Teawords: Experiments with Quality in Indian Tea Production

ABSTRACT The identification of distinguishing characteristics of commodities—a process known as “qualification”—frequently involves the use of specialized lexicons. Before Indian teas are auctioned, brokers evaluate them using a glossary of some one hundred and fifty English words. This glossary was devised at the end of the British colonial period by industrial chemists who aimed to subject the aesthetic judgments of brokers to experimental scrutiny. “Teawords” formed part of a late colonial effort to ensure the circulation of “quality” tea from plantation to market. After India’s independence, Indian brokers and plantation managers continued this effort. Like other vocabularies for describing comestible commodities, teawords performatively reproduce gendered and classed distinctions, but they do much more. When they circulate among brokers and managers, teawords subject plantation conditions to experimental adjustment. As a form of linguistic and material experimentation, qualification extends colonial norms of valuation—and the institution of the plantation itself—into contemporary capitalist circuits. [capitalism, food, taste, value, India]

RESUMEN La identificación de características distintivas de las mercancías –un proceso conocido como “cualificación”– frecuentemente envuelve el uso de léxicos especializados. Antes de que los tés indios son subastados, los evaluaron usando un glosario de unas ciento cincuenta palabras en inglés. Este glosario fue ideado al final del periodo colonial británico por químicos industriales quienes tuvieron como meta someter los juicios estéticos de los corredores al escrutinio experimental. “Las palabras del té” formaron parte del esfuerzo colonial tardío para asegurar la circulación de té “de calidad” desde la plantación al mercado. Después de la independencia de la India, los corredores indios y administradores de las plantaciones continuaron su esfuerzo. Como otros vocabularios para describir mercancías comestibles, las palabras del té reproducen performativamente distinciones basadas en género y clase, pero hacen mucho más. Cuando ellas circulan entre corredores y administradores, las palabras del té someten las condiciones de la plantación a ajustes experimentales. Como una forma de experimentación lingüística y material, la cualificación extiende las normas coloniales de valoración –y la institución de la plantación en sí misma– a los circuitos capitalistas contemporáneos. [capitalismo, alimentos, degustación, valor, India]

After it leaves the plantations where it is picked and processed, most tea produced in India finds its way to brokers, who taste and evaluate it before selling it in public auctions. Tea brokerage dates back to the East India Company trade in the late 1600s. At auctions in London, brokers initially bought and sold tea acquired from China, but with the carving out of tea plantations in India, beginning in Assam in the 1830s and in Bengal in the 1850s, colonial possessions
began to produce the majority of tea sold at auction. They produced so much that by 1861, tea auctions began being held in Calcutta. In contemporary Kolkata, the heart of the Indian tea trade, membership in social clubs, education, facility with English, European dress, and athletic prowess are all seen as signs of one’s qualification to be a tea broker. Being a man is also an advantage.

On a Tuesday morning in 2009, I joined a broker on the top floor of Nilhat House, India’s oldest auction center, in central Kolkata. Mr. Pal, a tall, thin, avuncular man, was lecturing apprentice brokers about how to properly evaluate tea in order to give it a “valuation price” for the weekly auctions that his firm oversaw. As a group of assistants quietly brewed dozens of tea samples, straining the liquor into ceramic cups, arranging steeped leaves onto ceramic lids, and placing dried, unsteeped leaves beside them, Mr. Pal waxed about tea’s remarkable variability. “It’s an agric-product,” he stressed, “so this is a natural variability.” Different sizes of leaf, sourced from hundreds of plantations, contribute to that variability.

A broker’s expertise is measured by his—and it is almost always his—ability to corral tea’s varied tastes, smells, looks, and textures into a few words, drawn from a fixed glossary. For example, here is how Mr. Dutta evaluated an invoice of Darjeeling tea: “Tippy clonals still have fair make. More emphasis on sorting would be of benefit.” He studied the dried leaves. “Mixed. Fannings are acceptable.” Then he smelled the steeped leaves before finally picking up the cup. “Clonal has brightness and character, but quality is not there. 300.” When Mr. Dutta says “300,” he is naming a prospective price, in rupees per kilogram, and he is promising that his firm will pay the plantation 50 percent of that price as an advance on the auction sale.

This qualification work happens before teas are sold to buyers at auction, but it is important to reiterate that both sellers (plantations) and buyers (who purchase teas at auction) pay brokerage fees to brokerage firms, who receive commissions on each sale. Since brokerage houses have already provided advances on all teas up for sale at auction, brokers see it as imperative that their evaluations be precise. Tea is not only possessed of a “natural variability.” It is also highly perishable, with a shelf life of two years, at best. Many of the words used by brokers index tea’s capacity to be stored. Brokers need to describe and price tea accurately in order to sell it both quickly and at the highest price possible. Through the lexical system I describe in this article, brokers are tasked with determining not only the price of tea but also the material possibilities for tea on the market.

