee made from fresh arabica cherries, others roasted them with melted butter or fat, and in a few regions they were chewed without any preparation, there was no extensive local traditional use of the arabica berries for food or beverage (Weiss 2003; Ukers 1948; Uribe 1954). For some coffee-growing people, such as Tanzania's Haya, coffee became "a symbolic medium that permitted the value or values of different objects (livestock, bridewealth, money, etc.) to be expressed in its terms and then compared to—or made commensurate with—one another. Coffee in Haya social practice was and remains a privileged objectification of the commensurability of values" (Weiss 2003, 61). So, for the Haya, coffee was not a commodity, but it *was* money. As an export commodity, coffee would become an exotic crop, grown on continents far from its original home by poor people (many of them slaves from Africa) for use by richer people. Only in the twentieth century did Africa begin producing and consuming substantial amounts of coffee.

Coffee became a hospitality drink in Africa, but only later. The Coptic Christians of Abyssinia, locked in a war with Muslim enemies, outlawed coffee on religious grounds. Muslims in neighboring Harrar were more taken by coffee and probably spread it to their fellow Muslims in Arabia, though they did not diffuse it much in Africa. Although European colonialism increased interest in coffee-drinking, to this day, Africans drink very little on a per capita basis. In other

words, the natural appearance of coffee and knowledge of preparation were not sufficient to guarantee widespread acceptance. Coffee did not addict its first hosts.

COFFEE COMES TO THE MIDDLE EAST

The international spread of coffee was the task of Arabians, who were the leading traders in the Red Sea and central to the Indian Ocean trade. There are many stories about the origins of coffee. All of them emphasize the coffee bean's pharmacological accessing of adrenalin because that is what set it apart. The myth is that goats, not humans, discovered coffee's stimulant effect. The most likely starting place for the diffusion of coffee-drinking was the mystical Shadhili Sufi Muslims in Yemen, who were perhaps the first to welcome coffee-sipping as a central devotional ritual.

Their discovery of the beverage was not purely accidental. Although perhaps, as the legends say, wandering goats were the first to nibble on coffee cherries and then dance around from the adrenalin rush, humans had to recognize the virtues of this effect. Caffeine's virtues were not obvious to peasants working on natural time. But the Sufis' goals were not secular. They sought elixirs to produce visions granting access to the divine. They wished to remain awake in their long nighttime chanting rituals in which they sought to take leave of their senses and achieve bliss. From the beginning in Yemen, coffee was a drug and a social drink. Men and women together shared a common bowl that was passed around. The initial objective of coffee-drinking was to transcend the material world and find peace, not to make profit or increase their ability to work long hours. The ceremonies emphasized submerging the individual in the group and seeking ecstatic visitations rather than the individualistic reasoned analysis that coffee would later attend. Dancing and singing were also often considered spiritual sacraments, so it is no wonder that "dancing" goats tipped off the Sufi about coffee's magic powers. This was not the Puritanical great soberer of seventeenth-century England. Sufi vigils signified worship rather than secular entertainment, but nonetheless were unintended precursors of the cafés and nightclubs that would follow.

Early accounts speak much more of coffee's physical effects than of its taste or ability to quench thirst. Indeed, as a diuretic, it was more likely to dehydrate users than to hydrate them. A sheikh of the Sufi order who lived in the port town of Mocha may have been the first to devise a technique for roasting, grinding, and brewing coffee beans in the late fourteenth or early fifteenth century. Nearby, in the mountains of North Yemen, is probably where arabica was first domesticated. For two and a half centuries, Yemen would hold a virtual world monopoly on coffee production (Tuchscherer 2003). (Ironically, many Yemeni preferred to drink a tea made from the cherry's outer husk or the bush's leaves, or chewed the beans, rather than drinking the beverage suffused from arabica's ground, roasted seed—known in the West as the "bean," a corruption of the Yemeni word for it, *bunn*.) Coffee was much more an export crop than an endogenous subsistence one. To this day, Yemenis do not drink much coffee; they prefer to drink the tea or chew a shrub, *qat*, which fills coffee's social role and occupies much of the land suitable for coffee. Again, the spread of coffee was far from inevitable and its appeal far from universal.

