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The World Coffee Market in the Eighteenth And Nineteenth Centuries, from Colonial To National Regimes

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Introduction

This paper is an exploration of the world coffee market in the nineteenth century when world trade expanded some 20 fold. Coffee is often dismissed as a "dessert crop," and an unnecessary luodity i

n the world at the end of the nineteenth century. Dominated by European consumption and the production of European colonies at the century's onset, by 1900 the Americas played a central role in both consumption and production. In an era that Eric Hobsbawm has termed "the Age of Empire," in which colonies and international trade were expanding in Asia, Africa, and Oceania, national production came to dominate in the Americas . The ex-colonies in the Americas were able to assert considerable influence over making and remaking global markets and prices.

The Americas developed dependency theory which in its most radical form was hostile to international trade and suspicious of capitalism. It posited that the structure of the world economy and the rules of the game in the international market were biased against raw material producers. Latin Americans were seen as neo-colonials, part of a "colonial pact" subject to the whims of the European metropolis, particularly the English in the nineteenth century. Elsewhere, the world economy supposedly strengthened colonialism or informal imperialism. Though very different from classical trade theory, dependency did share a Euro

was an "astonishing variety" produced in the fields, the demands of the marketplace reduced them to a much smaller number of varieties for consumers: "thousands of names for field cultivars, a much smaller (yet still striking) number in the local market, and by the time the as yet un-spun cotton reached London, Bordeaux or Amsterdam, a relatively small number of highly generalized, often regional names and ordinal grading symbols...would be recorded in price quotations in 18th and early 19th century newspapers."[2]
Coffee faced a s

distinction, especially in coffee's first histories, suspicious of government officials' intrusions. A coffee expert, Joseph M. Walsh, wrote in 1902 "The real fact being that the difficulties in the way of forming accurate agricultural statistics are in the coffee producing countries almost insuperable…there is no means whatever of estimating the product."[5] Mauro Rodrigues da Cunha complained very recently "The central problem is that the majority of coffee producing countries to today still do not have completely reliable data available." [6]

The difficulty was not only in calculating the volume of production or trade, but to distinguish the product. The process of grading and standardizing was an intellectual process of people, mostly traders, creating categories and coffee drinkers responding to them. The creation of international standards of just what one meant by "coffee" was slow and complicated.. Variation was commercially important because coffee consumers were more aware of difference than were most consumers of raw materials and foodstuffs (grains and sugar come immediately to mind.) No mechanical tests of coffee's essence could be conducted as with sugar (sweetness), metals (assay), or cotton (fiber strength and length).[7] Appearance and taste were the keys. As a beverage that used few additives, some consumers were quite aware of quality and, often, able to discriminate in taste. (The addition of milk and sugar in some countries reduced this purity considerably, however.) This was particularly true in the more lucrative luxury market--which was the principal

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a historically and regionally contingent category. Over the centuries qualities has varied and changed markedly[8]. Walsh note

The Beginning

Coffee did not begin its life as an internationally-trade commodity as a result of European, Christian actions. It is generally assumed that coffee only entered into human history once Yemenis of a Sufi Muslim order began creating a drink. Although native to what is today Ethiopia and Central Africa, Christian Abyssinians did not drink it in any appreciable amount until the twentieth century. Clearly the ability to produce coffee prior to that.) Imperial prestige and custom were important in coffee's spread in the Ottoman realm. But so was the Pax Ottoman that made the roads and sea channels for coffee exports safe.

Although the trade was taxed by colonial officials, it was still pre-capitalist. The coffee trade did not constitute merchant capitalism in the sense used by Marx and van Zanden. [12] Even had they wanted to control the small market—only 12,000 to 15,000 metric tons a year were produced in Yemen in the eighteenth century-- merchants were subject to the whims of producing peasants who brought small amounts to market as the price or their need for money demanded. [13]Yemeni coffee was produced in small garden plots by farmers who grew subsistence crops between and alongside their coffee. Despite having a virtual world monopoly on one of the ancient world's more valuable commodities, growers were not converted into commodity producers. The king planted some trees, and slavery was known, but neither state farms nor slave production had much of an impact on the overall crop. Indeed, slaves seem to have been used more in processing than in cultivating. Aside from taxing the trade, the state appears to have had almost no role in coffee. Merchandizing was controlled by a trading diaspora of Banians from the Indian port of Surat.[14] Although, as we will see, production was later revolutionized, producers were buffered from world market forces for coffee's first three centuries as a world commodity. Thus Yemeni coffee *was* integrated into the world economy in the sense that Indian merchants acting for Middle Eastern, Indian Ocean, North African, and European exporters purchased the Arabian product with Mexican silver. On the other hand, production levels and