Markets for tea are made through the deployment of what Michel Callon, Yuval Millo, and Fabian Muniesa (2007, 2) term “market devices,” “material and discursive assemblages that intervene in the construction of markets.” Such devices include financial instruments (e.g., derivatives and stock tickers), but they also include linguistic tools like industrial glossaries (LiPuma and Lee 2004; MacKenzie 2006; Shapin 2016; see also Hébert 2014; Nakassis 2012). As much as the prospective numerical price, it is words like *make*, *character*, and *brightness* that indicate a tea’s quality. A list of some 150 terms is published by the Calcutta Tea Traders Association and rendered on glossy posters that adorn brokerage firm walls. This article uses the story of what I call *teawords* to argue for a view of quality as an experimental relationship between bodies, language, and materials, one that is grounded in a history of plantation production and colonial science (Barad 2007; Chatterjee 2001; Jegathesan 2019; Mol 2002).

Teawords, as an intra-industry lexicon, have become a means of creating a shared sense of quality among disparate industry actors. They are also tools for market making. “In modern bureaucratized economies,” Jane Guyer (2004, 83) explains, quality is often seen as a matter of ranking goods on “interval scales,” “by formal institutions such as expert panels, trade associations, and competitions.” One purpose of lexicons like the glossary of teawords is to make goods whose quality is seen to be highly variable circulate in standardized and predictable ways. Language describes material, but it too is material. As Shalini Shankar and Jillian Cavanaugh (2017) explain, drawing on the foundational work of Raymond Williams (1977), “language is a ‘distinctive material process,’” and a “practical material activity” (quoted in Shankar and Cavanaugh 2017, 1–2).

In his study of the words used to describe wine, Steven Shapin (2012, 177) advocates for a shift away from a dominant focus on “what taste does” to a historical and ethnographic focus on how modes of judging taste are made and performed. As Shapin suggests, “Such ethnographies would look a lot like those produced by laboratory studies of science, concerned with how fact and theory judgments come to be formed, discussed, and sometimes shared” (177). Since the colonial period, tea has been subjected to what Callon and colleagues have called “real life experiments,” or “trials,” designed to verify both its quality and the expertise of the brokers who evaluate it (Callon, Méadel, and Rabeharisoa 2002, 212; Callon and Muniesa 2005, 1245; see also Carr 2010). Brokerage is a kind of experimental trial. It entails an ordered set of operations, from brewing precise quantities of tea to measuring the flavor, appearance, and texture of steeped liquor and leaves against a known set of standards, codified in a lexical register. This experimental system reduces tea’s “natural variability” to a short list of words and prospective prices. In the example above, Mr. Dutta cannot be sure that the tea he has just tasted will fetch Rs. 300 per kilogram, but his senses, his memory, and his fixed routine give him confidence that it will. Tasting, smelling, and visually examining tea constitutes a qualifying “test” designed to both “clarify the functioning of the market … and act on its organization” (Callon and Muniesa 2005, 1246).

In *Keywords*, Williams ([1976] 2015, xxvii) identifies a certain kind of concept, one for which “the problem of its meanings seemed … inextricably bound up with the problems it was being used to discuss.” “Quality” is one such concept. The story of teawords offers a chance to understand
quality both historically and ethnographically. As Michael Ralph (2012) suggests in his study of how the rise of life insurance in the United States came in the wake of the demise of slave insurance, the history of economic instruments is intimately entangled with histories of empire and colonialism. The glossary of teawords was created in the final decades of the British imperial project in India. This was an experimental moment, as actors across spheres of governance and commerce sought ways to make their extractive industries viable for the future. A fixed lexicon for describing quality was first advocated not by brokers but by scientists employed by the Indian Tea Association (ITA), a guild of British tea plantation companies. During the 1930s and 1940s, these scientists undertook a series of laboratory “trials” to correlate the subjective judgments of brokers both to precise moments in the production process and to the precise chemical and biological constituents of particular teas (Callon, Méadel, and Rabeharisoa 2002; Latour 1999). Drawing on material from the archives of the ITA, the first part of this article shows how, in a context of economic and political upheaval, the governance of the tea industry came to revolve around the problem and the definition of quality. The glossary served to stabilize not just the quality of tea but also the institution of the plantation itself.

In the second part of the article, I draw on ethnographic research with tea brokers in Kolkata and in the plantation region of Darjeeling to show how, as subjective experiences are shared through the practice of brokerage—from bodily contact with tea to the utterance of words from the glossary—norms of gendered and racial inequality that were first established on the colonial plantation are rearticulated (Barad 2007; Bucholtz 2017; Carr 2010; Mol 2002; Shankar and Cavanaugh 2012, 2017). Tea tasting continues to be the subject of “real life experiments” whose form owes as much to the cultural economy of prestige as it does to the modernist push to reduce foods and drinks to their chemical and biological constituents (Berenstein 2018; Callon, Méadel, and Rabeharisoa 2002, 212; Spackman 2018; see also Bourdieu 1984). Brokers, as arbiters of quality, negotiate a tension between the norms of colonial science and those of colonial aesthetics. With this tension in mind, I suggest that quality is not an end in itself—a final destination for economic, imperial, and postimperial projects. Instead, as something that is produced through experimental interactions between bodies, words, and materials, quality continues to reanimate those projects.

