

Constructing quality: The multinational histories of chocolate

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Abstract

Geographic research on food quality, while considering many of the ways in which quality is socially constructed, has largely focused on the place-based aspects of the raw materials of food production. Here, we use French convention theory to look at a highly processed food in order to show how place associations in the social construction of food quality extend to manufacturing. For chocolate, quality is based on material characteristics whose relative importance in determining quality depends on the country in which different stages of economic innovation took place. Struggles over the definition of quality chocolate, as exemplified by the “European Chocolate War,” show how quality issues are connected to geographies of manufacturing and innovation.

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“Geography is a flavor.”

—Starbucks in-store advertisement

1. Introduction

Geographers and sociologists have shown how food quality is both socially and materially constructed in a number of different ways. Studies of the agro-food industry have demonstrated how biological constraints distinguish this industry from others, including the ways in which quality is defined (Marsden, 1997; Murdoch et al., 2000; Winter, 2003). In some cases geographical characteristics also help to determine what counts as quality wine, cheese, produce, or other foodstuffs (Ilbery and Kneafsey, 2000b; Mansfield, 2003a,b). Small-scale producers are increasingly relying on connections between place and product as an indicator of quality or even to define a product, such as Champagne or Stilton cheese (Treager et al., 1998; Parrott et al., 2002;

Barham, 2003). Though these connections are often in the name of “alternative” food provision and “community” (Hinrichs, 2003; Whatmore et al., 2003), economic considerations are more likely at the heart of linking food to place, whether by local producers or national or supranational organizations attempting to lift up lagging rural regions (Renting et al., 2003; Winter, 2003), or large corporations capitalizing on connections to place (as in the opening quotation).

Researchers have emphasized the need to connect place and quality throughout the commodity chain because quality is defined differently at different points in the chain based on power relationships between different actors (Murdoch et al., 2000; Fold, 2000; Mansfield, 2003a). In this article, we focus on the later links in the cocoa-chocolate commodity chain, analyzing the chocolate industry as an example of an industry where definitions of quality are closely connected to the places where the chocolate is manufactured, rather than where the raw materials are sourced. As we argue, chocolate quality is based on variations in processing and manufacturing, including the blend of ingredients used by different processors (such as the

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percentage of cocoa solids or milk) and the emphasis placed on different stages of the manufacturing process (such as the length of conching). The extent to which those material characteristics matter is based on history: which country invented which step of the process, and the mix of ingredients the leading manufacturers use. By this argument, the Dutch are known for their cocoa powder and non-sugary chocolate since they invented cocoa powder; the Belgians, who first developed candies consisting of soft centers enrobed in harder chocolate, are known for these pralines; the Swiss have notably smooth chocolate because they invented the conching process; and Spanish chocolate is most similar to that originally brought over from Mexico, including its liquid form. This is not to say that these innovations were not later adopted in other locations, but simply that regional differences in the definition of “quality” chocolate are closely tied to where particular innovations were *first* introduced.

The most important material characteristic in determining the quality of chocolate is the percentage of cocoa solids in the final product (Fabricant, 1998). The so-called European Chocolate War centered in part on controversy over using the percentage of cocoa solids as a definition of chocolate quality, or even as the definition of chocolate. This decades-long disagreement consisted of two issues: whether vegetable fats other than cocoa butter (CBEs, or cocoa butter equivalents) could be allowed in chocolate, and what the appropriate percentages are of milk and cocoa solids in milk chocolate. Countries lined up on either side of the conflict based on the practices of their predominant chocolate manufacturer(s). Quality chocolate as defined by manufacturers and consumers is thus based on arguments concerning not just place identity, but national identity.

In the next section of this article we provide background on the literature from which we are drawing. We focus in particular on convention theory and its four-part framework for explaining the different ways in which quality is defined. In the third section we discuss the history of chocolate and chocolate manufacturing, with an eye towards explaining how innovation in the production process occurred across space. As the chocolate industry is notoriously secretive, making it impossible to obtain detailed information about methods and recipes directly from the manufacturers (Brenner, 2000), our information is drawn from secondary sources. Next, we explain how the European Chocolate War exemplifies the social construction of food quality from the manufacturers’ and consumers’ points of view. In the discussion section we show more explicitly how these aspects of chocolate and chocolate-making fit into the literature on food quality. By examining the history of chocolate production and the Chocolate War, we contribute to the literature on food quality by looking at how quality is socially constructed not in terms of the origin of raw materials (because the origin of cocoa beans is rarely an issue for the consumer in defining quality chocolate), but in terms of the method of processing those ingredients and the national histories of manufacturing.