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[12] J.L. van Zanden, *The Rise and Decline of Holland's Economy. Merchant Capitalism and the Labour Market* (Manchester: Manchester University Press, 1993): pp. 1-18.
[13] Tuchscherer, "Coffee in Red Sea", p.55.
[14] Balkrishna Gouind Gokhale, *Surat in the Seventeenth Century* (Bombay: Scandinavian

technology were relatively unaffected by world demand and the price of coffee in consuming countries probably varied according to local merchants' ability to monopolize and to the willingness of the elite and urban middle class to pay.

Europeans, who were only beginning to drink coffee in the seventeenth century hardly made a dent in the

centuries that followed, that is, during Europe's industrial revolution and rise of bourgeois society, slavery, coffee production , and plantations were inextricably linked.

Coffee colonialism surged forward after production spread to the Americas . The Dutch and French states participated in this hemispheric transfer by nurturing coffee seedlings in their home botanical gardens. But the expenses of coffee's transfer and cultivation in the New World were borne by private individuals. Climate and soil differences translated into marked taste differences. Nonetheless, until the twentieth century many Latin American beans were designated "Mochas" ,"Bourbons" or "Javas" rather than named consumers of coffee[22]. Again, producing coffee because it was cheaper although it had to cross the Atlantic and the Mediterranean.[24] This demonstrates that shipping rates were sufficiently low well before the steam transportation revolution to remove distance as a major barrier to market integration. By 1840 Yemen supplied only 2 to 3 percent of world consumption.

Prices in the Amsterdam market demonstrated the extent to which the world coffee economy had become integrated by the second half of the eighteenth century. Rather than the spasmodic prices of a century before, which fluctuated with the arrival of each rare coffee-laden ship, prices now were quite stable from month to month and fairly comparable between Java and the Americas. Improved warehouse capacity, port facilities, bulk freight and predictable freight lines reduced intermediation costs. Yemeni prices followed competitors less steadily but by the end of the century were close. When the French Revolution provoked a slave rebellion in St. Domingue (today Haiti), greatly reducing the production of what had been the world's premier producer, prices in Java and the Americas jumped to take advantage.

The British were perhaps the first Europeans to bring coffee to the Americas. It is possible that John Smith, who had been in the Turkish service before crossing to the Jamestown colony in Virginia, was the first. In any case, we have William Penn complaining of the high cost of coffee in Pennsylvania already in 1683. But the British were not much interested in coffee as an export crop. London's booming coffeehouse culture whet the appetite of the few colonials who could afford to imitate Johnson, Defoe, Pepys and Dryden. But North Americans would have to wait for independence to become a coffee-

[24] Paul Butel, "Les Ameriques et l"Europe" in *Histoire Economique et Social du Monde* vol. 3 (Paris: 1978).

drinking country and for Starbucks for a widespread coffeehouse culture[25]. Until then, the British saw the mercantilist possibilities in exploiting the Chinese and then the Indian tea trades. They were the only western European power to reduce per capita coffee consumption rather than exploitingng country capitalist institutions as the stock exchange and with Lloyd’s coffee house, and consumption within the colonial system.[33] On the contrary, the French at first attempted to prohibit production in their colonies of Martinique and St Domingue (Haiti) because the Levant Company's interest in its Middle Eastern monopoly and the French East India Company in Reunion. The possibly apocryphal tale of the French officer, de Clieu, surreptitiously spiriting seedlings out of the royal botanical garden and husbanding them across the Atlantic to Martinique against pirates, Dutch intrigue, and foul weather stresses individual heroism, not French imperial foresight. The soldier did seem to want to bring a valuable commodity to the Caribbean colony but coffee did not yet occupy an important place in French colonial plans.