Coffee's properties made it the ideal "liquor" for more mainstream Islamic sects, however. Prohibited from drinking alcohol and short on clean water, a boiled beverage was well suited despite the heat of the Middle East. Coffee also fit well into the Muslim celebration of Ramadan, helping its consumers fast in the day and stay awake at night. It turned the night into day well before electricity lit the evening in the nineteenth century. The coffeehouse also became a welcomed institution for Ottoman soldiers and officials far from home. In the public sphere, coffee was mainly restricted to men, though women certainly participated in private and in female bath houses.

But coffee's place in the Islamic world was not won without a fight. The drink that, for its first two centuries in Europe almost exclusively was associated with Islam, was almost banned by Muslim holy men before it could become established. Some religious scholars protested that the roasted "beans" were prohibited or at least not overtly permitted by the Koran. Others were concerned about its medicinal properties. Coffee bags were burned in the main square of Mecca by religious opponents. Their concerns were not only linked to Gallic medicine but also to the rise of coffeehouses that challenged mosques as centers of sociability and the newly forming public sphere.

Chess, backgammon, song, and sexual favors accompanied the coffeehouse. Coffee became intimately linked to Islam, but some reformist movements within the religion, such as the Wahhabi in Saudi Arabia, occasionally preached against it because of coffee's link to secular sociability and because it was not mentioned in the Koran.

By 1500, the beverage became widespread on the Arabian peninsula (Hattox 1985; Tuchscherer 2003; Wenner 1991). The Sufi were probably responsible for spreading coffee drinking to Cairo, Damascus, and Mecca. The drink became integrated into their rituals. Other Muslims also adopted it in their worship. In Cairo, coffee drinking was concentrated in the square by the main mosque. By 1510, there are reports of people drinking coffee in Mecca's Sacred Mosque itself. It became associated with Muhammad's birthday. Indeed, various legends ascribed coffee's origins to Muhammad, who, through the archangel Gabriel, brought it to man to replace the wine which Islam forbade. Certainly, Muslims were instrumental in spreading the beverage throughout the Islamic world as far as India and Indonesia as the devout brought beans back from their pilgrimages to Mecca (Becker et al. 1979). This was certainly not the case of an illicit drug being smuggled along surreptitious paths and underworld connections. But demand was still so subdued that Yemen could meet all of it for two centuries.

Coffee also became intimately related to the growth of secular society. The Sufi were not full-time mystics. Ordinary tradespeople during the day, they spread their taste for the drink to the business world. The beverage, whose name probably comes from the Arabic *qahwah*—an epithet for "wine"—replaced the forbidden alcoholic wine.[7] Coffee quickly became respectable and legal in the Middle East, even if it remained a curiosity in Europe for another century. The thick, dark, hot beverage became popular probably more because of its physical effects and coffeehouse sociability than because of its taste. Perhaps its reputed medicinal properties, said to cure mange, gout, and intestinal troubles, increased its appeal. Despite the fact that sugar had been grown in the Middle East for hundreds of years before coffee's arrival, it seems to have been rarely added to the brew. Neither was milk, which was accused of causing leprosy when combined with *qahwah*. Cardamom, anise, and ginger were the only spices much added, though in some quarters opium and hashish apparently were also added to bring about an ecstatic spiritual experience.

Probably the technology of coffee-making—roasting and grinding the beans and boiling water—caused the beverage to be associated with a *site* more than almost any other commodity. The café was born in the Middle East. It was not just coincidence that in many languages the word for the site and the beverage were the same: *café*. Hattox suggests that early merchants, such as the two Syrians who introduced coffee from Egypt and Syria to Istanbul in 1555, used the coffeehouse as a marketing device. To acquaint new consumers with the beverage, it had to be presented to them hot and correctly brewed. Hence, these Syrian merchants, and many others from the Levant, opened cafés. They found an unoccupied niche in Middle Eastern society because restaurants were almost unknown and taverns were forbidden to devout Muslims. Coffeehouses became one of the few secular public places in Muslim lands short on public areas. Here, men could congregate with other non-family members. Cafés offered one of the only social possibilities for night life. They were an inexpensive place to offer friends entertainment and hospitality without bringing them into the home, which was off limits to non-family members.[8]

Coffeehouses played an important role in the commodification of entertainment, which previously was a largely private, domestic affair. Slowly sipping the hot beverage in the coffeehouse led to conversation on forbidden subjects. Coffeehouses in Cairo, Istanbul, Damascus, and Algiers became centers of political intrigue and fleshly vice (Carlier 1990). They disseminated the popular appeal first spread by the Sufi. While open to all male Muslims, some coffeehouses became luxurious pleasure gardens for the rich and powerful. Although some medical authorities claimed that arabica's cold and dry humors created melancholy and, more seriously, transgressed the laws of Islam by intoxicating its users, these arguments never carried much weight.

