Introduction

THE PRODUCTION OF QUALITY

WHAT MAKES A GOOD CUP OF TEA? Ask consumers in different tea-loving places, from London to Lucknow to Louisville, and you'll likely get different answers. Some like it hot. Some like it iced. Some prefer a splash of milk; others take it with a heap of sugar. While the way to prepare a proper cup of tea may vary from place to place, most tea drinkers will agree on where to start: with a simple bag of black tea.

Even to the most devoted consumers, the black tea bag can seem banal. Tetley. Lipton. PG Tips. Yorkshire Gold. The off-brand tea bag in your hotel room. There's nothing fancy here. No single-origin stories, no pricey packaging. The attraction of the black tea bag is its reliability, its sameness. A "nice cup of tea" is comforting because, like a favorite chair or a memorable song, it calls the consumer back into the realm of the familiar and the routine.

It is not only the taste but also the rhythm of making a cup of tea that is so familiar: filling the kettle, reaching for your favorite mug, ripping open the tea bag, waiting for the kettle to hiss or ding, pouring the hot water into your mug (being careful to not submerge the paper flag), then dunking the bag up and down a few times. As you dunk, the color dissipates in wisps and swirls into the water. As the deep reddish-brown hues slowly bleed out, you resume your day. Cups of tea can punctuate a leisurely morning or a busy afternoon.

When tea drinkers reach for a bag of black tea, they are reaching for something dependable and standardized, not something unique and distinguished. This book tells the story behind that dependability and standardization. The sameness and reliability by which tea drinkers judge a good cup of tea is the result of a hidden, complex process that traverses the history of European colonialism, postcolonial economic debates, and the development

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of modern industrial food science. Above all, this book tells a story about quality: the "nice" in that "nice cup of tea."

In a way, tea consumers today think as much as they ever have about quality. If they have switched to a fair trade or organic black blend, they presumably have the quality of the tea-producing environment or the life of the tea plantation worker in mind. But they also might justify spending a few extra cents on this specially labeled box because what is inside is just as good as, or maybe even a little bit better than, what is inside the conventional box.

The discussion of quality in this book is, in a word, *qualitative*. This does not mean that I am only interested in people's opinions about the flavors, look, and smells of mass-market black tea. Indeed, the main focus of this book is not tea consumption per se. What counts as quality tea is not just a matter of consumer preference or even of environmental and labor conditions at the point of production. Though what goes on at kitchen tables and on tea plantations is certainly important to the story of quality, this book also attends to the spaces in between: those of brokerage, blending, auctioning, and food chemistry. Even the cheapest, most ordinary-looking tea arrives in its cup in that reliable form thanks to a set of linguistic, technological, and aesthetic techniques not just for judging quality—as if quality were always just waiting there to be perceived—but for producing it.

No single corporation or institution fully controls this set of techniques. Over the history of the modern tea industry, these techniques have been debated, distributed, and refined by professional tea tasters, auctioneers, blenders, and scientists. What these people all have in common is that they occupy intermediary positions in the system that circulates tea from farm to cup. These intermediary figures and the spaces in which they work are the subjects of this book. The work of these figures helps make the black tea bag reach consumers in the form they come to expect, time after time. Focused on the production of black tea from India from the late nineteenth century to the present, I trace debates among these figures about what quality is, how quality can be promoted and maintained, and how qualities can be made to seem distinguishable from one another yet remain economically commensurable.

In contemporary capitalism, the relationship between quality and the market is often reduced to numbers. A quality product may be that which yields a high price or that which has more numerous traits that, according to market research, a given consumer demographic considers desirable. In the interdisciplinary field of food studies, a "quality turn" has been under way for over twenty years. Many studies of quality in food focus on the growing mar-

ket for artisanal, luxury, or organic products.² "Price differentials" between these kinds of products and "conventional" goods are made meaningful to consumers by expert-driven systems of evaluation.³ Yet what the sociologists Michel Callon, Cecile Méadel, and Volonoa Rabeharisoa call the "economy of qualities" is not limited to luxury goods. In fact, I argue, if we look instead at a seemingly undifferentiated, readily available, mass-market product like the black tea bag, it becomes possible to understand better how quality is produced.⁴ Callon and colleagues suggest that the "qualification" of goods, by which they mean the identification of their distinguishing characteristics, is essential to the functioning of modern markets.⁵ As Karen Hébert notes, this process of qualification, or "making things singular," follows many of the same logics that make things interchangeable and fungible.⁶ A product like, say, PG Tips tea bags, is paradoxically both "singular" on the market and "comparable" to other tea bags available, even at the same price point.⁷