2. Food quality

Collaboration between agricultural and economic geographers and rural sociologists has explored the relationships between nature, culture, and economy as exemplified in the agro-food industry. The definition of “quality” in particular shows the complicated ways in which social, economic, and ecological factors interact with each other. At various links in the commodity chain, producers, retailers, or consumers define quality (Fold, 2000). Those different definitions reverberate back and forth across the chain, changing the ways in which food is produced, marketed, and consumed. Therefore, different geographies of quality result depending on how and where quality is defined. Because of increasing consumer concern over where and how food is produced, as well as the unique biological characteristics of plant and animal products, it has been argued that the agro-food industry cannot be analyzed with the same political economy methods as other industries (e.g., Murdoch et al., 2000). Rather, attention needs to be paid to how ideas of quality are constructed based on social as well as biological characteristics, and how this differs across space and among different actors in the commodity chain (Mansfield, 2003c).

One particularly useful approach to analyzing quality in the agro-food industry has been French convention theory, which shows how different rules and norms apply at different points along the commodity chain according to different regimes (Murdoch et al., 2000; Fold, 2000; Daviron, 2002; Ponte and Gibbon, 2005). Convention theory argues that the rules and norms that govern economic transactions at various points along a commodity chain (or global value chain) are not pre-given, but emerge through interactions between various actors in the chain (Raikes et al., 2000; Ponte and Gibbon, 2005). Because these rules or regimes emerge through interaction, they are open to being challenged, though more powerful actors usually play a larger role in defining them. Each regime or “world” determines how quality is to be thought about, discussed, and defined: “there is no ‘universal’ understanding of quality...quality is cognitively evaluated in different ways depending on what ‘world’ is used to justify evaluation and action—and hence on which broader normative order is invoked” (Ponte and Gibbon, 2005, p. 7).

Research on food quality has explored four of these regimes. First, under the market-based regime, price is the determinant of quality: consumers prefer cheaper products (and manufacturers prefer cheaper raw materials). Second, the industry-based regime sees the standardization of physical characteristics as the most important factor in determining quality. Hygienic production or cleanliness is one of the most important variables used in industry-based regimes, as is regular size and shape for automatic processing or consumer aesthetics. Standardization by grade is a relatively new phenomenon, dating to 1925 for cocoa (Daviron, 2002). Struggles over the meaning of quality under this regime have to do with determining what physical charac-

teristics should be measured, and what the quantitative standards should be. To facilitate international trade, these standards are usually determined at the national scale or above.

Third, actors operating under the domestic-based regime put trust and interpersonal connections at the forefront of determining quality. This may include transparency throughout the manufacturing process, direct contact with the producer as with farmers' markets or community-supported agriculture (Cone and Myhre, 2000; Hinrichs, 2003), official appellations that link quality to place (Ilbery and Kneafsey, 2000a; Barham, 2003), or brand name. European Union programs to encourage specialty agriculture as a means of developing rural regions are another example of this, since they equate place association with a competitive edge (Treager et al., 1998; Skuras and Dimara, 2004). Likewise, food tourism explicitly links food production to place and economic development (Bessiere, 1998; Telfer, 2001). Place associations may even be used inversely, as with the US–Vietnam dispute over “catfish,” in which US catfish producers stated that foreign fish could not be trusted (Mansfield, 2003c; Duval-Diop and Grimes, 2005). It is important to note that domestic-based quality is nearly always based on a region or city rather than a country (e.g., Parma ham, Champagne, or Gouda cheese), with coffee and chocolate as exceptions.

Finally, civic-based regimes are concerned with the environmental and societal implications of food production. Products are considered to be high-quality if they are produced in an ethical and/or environmentally-friendly fashion. Fair-trade coffee (Ponte, 2002), organic produce (Guthman, 2004), and direct links between the consumer and producer (Winter, 2003) are all examples of this, as are the consumer-driven changes in the agro-food system in recent years towards greater transparency and accountability (Watts et al., 2005). Here, struggles over what quality means focus not on the physical characteristics of the product, but where and how it was made. The controversy over the definition of organic food by the US Department of Agriculture (USDA) is an excellent example of this (Guthman, 2004).

A multitude of different commodities have been studied in the agro-food literature using the convention theory approach, including cocoa and chocolate. Previous work on the construction of quality in the chocolate industry investigated the perspectives of different actors throughout the commodity chain (Fold, 2000, 2002). Shea nut producers, CBE manufacturers, chocolate manufacturers, and consumer spokespersons each define quality with regards to their own component of the commodity chain. These different definitions of quality exist in part because of “the different nature of the product in the specific segment of the chain: the transformation from a simple raw material (shea nut) to a valuable intermediate good, then to a mass consumer good in which the original substance is mixed with other processed—but pure—raw materials” (Fold, 2000, p. 108). Definitions of quality cocoa are altered by a changing

political economy (e.g., liberalization in Côte d’Ivoire), technological innovations that allow grinders to compensate for lower-quality beans, and centralization of certain activities in fewer but larger firms (Fold, 2001).