**LANGUAGE AND THE PRODUCTION OF QUALITY**

Food studies scholars have been documenting a “quality turn” for over twenty years, following the growth in the market for artisanal or organic products (Goodman 2003; Paxson 2012; Roseberry 1996; Weiss 2016). “Price differentials” between these and so-called conventional goods are made meaningful by expert-driven systems of evaluation (Guyer 2004, 83), but what Callon, Méadel, and Rabeharisoa (2002) call the “economy of qualities” is not limited to luxury goods. “Qualification,” the process of identifying distinguishing properties, is equally important for mass-market products (Gewertz and Errington 2010; Reichman 2018).

In an interview with me, one Nilhat House broker, Mr. Chetal, described learning to be a broker as a form of self-fashioning: “You train and train … and one day you realize that you are training yourself through your own processes of experimentation.” He was referring to a broker’s need to creatively combine his organoleptic faculties, his familiarity with the terms in the glossary, and his knowledge about the dynamics of the market. In this way, the evaluation of mass-market tea is a form of what Cavanaugh (2016, 692) calls “linguistic labor,” which is “… essential to contemporary capitalist production … entangling worker-selves in particular social as well as economic relationships.” Mr. Chetal and his colleagues are also well aware of their role in wrangling tea’s material variety. Elsewhere, Cavanaugh and Shankar (2014, 52) develop the concept of “linguistic materiality” to track the “dynamical coexistence … of words and things within … global economies” (see also Shankar and Cavanaugh 2012, 2017). For the tea brokers, “experimentation” with words is at the same time experimentation with things and bodies. It “not only determines the value of cultural objects … but also confers value on those who interact with these objects” (Carr 2010, 18; see also Silverstein 2006). This determination is multidirectional. It happens in the encounter between tea and brokers, but it also happens in the circulation of words and tea from the space of tasting, where brokers encounter tea, to the space of plantation production, where managers and workers encounter tea.

Attention to the entanglement of knowledge, materials, and bodies links the anthropology of language and capitalism with approaches from science and technology studies (STS) (Callon, Millo, and Muniesa 2007; Nakassis 2012, 625). In studies of laboratory sciences, feminist STS scholars emphasize the entanglement of knowledge, materials, and bodies in contexts as diverse as quantum physics (Barad 2007), stem-cell research (Benjamin 2013), molecular biology (Myers 2015), and primatology (Haraway 1990), as well as of eating and feeding. Annemarie Mol (2009, 278) suggests that “The ‘body’ able to sense, to appreciate, and to be pleased, is not singular and isolated, but linked with others and the world … the tasting body is socially embedded … it does not just learn from others, but also from what it eats and drinks.” The ability of the broker’s body to sense tea is both an outgrowth of plantation production and a means of reproducing it.

As Mr. Chetal explained to me in an interview,

> If I said _stewy_ to you, what would you think? It has the characteristics of stew, right? Thick, cloudy. But no, that’s not what it means at all! The meaning is much more exact. It refers to the exhaust temperature. It means that [a tea] was fermented at too high a temperature, that it over-fermented; it therefore has become _soft_.

As Michael Silverstein (2006, 484, 493) notes in his work on _oinoglossic_ (wine talk) terms, “At every culturally recognizable node in the trajectory from production to consumption
As intermediary merchants, most tea companies, from globally recognizable brands like Lipton and PG Tips sold in Europe and the United States to local brands aimed at markets in India itself. Most blends contain over twenty different kinds of tea. As intermediary mechanisms for moving individual teas into blends, teawords do both subjective, aesthetic work as well as a technoscientific work (Heath and Meneley 2007).

Paul Manning (2012, 9) suggests that “organoleptic trials” (e.g., wine tasting) are distinct from laboratory trials in that while the latter are “primarily about defining the properties of the object,” the former define “both the prestigious properties of the wine and the connoisseur at the same time.” My historical and ethnographic material indicates that such a clean separation between these two forms of “trial” (in the Indian tea industry, at least) is not so easy to make. To be sure, teawords do work similar to the “tasting notes” that appear on restaurant wine lists. Words like biscuity, knobbly, stewy, and soft attempt to capture “experiences of sensuous qualities … and feelings” (Chumley and Harkness 2013, 3). But such words and the manner of their deployment owe as much to colonial science as to a colonial economy of prestige.

**A GENEALOGY OF TEAWORDS**

When amassed into glossaries such as those for wine or tea, words become a kind of “expert register,” a recognizable, if specialized, linguistic repertoire that can include technical terms, or acronyms, specific prosodic practices, and nonverbal signs such as facial expressions, or gestures” (Carr 2010, 20). When sensations and experiences become recognized in common terms, they can become endowed with social and economic value (Munn 1986). As Williams ([1976] 2015) reminds us, however, such value is historically contingent. Indeed, the codification of teawords occurred during the last decades of British rule in India, when the role of experts in markets was subject to intense debate. Quality was the terrain of this debate.

In 1911, the ITA established the Tocklai Experimental Station in Jorhat, Assam. Initially, Tocklai scientists focused on field techniques and pest management, rather than quality, but when tea from Dutch-controlled Java and Sumatra entered the European market in the 1920s, the ITA became worried about a glut in overall supply, which would lower tea prices. By 1932, a global economic depression was underway, and consumer buying power ebbed. In response, tea plantations across the British Empire agreed to curb production and focus on making quality tea. These crop restrictions lasted until World War II.