The techniques that produce quality are not entirely unique to the tea industry, but the story of tea shows that the "economy of qualities," far from being a new phenomenon, was central to the process by which colonial plantation production in India was transformed into a postcolonial capitalist enterprise. The qualification of reliable, cheap things is the outcome of historical and contemporary modes of economic inequality, racial and gendered differentiation, and environmental transformation. Black tea comes primarily from former British and Dutch colonies, from East Africa to Southeast Asia. In these places, tea is plucked and pruned by hand on plantations, vertically integrated production systems in which factories, fields, and laborers' homes are all located in one place and are often controlled by owners in faraway urban centers. From plantations, tea is crated and shipped, ready for sale, to auction centers in former colonial port cities like Kolkata, Colombo, and Mombasa, where it is tasted, priced, and sold. Colombo

Mass-market black teas are blends of many different tastes, origins, and grades of tea, selected to match distinct flavor profiles. A bag of Tetley, PG Tips, or almost any tea consumers might encounter around the world is often a blend of twenty to thirty different kinds of tea, which traders refer to as "invoices." Large and small companies alike buy invoices from different teagrowing regions to make their blends. Some invoices may be recently harvested, while others may have sat in a warehouse for months before blending. Some invoices are chosen for their flavor (whether malty or floral), others for their appearance (whether "wiry" dry leaves or "bright" steeped leaves), and others for cost, with an eye to ensuring that the price of a particular blend

stays within a desired range. Reach for another box of the same brand a week or a month later, and it will likely be composed of a completely different set of twenty-something teas and a totally different combination of regions, grades, ages, and flavors. The teas inside will be different, but the taste will be familiar. In fact, the tea in your preferred tea bag tastes the same *because* the teas inside are totally different. Tea seems to be infinitely reproducible, despite the fact that what tea *is* is highly variable. So while we might think of the ordinary black tea bag as a static, simple thing, getting the Tetley tea bag you drink today to taste the same as the Tetley tea bag you drank last month—and getting the tea in that Tetley bag to react in the same way to everything from the hardness of water to the fat content of milk to consumer preferences in places as different as London, Louisville, and Lucknow—is actually a complex and fraught undertaking.¹¹

It is tempting to think of the plantation as the starting point for the production of quality, and of the auction or retail sale as the mechanism by which quality is transposed to consumers. In this view, quality matters because suppliers must meet the demands of consumers. (An alternative view is that suppliers define quality and manufacture demand through marketing.) My research leads me to join other scholars of capitalist markets in seeing such stories of "supply and demand" as deceptively simplistic. 12 The plantation and the auction are just two nodes in a much larger array of sites that also includes laboratories, agricultural experimental stations, and bureaucratic offices, as well as spaces of consumption. While the plantation shapes the quality of black tea in the sense that colonial imagery of plantation landscapes and workers still dominates advertising and packaging, the reverse is also the case. 13 Black tea—its sensory qualities, its "niceness," the images and memories it conjures, and normalized expectations about all of these things—also works to keep the plantation together. Efforts to standardize and objectify quality were central to the British colonial project that gave birth to the mass-market black tea that tea drinkers across the world know and consume. The resulting linguistic and technoscientific conventions for describing tea's qualities help maintain the colonially derived plantation form. Following feminist scholars of science and technology, I suggest that such conventions help materialize abstract notions about gender, culture, and ethnicity, fixing them in place.¹⁴ Quality is the momentary outcome of what the feminist historian of science Michelle Murphy calls "spatial arrangements of relationships that draw humans, things, words and nonhumans into patterned conjunctures."15

In this book, I discuss several such spatial arrangements, including the tea tasting room, the auction hall, the plantation, and the laboratory. In these sites, I ask both *what* quality is and *where* it is, geographically and historically, but I also ask what quality *does*—what claims about it are made, by whom, and with what consequences. Quality is not an end in itself—a final destination for economic, colonial, or postcolonial projects—but an opening for those projects. To tell the story of quality is to explore historically particular ways of relating to the material world through knowledge (both linguistic and embodied) and work (both productive and reproductive). Before a more in-depth discussion of what quality entails, I want to step back and provide a broader view of the Indian tea industry.