Fold begins with an argument similar to ours: “Differences between chocolate types in the European countries result from different national traditions in the way chocolate is produced and consumed...But these national traditions are not based solely on different national tastes and eating habits. The differences are also socially and commercially constructed” (Fold, 2002, p. 93). Fold supports this with the percentage of CBEs that different countries allow to be part of a chocolate product. By extending his argument to include the history of the production process of chocolate, we show that it is not just the recently debated use of cocoa butter or CBEs that define quality chocolate, but a longer history of manufacturing and innovation that is tied to particular countries. It is to that history that we now turn.

3. History of chocolate and basics of production

Chocolate is an unusual food in that its raw materials are produced in a different part of the world than where the final product is manufactured and consumed. While this is true of several products with tropical origins due to patterns of colonial-era political economy, the unique characteristics of chocolate and cocoa contribute to its geography of production, along with escalating tariffs on raw or processed cocoa beans (Smith, 2002). Cocoa trees only grow within the 20° latitudes, as they require even temperatures, year-round precipitation and midges for pollination (Coe and Coe, 1996). However, since the melting point of solid chocolate is 97°F (36°C), just below body temperature, chocolate production is significantly cheaper and easier in northern climates (Richardson, 2003). Its status as a luxury food also means that consumption is largely restricted to the northern, developed countries (Khodorowsky and Robert, 2001).

Cocoa is native to Central America and was first consumed in liquid form and with spices by the elite of the Aztecs and Mayas (Coe and Coe, 1996). When the Spanish brought cocoa back to Europe, they added sugar and old-world spices to please the local palate, and warmed it for the cooler climate. It is still a matter of debate whether drinking chocolate spread to the rest of Europe via Jews fleeing Spain, networks of monasteries and clerics, or the marriage of Spanish and French royals (Coe and Coe, 1996). However, it is clear that by the mid-18th century, chocolate was being drunk from England to Italy. Nevertheless, cultural and political differences were already at work. After years of debate, the Pope decreed that chocolate did not count as food because it was a liquid, and thus could be consumed during Lent (Khodorowsky and Robert, 2001). While this decree contributed to its spread throughout southern Europe, the Catholic connotation meant that Germans, the Dutch, and Scandinavians continued to

drink coffee. Similarly, the Portuguese continued to drink tea rather than the beverage of their Spanish rivals (Richardson, 2003).

The Industrial Revolution brought two major changes to the chocolate industry that greatly influenced chocolate production and consumption. First, in the late 18th century, Joseph Fry of England used a steam engine to grind cocoa beans. This mass production and processing made the product affordable to the average person (Coe and Coe, 1996). More important, however, was the application of industrial production methods to the manufacture of chocolate, including making use of what had previously been considered waste products in the name of efficiency. Cocoa beans consist of approximately 50% cocoa butter. The boiling-and-skimming method of separating the cocoa butter from cocoa solids did not completely remove the fat. In 1828, the Dutch chemist van Houten invented a hydraulic press that separated the fatty cocoa butter from the dry cocoa solids, which could then be ground into cocoa powder, improving the quality of drinking chocolate. However, this process left approximately 30% of the cocoa bean as waste in the form of cocoa butter. At the same time, Fry and Sons had been trying to figure out how to process chocolate into solid form. It was the addition of the excess cocoa butter, instead of water, that allowed the mixture of cocoa solids and sugar to achieve the right consistency and taste to make solid chocolate (Coe and Coe, 1996). In 1847, the production of solid chocolate started in Great Britain, though it was not until the early 20th century that it outsold drinking chocolate (Richardson, 2003).

By the mid-1800s, the increasing demand for cocoa beans had led to the introduction of the plant in Portuguese, British, and Dutch colonies in Africa and Asia. This increase in supply led to a fall in the price of cocoa and chocolate, making it an even more commonplace food. The chocolate bar, however, was still in need of refinement because the milk it contained made it a perishable product. In 1897, two different innovations in Switzerland solved this problem and led to solid chocolate overtaking liquid in terms of sales. Daniel Peter, a chemist, used Nestlé's recent innovation of milk powder to eliminate the perishability issue. Nearby, the Lindt Company invented a process known as conching, which involves heating and rolling the cocoa solids and butter with large granite rollers in order to break down sugar crystals and create a smoother product. Swiss chocolate, under law, must be conched for at least 72 hours; chocolate made in the USA is usually conched 18 hours or less, or not at all, leading to a grittier taste (Rinzler, 1977). The length of conching can therefore be seen as one indicator of quality chocolate.