The *social* aspect of this social drug, the politically subversive possibilities of the coffeehouse, however, was much more threatening to Middle Eastern rulers. Certainly, the Ottoman Sultan Murat IV was worried about the political effects of the six hundred coffeehouses in Istanbul when he decreed that the punishment for operating a coffeehouse was cudgeling; for a second offense, the perpetrator was sewn into a leather bag and thrown into the Bosporus. He failed to end the habit, however; "Turkish coffee" became the generic name for a certain thick brew in which the pulverized coffee was mixed directly into

boiling water in small increments, often ten to twelve times. The Middle East and South Asia were the world's principal coffee-drinking areas until probably the middle of the eighteenth century. Habermas's Eurocentrism notwithstanding, it was the Middle Eastern café that first created a public space. As Heinrich Jacob (1998, 20) so lyrically and hyperbolically observed: "The Arabs led the attack on unconsciousness and darkness . . . they led the attack but for which modern civilization would be unthinkable."

EUROPEANS ADOPT THE COFFEE HABIT

In Europe, coffee's favor rose in the seventeenth century along with the emergence of commercial capitalism. The medieval Middle Eastern bean, fostered by the ascetic Sufi who tried to free themselves from worldly matters, evolved into a Western capitalist commodity and stimulant for men very much involved in mundane commerce. The first European reports of coffee, from travelers in the Middle East, emphasized its curative powers because their authors objected to the taste of the hot, unsweetened, and very dark coffee they received (Schnyder-von Waldkirch 1988). Coffee arrived in Europe via trade, diplomacy, war, and immigration, demonstrating its links to the main currents of history. The first purveyors of coffee regarded it as a medicinal drug that could cure sore eyes, dropsy, gout, and scurvy (Dufour 1685). It was sold in apothecary shops as a cure. Some Catholic clerics wanted the beverage banned, as it had been by Abyssinian Christians, because it was the drink of the infidel Muslim. Supposedly, Pope Clement VIII decided to convert it into a Christian beverage.

Coffee's role in sociability and prestige was enhanced by the arrival of luxuriously attired emissaries of the Ottoman Sultan in France and Austria in 1665–66. The "Orient" in these days represented the wealth and conspicuous consumption of the spice and silk trades and the Sultan's extravagant court. It was not a time in which reigned "the doctrines of European superiority" that Edward Said has analyzed (2003, 8). The Turks poured the exotic liquor for their receptive aristocratic European guests during extravagant soirees (Leclant 1979; Heise 1987). Coffee's prestige, distinction, and exotic aura were enhanced by the use of novelty status materials newly introduced into

Europe in the coffee ritual. Porcelain cups from China, pots made of silver from Peru, tobacco from America, and sugar from African islands and Brazil were the appealing companions for this social drug. The Ottoman Turks, who besieged Vienna in 1683, were an unintentional vehicle for propagating it; armies would continue to play important roles in popularizing coffee drinking. Elsewhere in Europe, Armenians, Greeks, Lebanese, and other Christian traders from the Levant created new markets for the beverage in ports and cities.

Northern Europeans became the largest consumers, probably relishing the heat the African bean brought to cold northern climes. In England, coffee was intimately involved with the academy from the beginning: apparently, the country's first coffeehouse was opened in Oxford in 1637, by a Greek merchant. It has been closely tied to university life ever since. In Puritan England, it occupied the prized role of what Heinrich Eduard Jacob called the "anti-Bacchus" (1998, 12) and Wolfgang Schivelbusch has called the "Great Soberer" (1992). (In fact, Schivelbusch goes so far as to assert that coffee was a particularly Protestant drink while Catholics favored cacao, an observation that would have surprised the fanatical coffee aficionados in Catholic Austria, France, and Italy.) Certainly, with low-proof alcoholic beverages the main forms of drink available, an antidote was welcomed in many circles. London merchants soon were imbibing the potion in coffeehouses such as Jonathan's and Garraway's, which also served for three-quarters of a century as England's main stock exchanges, the Virginia and the Baltic, which doubled as the mercantile shipping exchange, and Lloyd's café, which became the world's largest insurance company. The coffeehouses served as office buildings, "penny universities," which disseminated the latest news, reading libraries, the first men's clubs, and the workplace of such literary giants as Daniel Defoe, John Dryden, and Alexander Pope. They also served as zoos, theaters, and museums (Ellis 1956; Cowan 2005).