THE PAST AND FUTURE OF INDIAN TEA

Tea auctioning began in London under the auspices of the East India Company in the late 1600s. In these auctions, traders bought tea acquired from China. With the expansion of colonial control in India and the development of tea plantations there, beginning in Assam in the 1830s and moving to what is now West Bengal by the 1850s, the tea auction infrastructure expanded to include Calcutta, where the first sales were held in 1861. The environmental and social upheavals of plantation expansion under the British Empire ran parallel to the development of the new sciences of food chemistry and agronomy, the government regulation of an expanding global agribusiness, and the emergence of consumer consciousness about the taste, health effects, and safety of everyday foods and beverages.

Tea remains central to debates that are ongoing in India today about the country's agricultural and economic future. Tea is part of the Indian national imaginary. The humble, affordable cup of *chai* is a central feature in both private and public spaces—from homes to hotels—across the subcontinent. Tea unites Indians of all classes and regions. It is drunk in dusty bazaars out of clay cups, in shiny office buildings, and in newfangled urban corporate café chains aimed at the upper middle class. India's current right-wing leader, Narendra Modi, explicitly portrays himself as the son of a railway station *chai-walla* (tea seller).

The tea that Modi and his father sold on a railway platform in rural India and the tea offered by high-end urban retailers all originates on plantations. The plantation is far from an anachronism or relic of a bygone era. It is both

a crucible of the modern food system and an enduring driver of it.¹⁹ The tea plantation was a site at which scientific and economic experts first experimented with quality, devising methods for what they called the "improvement" of India's landscapes, people, and tea itself.²⁰ Within a few decades of carving out plantations in Assam from native forest, planters began to shift from hand-processing tea (the method used in China) to machine processing. They constructed on-plantation mechanized factories, working toward a faster, more efficient, and vertically integrated system for converting highly perishable green leaf tea into a fermented, dried, and transportable form.²¹

The plantation system allowed planters to monocrop tea, with a vast workforce that constantly pruned tea plants (which frequently grew into trees in China) into flat-topped bushes. Tightly pruned bushes grow into each other, creating a nearly solid green shelf. Today, tea workers, most of them women, must pull themselves through tightly packed hedges to pluck from their flat, manicured tops. Tattered pieces of tarpaulin protect their legs and torsos from scratches and punctures. They return to the same bushes nearly weekly for ten to eleven months a year to find the freshest sprigs of tea—the iconic "two leaves and a bud." In the short dormant season, these women prune those same bushes to incite more sprigs to grow next season. On innumerable advertisements and packages, images of two leaves and a bud and of stooped, comely Indian tea workers create the illusion of an entirely natural production system.

But black tea as we have come to know it is far from natural. Black tea's very existence in India and in the cups of consumers in the metropole is the result of a distinct industrial ecology, an ecology that contains and constrains the botanical variability of the tea bush into a standardized form. I have spent much of the past decade living and working on the plantations of Darjeeling, in the Himalayan foothills of West Bengal, where some of the world's most expensive tea is produced. In 2015, I began research in the adjacent region of the Dooars, at the base of the foothills and just a few hours' drive from Darjeeling. Plantations in the Dooars produce India's cheapest black teas, sold largely on the domestic market. In both Darjeeling and the Dooars, plantations operate much as they did during the colonial period, even though British companies have given way to Indian ones. As I have shown in my previous research, the plantation remains so ingrained in the tea industry that even ethical sourcing schemes like fair trade and organic certification, which are intended to ensure quality for both consumers and producers, can neither avoid it nor effectively challenge it. 22 All plantations still

rely on a vast workforce of ethnically marginalized laborers who depend on the plantation not just for their daily wage, but for food, housing, and health-care. While many stories about contemporary capitalism highlight the paradox that low-paid workers cannot consume what they produce, nearly all tea plantation workers are tea drinkers. Tea punctuates the plantation working day and the home lives of laborers, and quality matters to low-paid tea workers, albeit in a way that is quite distinct from how it matters to tea brokers, not to mention consumers in the Global North.