In St. Domingue it was not the aristocratic and bourgeois elite of the empire, the sugar planters, who cultivated coffee on the remote hills, but *affranchise* , modest people of color.[34] Initially, their market was the prosperous colonial community on the island that sought to emulate Parisian fashion and drink coffee in coffeehouses. Aristocratic and then bourgeois fashion were as instrumental in stimulating demand for coffee as the taste or pharmacological effects. (The French had taken to this custom out of admiration for the oriental splendor of the Ottoman officials and traders they encountered at the Sun King's court). From the mid-1700s on coffee production became increasingly export-oriented and slave-driven. Whereas St. Domingue's coffee exports in 1767 were barely more in value than one quarter of sugar exports, by 1787-89 they almost equaled sugar exports to be by far the largest coffee exports in the world.[35] French colonies supplied two-thirds

[33] Joel, David and KarlSchpira, *The Book of Coffee and Tea* (NY: St. Martins Press, 1982), p. 11.

[34]Carolyn Fick, *The Making of Haiti*, (Knoxville Tenn. University of Tennessee Press, 1990)pp. 19,22. Michel-Rolph Trouillot, "Motion in the System: Coffee, Color, and Slavery in eithteenth-Century Saint-Domingue"."*Review* 3 (winter 1982), 331-388.

[35] Auberteure, *San Domingo*, p. 55; Bryan Edwards, *Histoire de l'ile St. Domingue,* (Paris: G. du Four, 1802) pp. 55, 135

of the world's coffee in the years immediately before the French Revolution.[36] But the massive concentration of African slaves led to the most successful slave rebellion in the world. Haiti pounds exported in 1800 to under .5 million pounds in 1900. Cuba did not grow enough for its home demand and Puerto Rico also turned primarily to sugar and tobacco.[40] Even integration into the United States empire, the world's greatest coffee consumers, did not expand Puerto Rican exports in good part because vicious hurricanes in 1899, 1926 and again in 1928 destroyed most of the crop Low world prices after that relegated the island's production to domestic consumption.[41]

Coffee spread in substantial scale to the American mainland only later. The Spanish and Portuguese preferred cacao or tea so that Latin Americans had to wait for independence to become significant coffee producers.[42] Although the dependency literature emphasizes the colonial nature of Latin American production, the export of coffee - by far the most important of all Spanish and Portuguese American commodities - was not a colonial imposition. This Portuguese failure is surprising because the Portuguese had been the first European power in the Red Sea when they aided the Abyssinians against Muslim

European fashion that had originated in the Americas; cacao was drunk already by could compete with Brazil in price nor meet the large new demand in the colonial powers and in the U.S.. By 1850 Brazil was producing over half the world's coffee; in 1906 it produced *almost five times as much as the rest of the world combined*. Indeed, about 80 percent of the expansion of world coffee production in the nineteenth century occurred in Brazil alone![44]

and 1860.[48] And coffee production grew rapidly despite depending upon an increasingly aging and expensive slave labor force until abolition in 1888. Initially, at least, the expansion was due to vast, easily accessible virgin forests (meaning a sparse indigenous population that could be pushed out); proper climate; an export-oriented commercial infrastructure; a large slave force; and relative political peace.

If not key in instigating the export boom, the railroad was important in permitting it to continue to expand. Before the iron horse, transport had been very expensive. By one calculation, 20 percent of the male slave force was used in mule trains and transport cost one-third of the final price. Moreover, the primitive form of conveyance often damaged the beans. The train reduced tariffs, but not dramatically. Bec the only country to attract millions of European immigrants to work in semi-tropical agriculture.[49]