It was in the context of this industry-wide turn to quality that a chemist and meteorologist at Tocklai, C. R. Harler, first proposed a standard glossary. Harler had observed brokerage in Calcutta and London, and he became frustrated that “there was no common language, even among Brokers, to describe the characteristics of tea.” He elaborated his critique in a 1932 *ITA Quarterly Journal* article, in which he complained not only that brokers’ language was unstandardized but also that there are a good number of terms used by individual tasters which convey little or no effect to the average planter. Thus, in one case, a tea infusion was described as tasting like a “bandsman’s tunic.” Such an expression connotes unpleasantness, and may denote sweatiness, but gives no definite guidance to a planter who wants...
Harler’s critique was of the kind of language that marked expert knowledge. The tastings he attended must have had the hallmarks of the “organoleptic trials” described by Manning (2012). Phrases like “bandlems’s tunic,” while long on poetics and certainly descriptive, were metaphorical. Their material referents lay outside the “chain of sites” along which tea traveled (Silverstein 2006, 493). To be clear, Harler did not object to the role of subjective judgment in the production of quality; after all, sweatiness is a “sensuous quality” (Chumley and Harkness 2013). In shifting from the metaphor of the bandsman’s tunic to the sensation sweatiness, he sought to “stabilize subjective experiences … and render them objective” (Shapin 2016, 451–52).

Harler undertook the formulation of the glossary with a market-oriented motivation. He argued that it was possible to link teawords to production processes. A question remained, however. What exactly was sweatiness, scientifically? Harler proposed to identify which chemical constituents of tea were “responsible wholly or in part for such cup qualities as rawness, briskness, pungency, strength, colour and thickness” (1932, 78; emphasis in original). Harler claimed that chemical analysis,

\[ \text{if it distinguished teas according to their quality, would be of great use. By means of such an analysis the changes occurring in the tea leaf during manufacture could be followed, and used as a basis for recommendations regarding factory procedure. A complete analysis would also indicate ultimate differences between teas from various districts, and useful conclusions might be drawn regarding methods in different areas.} \] (78)

Harler did not invent new terms for his glossary. Instead, he tried to include what he saw as the “commoner” terms already in circulation among brokers. Still, when members of the General Committee of the ITA in London read Harler’s 1932 glossary, they found it “controversial and incorrect” (Harler 1932, 89).

Though Harler’s dream of linking words to chemical constituents would not be realized during his tenure at Tocklai, the glossary he proposed did succeed in making the problem of quality both workable and thinkable across the spheres of production and brokerage. This happened at a moment...
when, due to economic depression, a looming world war, and a growing movement for Indian independence, the colonial plantation complex was more vulnerable to collapse than at any time in its hundred-year history.

**EXPERIMENTS WITH QUALITY**

The agreement over the contents of the glossary did not end the intra-industry debate about quality. In 1935, as the glossary revisions were going on, the ITA appointed Cambridge University biologist Frank Engledow to lead a “commission of enquiry” to identify a way forward for the industry. Again, the timing was significant. The Engledow Commission was formed in response to a 1931 Imperial Economic Committee report that advocated a concerted effort to bolster Britain’s “home” industries in response to the deepening depression. As part of its initial survey, the Engledow Commission issued a questionnaire to ITA members (plantation owners and managers). The questionnaire revealed that the “improvement of quality” remained the membership’s highest priority, but Engledow, the biologist, resisted framing quality as a scientific question. In his final report, he wrote, “Quality at the present time can only be defined as a conception, more of art than of intellect, of which tea tasters are the repository” (ITA 1936, 59). Further perplexing to Engledow, the power individual brokers held to arbitrate quality seemed only to have been enhanced by the standardization of teawords into a glossary. Here, Engledow saw a “dangerous situation.” As he wrote, “Of the relative monetary importance of the individual components of quality nothing is said” (ITA 1936, 59). No one outside of brokerage firms knew how the then seventy-odd terms were being used to determine prices. Amid this opacity, it was hard to plan for the future. A modern tea market—one that would weather both the depression and the increasingly likely end to the Raj—had to be one in which the numerical scale of price could “stand plausibly for . . . other scales,” such as those used in the cloistered spaces of brokerage (Guyer 2004, 84).

To address this need, the Engledow Commission proposed “a new specification of quality,” in which the professional taster would become “a key-member of the scientific staff” (ITA 1936, 61). For the commission, the objective of scientific investigation should be “to connect cause and effect” (61): to understand the relationships between the sensory and material qualities of tea, as assessed by brokers, and notions of greater or lesser quality, as reflected in market price. The commission gave the example of a hypothetical agronomic experiment that looked at the effects of applications of nitrogen, potash, and phosphoric acid. Such an experiment would need to ask what would happen with varying doses and combinations of the three substances. After doing so,

The whole elaborate experiment must now be consummated by the tasters’ deciding on the quality of tea from every plot. With the present practice the only information in a tasters’ report which has for all teas a constant purport is the price. But price does not meet scientific requirements. . . . Two teas from an experiment may be worth the same price, one being outstanding in one characteristic and one in another. Price would thus not help in connecting individual causes with individual effects. (62–63)

Engledow’s commission proposed a “uniform and analytical system for specification of quality” (62). Brokers would evaluate teas based on a maximum of six quality characteristics, which should then be assessed on a numerical scale, from 1 to 10, using a sample from a control plot as a standard and comparing all other teas to this standard, as “equal to, better than, or worse than the control” (65–69). Engledow was proposing something akin to Harler’s vision of a laboratory-based qualification trial. The broker’s body would become a kind of laboratory instrument, with its measurements calibrated to a known standard (Muniesa and Trebuchet-Breitwiller 2010).