Factories and monocropped fields were not the only "improvements" European planters made to tea production. Tucked between sections of tea are the villages where plantation laborers live. In order to meet the demands of year-round production, planters need workers with the skill to properly maintain tea bushes to live on plantations year-round and season after season.²³ Today, small two- to three-room houses are mandated for all workers by Indian plantation labor law. What all of this means is that workers on tea plantations do not freely come and go from the land. They do not sell their labor by the season like fruit pickers in California and the Pacific Northwest. For Indian tea workers, the plantation is home, yet they do not own the land under their houses or have any claim to the land under tea. Importantly, rights to that home are conferred more often than not by women's labor, since women make up the majority of the plantation workforce. Neither these women nor their ancestors had any say in the decision to plant tea there—or, as I explain later, the decision to keep it there after Indian independence in 1947.

On Indian plantations, there are two different factory-finishing processes. "Orthodox" tea is the tea that most Euro-American consumers would recognize. Orthodox production yields long cylindrical twists of tea that resemble the botanical material from which they are derived. CTC (cut-tear-curl) finishing involves tearing the leaves and rolling them into tiny balls, which, once fired, are visually reminiscent of instant coffee. (Figures 1 and 2.) CTC production uses machinery that can produce greater quantities of black tea over a shorter time than the orthodox method, at a lower cost of production. CTC and orthodox black tea (as well as green and oolong teas) come from two plant varieties: *Camellia sinensis* and *Camellia sinensis* var. *assamica*, known respectively in India as the China *jaat* (type) and the Assam jaat. The China jaat has smaller leaves, which yield light, flavorful teas like those produced in Darjeeling. The Assam jaat has broader leaves, which produce a maltier, darker cup. In everyday agricultural practice, however, these are largely ideal types. What workers pluck on Indian plantations today are



FIGURE 1. Orthodox tea. Photo by author.

clonal varieties of both jaats.²⁴ It was not until after the widespread adoption of CTC manufacture in the 1950s that tea became an object of mass consumption in India. When people think of black tea as India's "national beverage," it is CTC, boiled with milk, sugar, and spices, to which they are referring.²⁵

After it is processed and packaged on plantations, railways, constructed during the colonial period, bring crates of processed tea to brokerage houses in urban centers, where professional tea brokers make judgments about quality, giving feedback to plantation companies not only on the color, smell, and taste of the leaves but also on the management of the field and factory laborers who pluck and process them. By the late nineteenth century, this allmale class of tea brokers had become the main arbiters of quality in the tea



FIGURE 2. CTC tea. Photo by author.

industry. They controlled—and to a large extent, continue to control—the tasting, pricing, and auctioning infrastructure that converts individual invoices of tea into the standardized blends consumers recognize today. At auction, buyers bid not on generic lots of a single commodity but on a wide array of qualities expressed in catalog descriptions, an esoteric language, and a range of numbers indexing everything from weight to age to location.

Tea brokers and traders, still overwhelmingly men, are central figures in this book. Much of my research took place in the auction halls and brokerage offices of Kolkata and Siliguri, a city in the northern reaches of West Bengal. In these sites, I followed tea brokers as they tasted tea, and I observed the lively public sales at which they auctioned tea to buyers. In addition, I spent time in the Kolkata archives of the Indian Tea Association (ITA), the

guildlike organization that represents tea plantation managers and owners; in the National Library in Kolkata; and in the British Library in London, to which the ITA's London branch donated its materials after the office downsized in the 1970s. Focused on the years between the founding of the ITA in 1886 and the passage of the Foreign Exchange Regulation Act of 1973, which officially ended British capital's control over the tea industry and other enterprises in India, my archival research traced the ITA's central role in the development of standardized aesthetic and scientific methods for discerning quality. In the quest to improve Indian tea, the expertise of professional tea brokers was both juxtaposed to and blended with that of scientific experts—chemists, agronomists, and botanists—engaged by the colonial and post-colonial tea industries.

Throughout the British colonial period, the ITA governed the production of tea on plantations and its movement by rail into Calcutta and by ship out of the city's port. After India gained independence in 1947, the Government of India's Tea Board took over many of these responsibilities and created new forms of oversight. An abiding concern of both the ITA during colonial occupation and of the Tea Board of the newly independent nation-state was how to establish Indian tea as both commensurable to tea grown in East Africa, Southeast Asia, and East Asia and appreciably unique. This tension between commensurability and uniqueness continues into the present. Today, Tea Board of India bureaucrats and private tea brokerage firms grapple with the question of how colonially rooted products like tea come to have a place on the global market. Regulatory efforts by the Tea Board to reform the tea industry have been hampered, as much as anything, by the entrenchment of quality itself.