In addition to the contribution of the iron horse, the shipping revolution meant that swelling Brazilian coffee exports--they grew six fold between 1850 and 1900--could be brought to market without shipping bottlenecks. A host of European steamers began regular service to Brazil where port facilities were slowly improved and, hence, shipping costs fell. This allowed growers to receive a greater share of the final wholesale price while consumers enjoyed lower end prices. Because imports became cheaper, Brazil could enjoy steadily improving terms of trade; that is, the real price of coffee reflected in the imports that coffee income purchased increased more rapidly than did its nominal price which was fairly steady until the late 1880s.[50] According to one estimate, Brazil's terms of trade rose from 128.9 in 1850 to 200 in 1860, fell back to 129 by 1870 then rose to 245 in 1893 ending the century at 137.[51] Gudmundson points out that the declining cost of oceanic shipping also increased returns to Costa Rica's growers. [52] In other Latin American

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[49] W. Arthur Lewis in *Growth and Fluctuations*, (London: George Allen & Unwin, 1978),p. 181 points out that Brazil (1.43 million) trailed only the United States (23.4 million) and Argentina (2.5 million) in receiving European immigrants between 1871 and 1915.

[50] Nathaniel H. Leff, *Underdevelopment and Development in Brazil* vol. 1 (London: George Allen & Unwin, 1982), pp. 80-85; C. Knick Harley, Late Nineteenth Century Transportation, Trade and Settlement" in Harley ed. *The Integration of the World Economy, 1850-1914* vol. 1(Cheltenham U.K.: Edward Elgar Publishing, 1996), p. 236. Edmar Bacha, "Política brasileira de café" in Martins & Johnston *150 Anos de Café*, p.20.

[51] Mauro Rodrigues da Cunha in the "Apendice Estatistico" in Marcellino Martins E. Johnston, *150 Anos de café* (Rio: Marcellino Martins & E. Johnston, 1992) table 1.10.

[52] Lowell Gudmundson, "On Paths Not Taken: Commercial Capital and Coffee Production in Costa Rica" in Clarence-Smith and Topik,

proletarians, if they drank a hot beverage at all, tended to drink chicory and other substitutes for "Bohnenkaffee".

The explosion of production in independent countries after the Napoleonic Wars, made the beverage available to urban workers and even occasionally to rural residents. Coffee's heroic nineteenth century occurred not only because of Brazilian production, but also because of skyrocketing consumption in the United States and northern Europe. The transportation revolution and lowered transaction costs fueled the vertiginous trajectory of the Atlantic coffee economy Brazil improved transport by constructing railroads and ports and effecting marketing economies of scale in which production costs remained level while output increased. This combined with the exogenous benefit of greatly reduced international shipping costs and the world's most efficient internal transportation system and an elaborate marketing network in the U.S. to stimulate a rapid rise in American per capita consumption. Coffee became truly a mass product for the first time in the U.S..

U.S. government policy also helped. The United States was the only major market to import coffee tax- free as duties declined from a high 10 cents a pound in 1812 to 5 cents in 1814 and free for all but a decade after 1832. Consequently, per capita consumption grew from one-eighteenth of a pound in 1783 to nine pounds a hundred years later. US population’s fifteen-fold explosion in that century meant that total coffee imports grew 2,400 percent! Byita.00 ointernaound in

Almost all the rest was in Western Europe, especially in northern Europe: Belgium, Germany, France, the Netherlands, and Sc inhabitants and eventually even to rural populations at a relatively low price, they chose it over the ersatz coffees and teas they had previously drunk. So powerful was this appeal that the income-elasticity in developed countries between 1830 and 1900 has been estimated at 1.3 (that is, coffee purchases grew proportionately faster than income grew). However, as it became an accepted part of the working class's breakfast, and increasingly lunch, coffee break and dinner, coffee became rather price and income inelastic. The United States Federal Trade Commission estimated income elasticity in 1954 at only .2 percent; almost no additional income was spent on coffee.[57] Effectively the population had almost entirely satisfied its desire for coffee.