This rendering of bodies as instruments of numerical measurement was increasingly common in European and American corporate food production in the mid-twentieth century. In a marriage of marketing and science that Shapin (2012, 179) 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 subjective qualities of the products they consume. Though Engledow’s proposed experimental system engaged brokers rather than consumers as participants, its design was remarkably similar to those devised by flavor scientists at companies like Arthur D. Little, Inc. (Berenstein 2018; Spackman 2010).

Following the Engledow Commission’s recommendations, the ITA set up a laboratory in London and appointed Dr. A. E. Bradfield to lead investigations designed to correlate chemical compounds to tea brokers’ evaluations. Bradfield’s summary report for the period 1939–1943 describes an experiment in which he took five teas from different regions of the British empire—each judged by brokers to be of better or worse quality. Tea A was an “ordinary Sylhet tea”; Tea B “a very good Upper Assam tea, showing good tip”; Tea C a “high grown Ceylon tea”; Tea D a Doobars tea; and Tea E a Nyasaland tea. This experiment linked “astringent taste,” “thickness,” “pungency,” “brightness,” and “strength” to relative polyphenol content. The two higher-quality teas, A and B, both had similar amounts of “insoluble polyphenols, gum and inorganic salts.” Tea B had a much higher proportion of soluble polyphenols and caffeine. Bradfield concluded that it was “clear that the strength, pungency, and brightness of the liquor from Tea B arises from the presence of this higher proportion of soluble polyphenols.”

This experiment put words and chemicals into conversation with each other. After World War II and Indian independence, tea science remained very much a British project. Dr. E. A. H. Roberts took over the London experiments, assisted by Dr. Donald Wood, a British chemist based at Tocklai, which was still operated by the British-dominated ITA. Roberts and Wood extended Bradfield’s work and isolated
two particular types of polyphenols, theaflavins and thearubigins. They correlated these, in various permutations, to briskness, brightness, strength, and color.

By the 1950s, then, a multisited experimental system for the qualification of tea seemed to be emerging. Teawords, each correlated to some aspect of plantation field and factory production, formed the connective tissue of this system. Not only was the lexicon of teawords now fairly uniform, but its mode of deployment was also taking on the rigid, controlled character of the laboratory. The brewing of tea in tasting rooms in Calcutta was synchronized by precise clocks. Weights of tea and volumes of water, even the crockery out of which tasters slurped their tea, were now tightly regulated. Colonial scientists may not have definitively connected all teawords to chemical correlates, but they did manage to integrate tea brokers and their aesthetic, prestige-oriented practice of “organoleptic trial” into their laboratory trials (Manning 2012). As in the contemporaneous “sciences of subjectivity” that engaged consumers’ bodies in the evaluation of foods and drinks, the design of these hybrid trials for tea presumed that some bodies were more suited than others (by dint of race, gender, or occupation) to acting as experimental instruments (Muniesa and Trebuchet-Breitwiller 2010; Shapin 2012).

As Deborah Heath and Anne Meneley (2007, 594) suggest, these kinds of hybridized technoscientific practices link the production of knowledge to the production of commodity commodities, across historical epochs. As colonial rule came to an end, the Indian government took an active role in pushing for the inclusion of Indian men in the ranks of tea brokerage. As a 1950 report of the Government of India’s Ministry of Commerce and Industry’s Ad Hoc Committee on Tea stated, well-trained tea brokers were “with good personality and manners and with a suitable background,” whom the four brokerage houses then in operation in Calcutta would train (123). Such training, the committee emphasized, “cannot be imparted at the Universities and technical institutions” (122–23). In order to seize some measure of sovereignty over the country’s most recognizable agricultural export, India needed a new class of brokers, plantation managers, and scientists who could inhabit and navigate the infrastructures—both material and linguistic—that had been created by British scientists and industry leaders. Though the habits, terms, and styles of dress of Indian tea brokers today retain a distinct air of Britishness, contemporary brokerage is not simply a process of colonial mimicry. Rather, as my ethnographic material shows, it is a process of actively curating what William Mazzarella (2017) calls a “mimetic archive” of taste, technique, and feeling.

PERFORMING QUALITY

In early June 2009, Mr. Dutta traveled to the Darjeeling Planters Club for a two-day series of tastings with plantation managers. Each year, brokers hold on-site tastings similar to those held at their tasting rooms back in Kolkata. In the tasting rooms, teawords allow brokers and managers to “virtually witness” one another, but visits like Mr. Dutta’s, which took place in an old conservatory in the back of the Planters Club, are about direct witnessing (Shapin 1984). As what might be termed “mock trials,” these live tastings allowed brokers to establish rapport, authority, and trust.