These first social areas outside of the home and the court helped stimulate business but may have outraged wives. They resented their husbands' addictions to the dark, noisy coffeehouses, issuing broadsides against the "base, black, thick nasty bitter stinking nauseous Puddle water" ("Women's Petition against Coffee" 1674) that allegedly caused impotence. King Charles II, concerned more with café patrons' political discussions than their marital responsibilities, tried

unsuccessfully to close them down. Popular resentment against the edict forced the king to rescind it. It would take the rise of the East India Company and Indian colonies and high taxes on coffee to make Britain a tea-totaling country in the nineteenth century (Bramah 1972; Ellis 1956).

On the European continent, cafés came to symbolize and serve the beneficiaries of capitalist prosperity, who constituted the new leisure class. But again, not without a fight. Europeans had to overcome the eighteenth-century mercantilist policies of tax-hungry kings to become ardent coffee drinkers. Frederick the Great was concerned with his subjects' political proclivities and the balance of trade. Unlike the Turks, he favored beer because it imported nothing; it used German malt and hops, giving work to German farmers. He sought to prevent commoners from drinking coffee by making it a royal monopoly. He failed, though the high import duties in the seventeenth and eighteenth centuries restricted consumption to relatively affluent consumers in major cities. The same was true in France and Austria (Heise 1987; Sinhuber 1993). In Switzerland between 1756 and 1822, there were five different decrees prohibiting coffee importation.

But in the capitals, cafés prospered. Their great popularity in Paris was to distinguish the elite from their social inferiors who bought their coffee in the marketplace. The coffeehouse denizens constituted an elite of achievement, a bourgeois elite. Coffee's great virtue, in contradistinction to alcohol, was that it stimulated the body while clearing the mind. Intellectuals now had discussions rather than drunken carousing. Some coffeehouses, such as Paris's Procope, served as centers of intellectual and artistic life where such men as Voltaire skewered aristocratic foibles. The Café Heinrichhof in Vienna inspired Brahms and other great composers as well as merchants who preferred the sound of money. Other coffeehouses, such as my grandmother's Café Mozart in Vienna, hosted cards and billiards and other such less inspired diversions. The leisure of the coffeehouse was serious business. Coffee "speakeasies" were intimately involved in the birth of civil society, public space, and the democratization of a semi-feudal aristocracy. Appropriately, then, it was in Paris's Café Foy that Camille Desmoulins sat on July 13, 1789, planning the assault on the Bastille that some historians argue ushered in the modern world (Oliveira 1984). Coffeehouses would continue to be associated with subversion

in the nineteenth century. Preparations for the 1848 revolutions were made in the coffeehouses of Berlin, Budapest, and Venice. In France, one of the state's first responses to threatened revolt was to close down the cafés (Barrows 1991). Ulla Heise (1987, 178) argues that, although émigrés continued to plot in cafés after 1850, the coffeehouses lost their revolutionary association once revolution became more proletarian; workers tended to frequent taverns, bars, and wine-houses. Susanna Barrows, on the other hand, credits the coffeehouse's declining political radicalism to the rise of newspapers, music halls, and other venues for association.

Just as coffee in Europe aided the middle class's struggle for democracy, coffee itself became increasingly democratized in consuming countries. Although taxes kept the price high, coffee became the breakfast beverage of choice for the Continent's urban working class. To compensate for the high prices, the poor often drank coffee substitutes made from a wide range of roasted tubers, fruits, and vegetables such as chicory, figs, and peas rather than from arabica. (In Germany, *kaffee* can refer to any number of beverages; arabica or robusta coffee is called *bohnen kaffee*.) The substitutes occupied the social space of coffee but contained no caffeine, so they did not have the same physiological effect. Even without the drug of caffeine, consumption grew.