The central role of United States consumption in the world market underlines the fact that British imports did not directly serve as an "engine of growth" for Latin America. Rather, there was a triangular trade. Brazilians sold their coffee in the U.S. and used the returns to purchase British finished goods. Americans purchased coffee with foreign exchange earned by selling temperate raw materials in Britain, as well as to the continent. Although the British did not drink much of the coffee that they serviced, they profited from re-exports to major consumers and the insurance and carrying trades whi5 3 0 T201i8"d f102 4

The freewheeling coffee market began to change in 1870 when a submarine cable tied South America to New York and London by telegraph. Information about prices and demand and supply became internationally homogeneous. Warehouses that held a substantial share of the world's visible stocks were built, strengthening the market position of importers. Exporters ceased being consignment agents, becoming instead agents of importers who controlled the trade and set the prices. Because of speculation, prices fluctuated wildly. The creation of the New York Coffee Exchange in 1882, which was instituted to prevent commercial corners from driving up prices as had happened in 1880, institutionalized access to information. (Hamburg, Le Havre and London followed with major coffee exchanges.) Although this might seem late for the development of a futures market since the Chicago wheat market began in 1848, in fact Britain's first futures market started only in 1883.[59]Coffee was a pioneer in global co years for US consumers to again reach the thirteen pound per but this was not yet merchant capitalism. The market was small, the drink a luxury.

The eighteenth century was dominated by European colonial organization of Asian and then American production. Rather than introduce new technology, they introduced coercion. Production was inefficient; the price remained high and the market small.

The nineteenth century began with colonies supplying almost all coffee, but ended with virtually no coffee colonialism. Colonialism ceased in coffee production for two main reasons, neither having to do with European plans or superiority: First, American colonials, starting with the Haitians, followed by Spanish and Portuguese Americans freed themselves. The second reason is that it turned out that they were very good at producing coffee. The Americas produced massive amounts of inexpensive coffee, reconfiguring the nature of European and North American demand. They were able to overcome a shortage of capital and available workers, as well as forbidding terrain to create one of the world's most valuable internationally traded goods in 1900. On the other hand, one could argue that Latinalism. Col factors.) The effects were quite different in different countries. Brazil, which was producing most of the world's coffee by the last quarter of the century, began building a commercial, financial, and transportational infrastructure and mechanizing coffee processing and transporting, though not cultivation. Spanish America and the Caribbean were far behind Brazil in these matters.

The coffee market was never totally "free" either in matters of labor, property rights, credit, or commerce. But states played a remarkably small role in the independent American producers. While state institutions were slow to come about, public power was exercised by oligarchs just as it had been by colonials. The market did not simply reward the most efficient and economically rational. Even after the end of slavery, coercion and oligopsony led to rent-seeking.

Coffee's experience was not typical. It was a vast market with oligopolistic production and consumption. A luxury good in the process of becoming a mass necessity, it benefited greatly from both the technological innovations and the explosion of purchasing power created by the Industrial Revolution even while the workers in the coffee fields enjoyed little of its fruits. The nineteenth century experience does not confirm Albert Hirschman's argument that coffee was particularly prone to stimulate entrepreneurship and industrialization because of its linkages, at least not in the cultivating countries. Little industry per se resulted in coffee lands in the nineteenth century and coffee workers provided a scant market for manufactures since the increasingly free flow of goods, capital, and labor did not necessarily lead to intensified capitalist relations in the coffee fields.

Europe's bourgeois brew rested on coercion or non-monetary payments which led to serious social tensions in the coffee lands. The effect of price stimuli varied greatly depending upon where in the commodity chain one was positioned. Still, Arthur Lewis was wrong when he argued that tropical producers would drive down prices because of their large supply of cheap labor since many labor markets were not integrated, free, or monetized. Coffee growers were often subsistence growers in various catch crops with coffee being a sometimes-coerced sideline. The terms of trade appear to have favored coffee exporters in the last quarter of the nineteenth century. But this did not last.

In the twentieth century these contradictions would be addressed by growing state presence in coffee's labor, financial, transport, and commercial markets. State capitalist cartels, price supports, and marketing boards, and cooperatives arose in cultivating countries which by the 1960s had virtually all gained their independence. And the North-South divided was further diminished as coffee growers became also roasters and important consumers.

Coffee's experience was distinct from that of most commodities in general and from most tropical commodities. The many players in the market reacted in different ways depending on their geo-political position, natural endowment, competing crops, labor resources, political organization of workers and strength of states. But it was an experience that intimately affected millions of people and dozens of states. In the Age of Empire, coffee production was a national project.

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