The setup of the mock trial was mimetic in a few senses. Just as in the tasting room at Nilhat House in Kolkata, teas would be set up in rows on long tables. They would be brewed in a precise manner: a consistent weight of dried tea, infused in a pot of near-boiling water for a controlled amount of time (measured by a specially calibrated antique hourglass that was stored in the Planters Club for just this purpose), and allowed to cool long enough for Mr. Dutta to appreciate the range of flavors and aromas within. The routine was already familiar to the assembled plantation managers whose tea was being tasted. One zealous manager even took it upon himself to walk down the table and strain the teas himself, afraid that they might steep too long. Moments before, I watched as he nervously switched the order of the cups back and forth and used a dust rag to clean the inside of the cups that would hold his plantation’s teas. This precision and regularity was itself a legacy of the efforts of colonial scientists to integrate brokerage into the experimental investigation of quality—to make the results of tastings mutually intelligible across space and time. In deference to the prevailing sartorial style of the Planters Club, a social and professional space that also dated back to the British period, Mr. Dutta would hang his white apron not over his tie and gray suit trousers but over a polo shirt and khakis.

In the mock trial, as in the trials that occurred in Kolkata, teawords would be deployed in abundance, but Mr. Dutta would not be giving teas prospective prices. Instead, his purpose was to focus the attention of his audience on improving production. He would be emphasizing the role of teawords as an archive of events that had taken place during that growing season on the various plantations whose teas appeared before him. The resulting event combined elements of an “organoleptic trial,” such as a Friday afternoon wine tasting at a local shop, and a “laboratory trial,” held in controlled conditions and designed to be replicable and falsifiable (Manning 2012).

As Mr. Dutta was tasting the day’s first offering, the manager of Kittibong plantation eagerly asked, “How is the fermentation?” Mr. Dutta said that it was “acceptable,” but he critiqued the rolling. I had met the Kittibong manager before. He often sported bright—and tight—striped polo shirts, but today he added a navy-blue blazer with shiny gold buttons, which made him look more like a cruise director from the 1960s than the manager of one of the region’s most well-known plantations.
Next, Mr. Dutta correctly identified a Pussimbing clonal tea among Kittibong’s offerings (clones are named after the plantation where the bush originated). “It used to be that only Pussimbing could make this tea,” Mr. Dutta said approvingly after he tasted it. The manager in the blazer used his mobile phone to snap a few pictures of Mr. Dutta as he spoke.

Reviewing Kodobari plantation’s offering, Mr. Dutta judged that its second flush teas, because they were harvested later in the season, should have a stronger character. They were too light and floral, like the first flush teas harvested at the start of the season. Mr. Dutta had told me a few months earlier in Kolkata that it was up to each planter to look at his plantation’s raw material and process it in any way that would “bring out its innate qualities.” Planters had to experiment. They could not process tea in the same way to look at his plantation’s raw material and process it in a way that would “bring out its innate qualities.” Planters had to experiment. They could not process tea in the same way throughout the year, or even throughout the week. Manufacturing methods had to be constantly tweaked to react both to variability in botanical material and to the steady warming of the Himalayan climate.

They moved on to teas from Amilopani plantation. “Poor sorting. Mixed,” Mr. Dutta noted on multiple invoices. “These are muscatels?” he asked, shaking his head disapprovingly.

He picked up the dried leaves from a tea he had already tasted and compared them to those from a tea offered by Amilopani. “See the evenness?” he asked the Amilopani manager. “Absolute right wither.” He picked up a tea from another plantation and told the Amilopani manager, “Try to maintain something like this. Sorting of the leaf is crucial.”

Mr. Dutta then tasted a second Amilopani tea, put it down, and tapped the rim. “Firing … a little on the high side. Bakey.”

He pulled out a third tea. “Attractive leaf.” He moved down to the next invoice and acknowledged an improvement over his last tasting back in Kolkata. “Leaf is better … more even. Not as much brown leaf.”

“What about the fire?” the Amilopani manager asked expectantly.

“It’s ok [Teek hat],” Mr. Dutta said noncommittally, bobbing his head.

As Williams ([1976] 2015) notes in Keywords, the word “expert” is derived from the Latin experitus, meaning “to try.” The first English iterations of the word “expert” were closely related to the connotation of “experience” (Carr 2010, 25). As he tasted, Mr. Dutta set aside a few samples as “standards.” Using his palate as an instrument, Mr. Dutta was able to select certain exemplary teas from those on offer against which he could measure others (Muniesa and Trebuchet-Breitwiller 2010). This standard-selection, too, reflected the experimental model that originated with the work of colonial chemists. Because of tea’s complexity and variability, it was impossible for Mr. Dutta to know in advance what might count as a standard on this particular day, in this particular season. Experiences of trial and surprise are essential in the production of quality tea because teas often do not taste, look, or feel the way that brokers think they should. This is why Mr. Dutta needed to convince the managers to think experimentally: to see their plantations as something like “experimental systems” (Rheinberger 1994, 1998). Experimental systems, as understood in STS and in the anthropology of food, are open ended (Fischer 2007; Roosth 2013). Though their components, like those of a farm or factory, are rigidly choreographed, those who participate in them also must be prepared for surprises.