COFFEE AND MODERN MASS SOCIETY IN THE UNITED STATES

As clanging factories gave birth to the industrial age, coffee came to represent not only leisure but also labor. Although Sidney Mintz (1986) emphasizes the role of sugar and tea in the industrialization of England, it was sugar-sweetened *coffee* that helped push the United States and northern Europe into the age of machines. North American thirst was instrumental in making coffee a mass consumer product. The thirteen original British colonies had developed a preference for tea rather than coffee although they did not drink much of either. Nor were coffeehouses very common in the rural far-flung colonies. U. S. coffee consumption in 1783 was only one-eighteenth of a pound per capita a year. By the 1830s, however, North Americans had cast aside tea for coffee. By mid-century, they were each drinking over five pounds a

year. Although the 1765 Stamp Act and the Boston Tea Party dampened enthusiasm for tea, commerce and demography were probably more responsible for transforming the United States into the world's greatest coffee market. Resistance to the British East India Company was bolstered by the proximity of the French coffee-producing colonies of St. Domingue (Haiti) and Martinique and later Portuguese Brazil (MacDonald and Topik, 2008). The price of coffee fell from eighteen shillings per pound in 1683 to one shilling in 1783. Lower prices expanded demand. Government policy further aided the transformation as import taxes on the beans were lowered and then abolished in 1832. This was part of President Andrew Jackson's politics in favor of the working man and opposed to high tariffs.[9] Coffee began to become a mass drink. The absence of a coffeehouse culture meant that the beverage's popularity was not associated with political subversion as in the Middle East and Europe. Its consumption could be encouraged with no political cost. The flood of northern European immigrants from coffee-drinking countries probably contributed to the shift from tea.

The Civil War played an important role in the industrialization of the coffee sector. Initially, wartime transport shortages, blockades, and a temporary rise in import duties reduced coffee consumption by one half. However, the northern army came to recognize coffee as a military necessity. (Coffee drinking had always been more popular in the north than the south, probably because of climate, and the different origin and number of European immigrants in the two areas.) Whereas rum, not coffee, was rationed during the Revolutionary War, coffee became an important part of each soldier's ration by the time of the Civil War, when they were given one-tenth of a pound a day (*Quartermaster Review* 1928). Soldiers who had never tasted coffee became addicted to it. An Iowa volunteer, William Scott Forse, recalled: "if there had been reverence enough among the veterans to form the basis of a new religion, their gods would have been Fire and Coffee" (Prescott 1944, iv). Coffee was slowly moving away from being simply a domestic drink and from being purely a breakfast beverage. Soon, coffee drinking became entrenched as a social institution. Annual per capita consumption ballooned from under one pound at Independence to nine pounds by 1882, when *The Spice Mill* (1878, 41) reported that it "is now deemed indispensable in every household."

The demand for improved and standardized coffee probably derived in good part from improved transportation, roasting, grinding, and brewing technologies. Although green beans traveled well, long sea voyages aboard sailing ships while stored in leather pouches sealed with grease frequently caused damage. Merchant efforts to dye the damaged beans with rust, indigo, or beef blood or glaze them with eggs improved their appearance but not their flavor. Nor did the practice of roasting impaired beans with cinnamon, cloves, cocoa, and onions help much. Even worse, some unscrupulous exporters applied arsenic, chromate of lead, and ferrocyanide of potassium to color the beans (Van Delden Laerne 1885, 24). Equally troubling was a traders' habit of adulterating coffee with substitutes (*Spice Mill* 1878, 41). In his study of coffee, Francis Thurber (1881) observed "a primary requisite for making a good cup of coffee is, of course, coffee" (162). He mentioned the apparently obvious because of "the number of preposterous substances now in the markets of the world" (162).

The nineteenth century witnessed solutions to the difficulties in brewing good coffee. Coffee not only promoted U.S. industrialization by intensifying labor power, coffee production itself was industrialized in the United States. Rapid and relatively large steamships protected the green beans from ocean damage. Improved control over even oven temperatures offered by, for example, the spherical roaster invented by the Austrian Max Bode in 1851 and the pull-out roaster produced by the New Yorker Jabez Burns in 1864 allowed more regular roasting. Better grinders, producing finer and more even grounds, were invented. And a welter of coffee pots was mass produced. The first predictable pumping percolator, patented in France in 1827, became the most popular North American pot in the first half of the twentieth century. Drip pots, which were improved with the invention of the disposable filter in 1907, were more popular in Europe, as was the espresso machine, first designed in 1837.