BODIES, MATERIALS, AND MARKETS

Understanding quality—in this case, what makes a cup of tea not just come to be, but come to be *good* (or bad, or tasty, or bitter, or soothing, or even just "nice")—requires attending to several dimensions. Though the framework I describe below is somewhat specific to tea, my approach to quality is applicable well beyond the world of tea and even beyond the world of food. Quality matters in a variety of contexts, from the construction and maintenance of water systems to the production and consumption of pharmaceuticals or cigarettes to sperm banking to precious metals and minerals to development metrics and global health indicators.²⁷

First, understanding quality requires attending to the embodied legacies of empire, or the power relations that allow a thing, whether cheap or precious, to come into contact in reliable ways with human and other bodies, whether through consumption, labor, or scientific research. Consider a 2017 essay in *Al Jazeera* by Hamid Dabashi, titled "How British Colonialism Ruined a Perfect Cup of Tea." The essay explores what Dabashi sees as the mass illusion among the British that the tea they rely on and consume in mass quantities actually tastes good. He juxtaposes his unpleasant encounters with the milky brown substance the English call "tea" to his own memory of encountering the "perfect cup" as a child in Iran. For Dabashi, those childhood encounters with tea provided a sense of connection to his mother, his local shopkeeper, and Iranian notions of collective belonging, the sense of we-ness and energetic force that Émile Durkheim, appropriating a term from Oceanic languages, called "mana." As Dabashi explains:

The entire joy of drinking tea, as any Turk, Russian, Iranian, or Central Asian teahouse master will tell you, is the exquisite delicacy of negotiating a peaceful, cooperative, and delightful coexistence between the bitterness of tea and the sweetness of sugar, diplomatically negotiated inside your mouth. Can you even imagine Donald Trump, Benjamin Netanyahu, or Theresa May trying to grasp that sublime sense of peaceful coexistence?³⁰

Dabashi is arguing against a certain strain of cultural history that sees food as a mere object on which consumers (usually, wealthy, white consumers) imprint the value judgments that come to be known as "qualitative." In these kinds of histories, value judgments often trickle down from the circles of wealth and power into mass consumer society.

Dabashi's critique of this conventional kind of historiography and his postcolonial theory of tea bring attention to the social life not just of things, but in things. How do ineffable and unquantifiable characteristics like taste become normalized as goods that express a collective identity or sense of togetherness—for better or for worse? Answering this question requires us to center taste, rather than bureaucracy or religion or caste, in the analysis of empire and its consequences. This approach grounds the sensorium of everyday life in a long history of exploitation and extraction, as well as resistance to these experiences.

Something as seemingly mundane as the taste of tea brings attention to what William Mazzarella terms a "memetic archive" that is opened up through acts of consumption.³² In his essay, Dabashi is defending an idea of

"good tea" against British butchering, but at the same time he is recognizing that in drinking tea, he unavoidably becomes who he is in relationship to figures like Trump, Netanyahu, and May. Tea possesses panacea-like effects in mainstream (white) British culture, where it is a means for calming the nerves, for dealing with tragedy, or for facing a day of office drudgery. Dabashi, by contrast, interprets the British willingness to drink a milky, brown, unappetizing version of his grandmother's tea as "redemptive suffering," a penance for the terror wrought by slavery, empire, and environmental destruction. For Dabashi, colonial violence is archived—and archived over and over again—through the mimesis of tea consumption, in the taste and smell of what the British euphemize as "a nice cuppa."

Second, understanding quality requires thinking about materials as more than passive objects. Dabashi's memories about how "the bitterness of tea and the sweetness of sugar [are] diplomatically negotiated inside your mouth" point us to the idea that substances like tea (and sugar and milk, for that matter) play an active role in their own qualification.³⁴ This is a point that has been made recently by anthropologists studying "specialty" or "alternative" food production in the United States and Europe. For example, Heather Paxson illustrates how the "goodness" of artisanal raw milk cheese depends on a pragmatic (if not also diplomatic) negotiation between cheesemakers, the tools they use to make cheese, and the microbial cultures that impart flavor to cheese.³⁵ Cheesemakers recognize microbes as active, if also somewhat unruly, collaborators in the crafting of "good" cheese. Elsewhere, Brad Weiss has explored how these material aspects of quality are historically informed, arguing that "heritage" breeds of pigs—whether they are alive in their pens or butchered and served up on white dinnerware—embody the sensory qualities that artisanal pork connoisseurs in the United States desire. For Weiss, the good taste of artisanal pork is far from natural. Eaters and cooks alike must learn to appreciate what heritage breeds bring to the table 36