Indeed, when he took up the next plantation’s invoices, Mr. Dutta was surprised. “The bloom [sheen, luster] is more prominent on [invoice number] 44. I never expected to see this kind of leaf . . . . We used to always say that Gompabari was poorly fired, but now taste this . . . . Bahut smooth hai,” he said, mixing the English term smooth into his Hindi aside. “Every time you taste it, it gets better. Fine. Good clone.”

Later, he compared teas from two other plantations, Simibari and Burnside. He tried to convince the manager of Simibari that his leaf looked “all chopped up.” In reply, the manager of Simibari quickly pointed out the brown leaf in Burnside’s invoice.

“At least it is whole leaf. See the bloom?” Mr. Dutta asked, pointing out the sheen and luster of the dried leaf. “At least it looks like a leaf.”

With the manager of Simibari suitably chastened, Mr. Dutta continued to the next invoice. “A little black, coarse liquor. Slightly lighter [fire] and flavor may be nicer.” After hearing Mr. Dutta’s critique on several invoices, the Simibari manager finally backed down and vowed to do better. In the mock trial, the glossary, as an “intersubjectivity engine,” forges a shared sense of tea’s qualities (Shapin 2016). As an experimental process, the trial builds mutual trust among plantation managers in brokers’ evaluations. In the months that follow the mock trial, managers affirm this trust by continuing to send teas produced by the plantations on which they work to the brokerage houses represented by the brokers who visited them. The mock trial, as an active re-integration of the spheres of brokerage and management in the project of producing quality, is thus itself a market-making event.

Near the end of the session, Mr. Dutta invited the managers to taste. They all grabbed at the cups, particularly those Mr. Dutta had approvingly evaluated. Unlike Mr. Dutta, the managers slurped messily. Whereas the broker’s procedure was to neatly spit his sip of tea into a discreetly placed bucket, the managers spit their tastes out the windows of the conservatory. Mr. Dutta invited the managers to smell a pile of steeped leaves. “Aroma is important,” he reminded them, pressing his index finger into the middle of the pile and making a little divot, where he buried his nose and reemerged with wet leaf stuck to his lip. The managers all then tried to smell, some with such gusto that they, too, got leaves stuck to the tips of their noses.

The manager with the shiny gold buttons commented that one tea tasted like a duppi tree. Mr. Dutta gave him a confused look. The manager explained that duppi (Japanese...
cedar or Cryptomeria japonica) was the signature evergreen tree that dotted the Darjeeling landscape.

“A little green-ish,” Mr. Dutta corrected, accentuating the use of the appropriate teaword. “What’s the fermentation?” he quizzed. Unsatisfied with the manager’s response, he said, “You can increase the fermentation a bit, maybe 10, 15 minutes more—and higher on the fire.” The planters in attendance nodded in unison.

Though the planters were clearly doing their own mimetic work in attempting to slurp, spit, and smell tea like Mr. Dutta, organoleptic and stylistic behavior was not enough. In their proper deployment, teawords could become vehicles for experimenting with the very production of tea. Mr. Dutta’s purpose, then, was to use practices of mimesis, drawing together resonances of the laboratory and the drawing room and the factory, to discipline both planters and the tea they grew (Mazzarella 2017). Mr. Dutta had to exude an air of connoisseurship in order to bring out a willingness in his audience to experiment in the field and factory.

This co-construction of teawords and their material referents is what differentiates the mock trial at the Planters Club from organoleptic trials like wine tastings. In wine tastings, lexical registers are deployed in patterned and meaningful ways that link disparate sites (i.e., fields where place confers terroir and shops and restaurants where terroir is imbibed) (Silverstein 2006). Wine words are embodied insofar as their correct usage (along with correct dress, mannerisms, etc.) affirms belonging in a cloistered community of experts.12 As they are deployed in tea tasting, by contrast, lexical registers demand not a consumptive disposition to productive conditions but a managerial one. This is because teawords matter for the evaluation of teas that will not reach the cups of mass consumers until they have been blended.

The overwhelming majority of the teas being considered at the Planters Club would only be marketable if their particular qualities could be blended further down the commodity chain with the particular qualities of other teas. The planters’ willingness to cultivate a style of connoisseurship was intimately linked to their willingness to experiment in the cultivation of tea itself. Because the growth, plucking, and processing of tea all happens on plantations, the materiality of language thus extends to the bodies of plantation laborers—in Darjeeling, the predominantly Nepali women who, for generations spanning back to the British period, have tended to the rows of tea bushes that line the hillsides (Besky 2014; Shankar and Cavanaugh 2017).