Improvements in technology led to standardization and eventually a wholesaling oligopoly in the United States. While the French concentrated on devising new pots to improve the quality of brewing for the refined palate, North Americans focused on roasting, packaging, and marketing to reach the mass market. The first packaged roasted coffee was Osborn's Celebrated Prepared Java Coffee, started in 1860. Coffee, rather than being an occasion, drink, or site, had become a

branded, trademarked product. The first brand to have a national market was Arbuckle's Ariosa, which began in 1873. Branded coffees were slow to replace the sales of green beans, however. Naomi Klein's study of "logos" in the age of globalization does not recognize the initial struggles manufacturers went through to introduce the concept of a "trademarked" commodity (Klein 2000). The major technical breakthrough came in 1900 when Edwin Norton invented vacuum packing, which allowed roasted, ground coffee to retain its flavor. In 1903, Hills Brothers was the first to commercially use it (Uribe 1954; Ukers 1935). The ability to preserve roasted coffee in vacuum packages allowed a few national brands to come to dominate the trade in the United States. But the shakeout took more than half a century. (Europeans were much slower to buy canned coffee, preferring beans and cafés.) North American firms began to integrate vertically. The A&P grocery chain went the farthest, stationing buying agents in the interior of Brazil, importing, roasting, packing, and retailing their own brand (Ukers 1930). Brand-name products relied on return business, so reliability and uniformity in quality became more important. Coffee's sociability led it from a salon drink of distinction to a café's pride, to a housewife's proof of domestic aptitude, to a convenience drink.

The United States became one of the first consuming countries to regulate coffee quality with the 1907 Pure Food and Drug Act, an omnibus law that oversaw the quality of many foods. Dr. Harvey Wiley, the architect of the pure food and drug movement, opposed caffeine because he believed it habit-forming and non-nutritious. However, he did not move to restrict it, only to prevent its adulteration. He did bring Coca-Cola to court and forced them to reduce their caffeine content, which he believed unsuitable for a beverage that targeted adolescents (Courtwright 2001, 26). Although coffee roasters also aimed to sell to American youth through trading cards and advertisements starring children, coffee continued to be mainly an adult beverage.

State oversight grew not just from the demands of the market but also from religious and social trends that accompanied industrialization. The growing concern with the plight of the industrial working class that Charles Dickens and Jane Adams so movingly portrayed led to social investigations of diet; religions, such as the Mormons and Seventh-day Adventists, opposed coffee. They, and other religions,

treated physical health as a sacrament because the body was a temple to God. Their view inspired health-food movements.

Buyers, in turn, became more conscious of the quality of their coffee as they were able to buy professionally and uniformly roasted beans. North American per capita consumption almost doubled between 1880 and 1920, to sixteen pounds per capita. The growth of cities and factories accelerated the trend. No longer primarily the beverage of spiritual contemplation, commerce, or leisure, coffee became the alarm clock that marked industrial time. North Americans' coffee imports swelled almost ninety-fold in the nineteenth century.

In an ironic twist, temperance societies in the United States as well as Europe promoted coffee and coffeehouses as the antidote to the alcoholism of the saloon. Said a sign in one Christian café: "Coffeehouse—God's house; Brandy shop—Devil's drop" (Heise 1987, 227). But there seems to have been no close relationship between coffee and alcohol. Coffee consumption did not suddenly increase in the United States with the onset of Prohibition, nor did consumption sharply drop with the re-legalization of alcohol. Prohibition did lead, however, to a trend that would only explode after World War II: the expansion of "soft" drinks (as opposed to alcoholic hard drinks). It was not simply coincidence that the alcohol substitutes took the names of the drinks they were trying to supplant: ginger *ale* and root *beer* (A&W Root Beer was founded in 1919), for example, and that one of the most successful companies named itself the Canada *Dry* Company to advertise its temperance sentiments. Coca-Cola and then other colas used the caffeine of the kola nut. They began to replace coffee after World War II (Pendergrast 1993). They attracted consumers more as a delivery system for the drug caffeine than as a remedy for alcohol.