Third, understanding quality requires thinking about markets. In capitalist markets, quality indexes that which we come to expect sensorially—consistent flavors and smells—as well as that which we come to expect materially—consistent physical properties such as weight or biochemical contents. If the taste of your Tetley tea is "off" for some reason—if it does not seem the same as it always does—this may reflect "poor quality." *Quality* is the term we use to capture what foods or other commodities are supposed to taste, smell, look, or feel like.

Quality in market terms can also be about how products take on value as commodities and the role of experts in keeping that value consistent, or, put another way, making that value appear consistent and commensurable with that of other things. When it comes to food and drink, we generally think that this work involves translation back and forth between the rational domain of price and the sensory domain of taste. Price and taste are, in turn, shaped by the historical forces of colonial and postcolonial development, science, and financial markets. Rather than attempt to discern where quality is quantitative and rational and where it is sensory and subjective, however, I join other theorists in approaching quality in the market as processual and pragmatic. Along with scholars who have examined capitalism through the lens of science and technology studies, I see the production of quality as one element in the making of markets themselves. Markets are not pregiven; rather, they are engendered through the operation of what Callon dubs "market devices," sociotechnical tools that shape and reshape markets. These devices include financial instruments (derivatives, futures, stock tickers), but as I suggested earlier, they also include techniques of "qualification." ³⁷ Like other market devices, these are experimental rather than instrumental.

EXPERIMENTS WITH QUALITY

Anthropologists of capitalism have frequently approached the question of quality by "following" notions of taste, ethics, or aesthetics as they circulate through "commodity chains," the pathways traveled by goods, from production to brokerage to consumption. Anthropologists in the 1970s and 1980s began to map the dynamic linkages between production and consumption, inspired in large part by Sidney Mintz's classic study of sugar, which showed how taste for sugar among the English working class was forged through the elaboration of the Caribbean slave plantation.³⁸ Subsequent approaches added a close-up ethnographic dimension to Mintz's historical approach, tracing the "careers" of goods that included secondhand clothing, high art, and curios.³⁹ By doing what George Marcus calls "following the thing" and "following the idea," scholars were able to explain how quality morphs as things circulate across spaces and contexts. 40 As Theodore Bestor puts it, at each link in a given commodity chain, "objects acquire or shed meanings, identities and implied qualities that render them worthy of use and exchange. Without this culturally constructed valuation, goods have no

value as a commodity in the sense of objects of *either* social or economic advantage."⁴¹

It is difficult to follow a thing as materially multiple, yet seemingly standardized, as a mass-market black tea bag. Because almost all of them are blended, tea bags manage to be consistent, even though one is never exactly the same as the next. But the difficulty is not due to blending alone. A tea bush will react differently to different soils or temperatures, just as processed black tea will react differently to boiled water, sugar, or milk. In order to follow not only the tea bag but also how and why it steeps the way it steeps and feels the way it feels—to understand steeping as a social process that puts bodies, materials, and markets into a qualitative relation—it is essential to understand how these reactions reverberate across the entire commodity chain.⁴² To do this, I draw inspiration not only from anthropological commodity chain studies but also from the work of Michelle Murphy, who describes how PCBs, methyl mercury, and other chemical by-products of heavy industry seep and sediment into soils and human, plant, and nonhuman bodies. 43 Their effects may take decades to manifest themselves, and—like the moral, political, and cultural values traced by anthropologists of commodity chains—those effects move in an unpredictable, often nonlinear fashion. Knowledge about these effects is made in piecemeal ways. Experts specialize in particular aspects of production, circulation, or evaluation. No one actor—no one form of expertise—maintains the system. Importantly, as Murphy points out, these effects are *felt* as much as they are seen; and they are felt unevenly across disparate locations. 44

While chemical effluents and tea can seem quite distant from one another, I find Murphy's observations about historical and material seepage and reverberation useful for understanding quality. In fact, a great deal of time and money has been invested over the past century in understanding tea's chemical makeup. Exotic-sounding substances like theine, tannins, polyphenols, theaflavins, and thearubigins—substances that are also sensed as much as they are seen and whose material effects manifest over decades of colonial and postcolonial plantation production—are key players in this story about Indian tea. A caffeine jitter in Johannesburg is linked to the work of tea plantation laborers from East Africa to Sri Lanka who bring tea into being, while these laborers live in villages and landscapes that are themselves saturated with agricultural chemicals. Sensation and affect matter not just when it comes to consumption, but throughout the production and circulation of everyday things.