CONCLUSION

While quality in capitalist markets is frequently posited as an end in itself, this is not always the case. In the colonially derived plantation system that produces mass-market tea, quality is less an endpoint than a material and semiotic variable, one that can be viewed and manipulated at a variety of sites. Quality is not just a slippery concept because it is inevitably subjective; it is a slippery concept because it is the result of changing material relationships. Stabilizing quality, then, requires not only disciplining feelings but also disciplining soils, machinery, and bodies. As I have argued here, language is essential to that discipline. As anthropologists have shown elsewhere, lexical registers imbue the slippery notion of quality with a capacity to travel from spaces of production to spaces of consumption (Manning 2012; Silverstein 2006). This article’s ethnographic and historical attention to the colonial and postcolonial blending of science, connoisseurship, and management shows how quality’s travels through the intermediate spaces between production and consumption are also crucial to the operations of capitalist markets.

The “experimental system” that qualifies tea before it goes to auction involves an “interrelated set of devices,” from teacups to test tubes; “forms of practice and organization,” from chemistry to brokerage; “and conceptual frames,” encapsulated in terms like brightness and character (Jensen and Morita 2015, 83; Rheinberger 1994). If we see the quality of food and drink as a matter of experimentation, it might be possible to link this kind of quality to quality as imagined and practiced in other areas, from the construction and maintenance of water systems (Ballestero 2019; Spackman and Burlingame 2018), to the circulation of pharmaceuticals (Banerjee 2017; Hayden 2007), to the selection of the concrete, metal, and wood that make up houses and office buildings (Shapiro 2015).

The quality that emerges in the experimental interplay between teawords, chemicals, managerial strategies, polo shirts, decorum, and Indian tea itself can be informative for how anthropologists frame industrial capitalist projects. At various points in this article, I have used the term system to label those projects, creating my own linguistic linkage to the notion of a system as developed in STS. More familiar to anthropologists, perhaps, are the terms “commodity chain” or “supply chain.” Drawn from the lexicon of organizational sociology, these terms evoke a thinkable, workable economic space.

Even though the chain is metaphorical in business, in anthropology it has been effective in drawing attention to the hidden material ways the social lives of people and things are connected. But if, as I have suggested, quality is constantly produced experimentally, in nonlinear engagements among bodies and materials, then it may be necessary to think beyond metaphorical “chains” to what Michelle Murphy (2013, 104) calls “patterned conjunctures,” the spatial arrangements of relationships that draw humans, things, words, and nonhumans together. The quality of tea (or water or pharmaceuticals or logged timber) is shaped by the materials and means by which it moves around the world, yet these materials and means are unstable, perishable, and reactive. While tea plantations might seem like relics of colonial production, they are spatial arrangements that must be continually and experimentally rearticulated.

As Murphy (2006) has noted in her study of indoor air quality, ways of perceiving and describing the world are
also thoroughly raced and gendered. “Perceptibility,” Murphy suggests, is made in “regimes”—disciplinary regimes that cross-cut the sciences, political regimes that govern colonies and postcolonies, and semiotic regimes that link labor and subjective judgments about the quality of air, of food, and of life itself (Murphy 2006, 2017). Brokerage—with its attendant glossary—is one such regime, a disciplined form of knowledge that enables not only quality but also the plantation itself to become thinkable and knowable. Attention to how language matters in the in-between spaces of commodity chains, then, can help account for the persistence of industrial capitalist systems over time. Such attention can shed light on why the plantation continues to be the answer to the question of how “quality” tea is produced.

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NOTES
Acknowledgments. This research was funded by the American Institute of Indian Studies, the Fulbright-Hays Program, the University of Michigan, and Brown University. Much of the writing took place under the auspices of a Wenner Gren Hunt Fellowship. Thank you to colleagues in the Department of Anthropology at the University of Pennsylvania for the generous engagement with this article. Additional thanks to Dwaiipayan Banerjee, Ashley Carse, Poulomi Saha, and Aarti Sethi for their comments on an earlier draft of this article and to Alex Nading for his reading of this argument in various stages of incubation. I am also particularly indebted to the thoughtful and exceptionally thorough comments from the anonymous reviewers and Deborah Thomas. Any errors or omissions are my own.

1. Brokerage is critical to the circulation of Indian tea (and to the tea grown in East Africa and Sri Lanka as well), but as I have explained elsewhere (Besky 2016), tea’s radical specificity means that tea brokerage is not easily compared to other forms of commodities trading.

2. Though space prevents developing this point here, it is noteworthy that many teawords reference what linguistic anthropologists call qualsa, “sensory experiences of abstract qualities such as heat, texture, color, sound, stink, hardness, and so on” (Chumley 2017, 51). Attention to qualsa “enables anthropologists to consider ethnographically what is continuous semiotically across and within practice” (Harkness 2015, 574–75; see also Gal 2013).

3. This is a goal Harler shared with the University of California, Davis scientists who developed the Wine Aroma Wheel that links wine’s flavors to linguistic referents (Shapin 2012, 2016).


5. BL Ms Eur F174/904, cover letter from the ITA on the revised glossary (1935).

6. BL Ms Eur F174/904, cover letter from the ITA on the revised glossary (1935).


8. Callon, Méadel, and Rabeharisoa (2002, 212) refer to such tools as “distributed cognition devices” (see also Mol 2009).


12. “Taste communities,” according to Shapin (2012, 179), “coalesce around practices . . . that refer to mutually accessible external properties as the causes of internal states. These taste communities are neither universal nor easy to join, but then neither are the thought communities of particle physics and genomics.”

REFERENCES CITED