Ironically, at the same time that reformist Prohibitionists were singing coffee's praises as an anti-alcohol drug, a cure for drunkenness and vice, makers of cereal-based beverages launched an expensive campaign *attacking* coffee's harmful properties. Champions of the Pure Food Movement, such as John Kellogg and C. W. Post, financed a massive campaign against coffee and created grain-based alternatives, such as Postum. Coffee producers responded with an even more expensive defense of their drink. These mass-media campaigns encouraged the oligopolization of the market, since only the most prosperous companies could afford ads in the print media and even fewer

in radio and television. In 1933 already, two companies, Standard Brands and General Foods, spent half of coffee's $6 million advertising budget on radio publicity expenditures.

Coffee overcame the "many bugaboos raised by the cereal sinners" to become linked increasingly to sociability as it was evermore drunk in public places (Ukers 1935, 477). In the United States, it became a part of the workplace, rather than just a breakfast drink as before. The twentieth century saw the rise of the coffee shop and the cafeteria. In a few areas, such as Greenwich Village, North Beach, San Francisco, and Venice Beach in Los Angeles, the coffeehouse arose in the 1950s. The coffeehouse enclaves catered to intellectuals and social and political activists as they attracted Beat poets such as Lawrence Ferlinghetti and Allen Ginsberg and folk singers such as Peter, Paul, and Mary and Bob Dylan (Dylan 2004; Cantwell 1996). More commonly, coffee was drunk at work. Workers, especially white-collar workers, needing to pause from their labor and socialize with their colleagues, took "coffee breaks." (The term was coined by the Pan American Coffee Bureau in 1952 [Pendergrast 1999, 242].) Indeed, the beverage became embedded in popular speech: "Let's have a cup of coffee" came to mean "Let's have a conversation."

For many, coffee became a necessity. Merchants employed coffee not only as a commodity to sell but also as a lure to pull in customers for other products and services. Restaurants used it to attract customers, keeping the price low and offering unlimited seconds. (Iced tea was the only other beverage to receive this privileged status until recently when soft drinks were included.) Grocery stores often used coffee as a loss leader to bring in shoppers. They felt it was so important that when prices steeply climbed in the mid-1970s, many grocers absorbed the higher price rather than alienate their customers. Because of its sociability, its tendency to addict consumers, the medicinal effect of its caffeine, and the small number of substitutes, coffee became more a necessity than almost any other food or beverage (Oldenburg 1989; Lucier 1988).

The growth of the vast U.S. market for coffee and the beverage's privileged social function caused a few companies to expand both vertically and horizontally to create oligopolies. Four companies became responsible for 80 percent of the U.S. coffee market: Phillip Morris, Proctor and Gamble, Sara Lee, and Nestlé. They dominated much of

the international market as well. Nestlé alone bought 10 percent of the world's coffee crop annually (Dicum and Luttinger 1999).

In recent years, specialty coffee beans, sold mostly by small companies and cafés until the Starbucks chain spanned the continent and went international, have challenged the conventional wisdom that North American consumers were unwilling to pay a high price for good coffee and preferred to drink it at home or in the office. This rise in connoisseurship occurred at precisely the time that per capita coffee consumption was declining in the United States. Coffee began reasserting itself in its battle in the cola wars. Coffee's rise as a sign of distinction and of connoisseurship meant that its appeal was no longer just its photoactive role as a stimulant nor the democratic sociability of the coffee shop. Coffee also became something it had never been before, the drink of youth. What is new is that the young have substantial disposable income that they can invest in fads. But since coffee has been the drink of the fashionable since at least the seventeenth century, the Starbucks revolution is as much a continuation of past trends as it is a remarkable break with them. Intensified work demands and multitasking, more than an increased demand for leisure, probably explain the growing appeal of caffeine to its new, younger audience. It has become so integrated into the new computer telecom age that one of the leading computer programs is called "Java" because programmers required gallons of coffee to develop their codes.

And coffeehouses have gone global. Cybercafés are the umbilical cords of their patrons. Being centers for newspapers and for face-to-face conversation and gossip for centuries, cybercafés' sociability now connects people internationally. Coffeehouses have also invaded tea territories in England, Japan, Korea, and China, and even returned to Istanbul. Gourmet coffee, which stresses the national origin and the roast employed and sometimes adds in other flavorings, is the only sector of the U.S. coffee market that is growing. Rather than a necessity, gourmet coffee is more a status symbol or a declaration of one's lifestyle rather than a center of protest or subversion. These North American and European trends are catching on in coffee-growing countries such as Brazil, Colombia, Costa Rica, and Mexico, where coffeehouses and a choice of coffee drinks are appearing for the first time. Slowly, the ability to consume coffee knowledgeably is taking on

as much cachet as does producing it profitably. Again, rather than just being a commodity, coffee increasingly becomes a social statement.