With these ideas in mind, my historical and ethnographic work documents what Callon, Méadel, and Rabeharisoa call "real life experiments," or "trials." For them, qualification, the process of identifying the distinguishing properties of goods, requires standardized experimental systems. In a marriage of marketing and science that Steven Shapin calls the "aesthetic-industrial complex," firms since at least the 1940s have used devices like flavor wheels and hedonic indexes to "account for taste" and thereby make consumers active participants in defining the very qualities of the products they consume. This approach to quality is experimental because both the products being evaluated and the devices used in that evaluation are constantly being updated and revised. Under the experimentation is essential to the operation of markets, even if it also "blur[s] habitual distinctions between production, distribution and consumption."

From the inception of the tea industry in India, quality has consistently been the subject of experimentation. Indeed, experimentation happens long before a blended tea bag makes its way into a consumer's cup. Experiments with quality have shaped, and continue to shape, the work of tea brokerage firms, scientific laboratories, regulatory offices, economic consulting firms, and even plantation management. Actors in these interstitial spaces between production and consumption have deployed a range of devices, including words, economic policies, land tenure arrangements, factory machinery, and even their own bodies, to coax bitterness, sweetness, floralness, astringency, and other components of tea into a knowable and exchangeable form.

I use "experimental" as an analytical term, then, but I also use it because, at various points in tea's history, people inside India's tea industry have explicitly described their work with tea as experimental. Though a colonial economic and social order certainly set the basic terms for experimentation with the quality of tea, no such order is ever fully fixed or immutable. Quality is a moving target. A working experimental system never really reaches a finality or end. ⁴⁹ Rather than something that is won and lost, accumulated or dissipated, quality remains an open question.

TASTING QUALITIES

This book contains a lot of historical material, but it is not organized chronologically. Since quality is immanent in the operations of the tea industry, I have chosen to begin in a particular site of experimentation, the tea brokerage

firm, and move outward in space and time to other sites, including the plantation, the laboratory, the auction, and the many different contexts in which tea is consumed. Above all, as I noted earlier, the narrative is organized as an examination of what quality is and what it does, in addition to where it is. Quality is never sitting in one place or lodged in a discrete set of attributes. It has always been actively composed, often by divergent means. The effect of this is that quality does many different things simultaneously and that what quality was in the colonial past has serious implications for what it might be in the future.

In chapter 1, I describe how professional tea brokers learn to taste and value tea. A tea broker's body is not a proxy for a potential consumer. Instead, his body is an instrument for evaluating production and consumption at the same time. The question of whose bodies count as properly qualified to evaluate tea is a highly gendered one. The techniques of brokerage were developed by British experts, and for decades brokerage was exclusively the province of white men. Since Indian independence in 1947, however, the ranks of professional brokers have been taken over by middle-class Indian men. Just as taste helps reinforce the ethnic distinctions between pluckers, factory workers, and managers that regulate the life of the plantation, it also helps constantly reinvent middle-class Indian identity. Middle-class Indian masculinity, too, emerges through engagement with material goods, as well as through the long legacy of sexualized imperial labor regimes. Indian tea brokers are not simply mimicking or fulfilling a British archetype. Rather, middle-class identity and masculinity are constantly coming into being and being rearticulated through the embodied processes of tasting and trade.

Once tasted, individual invoices of tea must be sold, one by one, in live "open outcry auctions" (so called because buyers bid by crying out offers to an auctioneer). These auctions are the subject of chapter 2. In the case of the brokerage firms I studied, the person auctioning was the very same person who, days before, had tasted and evaluated those thousands of invoices. Brokerage thus requires a deep knowledge not only of how to taste tea but also of how to cut a deal and of how to talk and comport one's body while doing both. While chapter 1 explores techniques for discerning quality through brokers' direct interaction with tea leaves in the tasting room, chapter 2 examines how quality emerges through their interactions with the numbers that constitute auction catalogs. These numbers include age, weight, number of packages, warehouse location, and other important details about each invoice. The one number not printed in the auction catalog is the esti-