Even before the recent rise in popularity of gourmet coffee, roasters sought ways of expanding the mass market. The beverage's gregariousness increased with the advent of instant soluble coffee. After many attempts, the first commercially successful dried coffee was produced by a North American chemist residing in Guatemala, G. Washington, in 1906. It attracted few drinkers until World War II, when it was included in soldiers' rations. Since then, instant coffee consumption grew substantially. By the 1960s, as much as one-third of home-prepared coffee was soluble. Its ease of preparation helped expand consumption but undermined the quality of the brew. Instant coffee mostly employs robusta coffee, a faster-growing but more bitter variety than arabica. Since the 1980s, as with gourmet beans, there has been a trend to add other flavorings to soluble coffee to produce specialty drinks that resemble, say, Irish coffee or cappuccino. Iced coffee has been slow to compete with iced tea and soft drinks, however.

CONCLUSION

Caffeine is the world's most popular drug and coffee is its most popular agent. Coffee clearly has had important physiological effects that have led it to be considered a drug for spiritual contemplation, a medicine for numerous ailments from digestive problems to headaches and hyperactivity, a remedy for hunger and fatigue, an elixir for creativity, an athletic and labor performance enhancer. Coffee's uses have varied from mystical agent to colonial commodity, to the brew of business and the fuel of revolution and countercultures. It has served as a Muslim ritual and as a Puritan antidote to alcohol. It has been seen as a healthy alternative to liquor and a spark to intensify productivity as well as a pernicious poison that corrodes the body. Even today, the medical community is divided on coffee's effects, though it has come to an agreement that coffee's consequences vary according to the individual consumer. Even with the same consumer, the effects vary according to diet, mood, even time of day.

Coffee's interaction with humans has been mostly as a social drug. It is a social drug both in the sense of epitomizing the cross-class,

cross-group, and even global idea of "society" and as a shorthand for "the public sphere." The locale, circumstances, and social ceremonies are as meaningful and consequential as coffee's pharmacological effects. Although there have been numerous efforts in many countries to ban or regulate coffee consumption over the last five hundred years, coffee's association with labor, industry, and sobriety, as well as its connections to status and leisure, have allowed it to be legal and widely consumed. Today, it is the second most valuable internationally traded commodity.

It is probably safe to say that coffee, which is produced in more than fifty countries, is associated with the "modern" in the consuming sphere even if it is often associated with poor peasants in the production sphere. Electric lighting turned the night to day, and electricity, through the Internet, has shrunk the world. Coffee has played a leading role in adapting our bodies to both the unnatural biorhythms of artificial light and the furious pace of the wired 24/7 world in which we live. That Sufi in the Yemen hundreds of years ago had no idea what a wide world of social interactions he was setting in motion when he sipped that first cup of coffee.

Notes

1. Although Nayan Chanda (2007, 247, 248) has shown that the world "globalization" became prominent only beginning in the 1960s, the world coffee market has been global at least since the eighteenth century when coffee from Yemen, the East Indies, and the Caribbean competed in Amsterdam.

2. This is true if we consider the Canary Islands part of Europe. And even in Antarctica, coffee is consumed.

3. See Mintz (1996) for a discussion of cuisines and food complexes.

4. My conclusion is derived from Pollan's work, though he does not address coffee in it.

5. As Jacob (1998, 72) noted, there were many physicians in Marseilles and other parts of France and Germany who opposed coffee because "the fruit of this Arabian plant was only a drug" which brought harm. Some thought of it as a poison.

6. Botanists disagree on the number of *Coffea* species, some putting the number considerably higher than nine.

7. Some etymologists believe that the name came from the southwestern Ethiopian province of Kaffa. Almost all languages use a word for coffee that derives from a single term. Ironically, in Yemen, however, it is called *bunn*, not *qahwah*.

8. For a view of the strict, gendered boundaries between house and street in one Muslim society, Egypt, see Mahfouz 1990.

9. Resumed during the Civil War because of fiscal necessity, the import tax on coffee was definitively abolished in 1872.

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