In recent years, the percentage of cocoa solids has become another important standard in defining chocolate quality. *Chocolatiers* have decreed that the higher the percentage, the "better" the chocolate (Fabricant, 1998). This means correspondingly less sugar and milk, and thus a stronger, less sweet chocolate flavor. Though consumer preference tests show a leveling off at 50–60% cocoa solids

(Januszewska and Viaene, 2001), *chocolatiers* produce bars with up to 75–85% solids and consider those to have the most sophisticated taste. For example, Terrio gives an account of a tasting where she observed an audience of 250 preferring the sweetest sample, which had only 35% cocoa solids (Terrio, 2000). However, the *chocolatier* running the event told the crowd as they were tasting that the samples with a higher percentage of cocoa solids were "better." Even though a high percentage of cocoa solids results in a "better" chocolate by these standards, mass-market chocolate manufacturers try to minimize the content of the most expensive raw material—cocoa—in order to save expenses.

As this discussion shows, the history of chocolate manufacturing explains in part how the quality of chocolate is defined. However, as with many other foods, the earlier links in the commodity chain also play a role in determining chocolate quality, although in different ways than for many other foods. The modern-day commodity chain of chocolate starts in one of a relatively small list of countries where cocoa beans are grown (Table 1). Smallholders dominate this stage of the process, with over 85% of cocoa worldwide being produced on farms of less than two hectares (Fold, 2000). Because of the number of smallholders involved, 11 million in West Africa alone, the geographic identity of the beans is largely lost in the grinding process (Tiffen, 2002). Leiter and Harding (2004) have argued that Ghana is the only cocoa producer whose beans can be traced throughout the production process because unlike Latin American producers, their labor was not coerced, and thus a better relationship existed between the skilled laborers, the growers, and the grinders. On the other hand, Fold (2002) argues that Ghanaian cocoa commands a price premium because of the "careful fermentation and drying processes carried out by farmers on a well-established quality control and standardization system throughout the chain" (pp. 231–232), and the higher fat content and richer flavor of the variety of bean grown in Ghana. Cadbury is the only major chocolate manufacturer who insists on maintaining a consistent source of its cocoa beans, and that source is Ghana (Fold, 2000). However, the variety of environments and production sites within a country may mean that a national label of origin is not useful. As a founder of Scharffen Berger chocolate put it, "To say, here we have single-origin Madagascar or Trinidad, and leave people with the impression that this is what beans from Madagascar or

Table 1
World cocoa bean production by country and region, 2001–2002

Country or region	Percent of world production
Côte d'Ivoire	46
Ghana	12
Other Africa	11
Indonesia	17
Other Asia	3
Brazil	4
Other Latin America	7

Source: ICCO (2003).

Trinidad taste like, is misleading” (Severson, 2006). For most manufacturers, therefore, the origin of the cocoa bean is only a secondary concern.

As with many confectionary products, chocolate manufacture usually started out as a cottage industry, often within apothecaries or chemists (Richardson, 2003). In recent years, however, chocolate manufacturers have centralized to the point where about half of the world output is produced by 17 companies (Fold, 2001). The big three are Nestlé of Switzerland, Mars of the USA, and Cadbury Schweppes of the UK. In some European countries, however, the method of artisanal production is as important as taste in determining where consumers buy their chocolate. The French and Belgian industries in particular rely on small-scale production of individual chocolates rather than bars of solid chocolate (Terrio, 2000). There are also tiny (but growing) quantities of organic, fair-trade, and varietal chocolate on store shelves, the latter attempting to link place to quality by using beans from individual plantations. Most chocolate, however, is produced by one of the large multinationals, so that neither the origin of the bean nor artisanal manufacturing contribute significantly to the understanding of quality for the average consumer.

As becomes clear from this discussion, there is a double disconnect in the chocolate commodity chain. The producers of cocoa, smallholders in developing nations, rarely consume the final product based on their labor. Consumers, mostly in developed nations, have no way of tracing back the origins of their chocolate bar to a particular country, much less a particular site of agricultural production. This lack of transparency in the early stages of the commodity chain means that “quality” from the consumers’ perspective must be defined based on the manufacturing process, in particular on how it determines taste, texture, and other material properties of a bar of chocolate. Therefore, variations across space in chocolate quality are determined by different national histories of innovation and the different understandings of quality that result from them. The following section demonstrates this via the Chocolate War in the European Union.

4. The Chocolate War

Since the geographical origin of the ingredients is not the primary determinant in quality chocolate, the mixture of the ingredients and the manufacturing process are what matter most. These include conching time, the percentage of cocoa solids used, the percentage of milk, and the use of vegetable fats other than cocoa butter (CBEs). The so-called Chocolate War in the European Union focused on two issues: whether vegetable fats such as palm oil or shea nut butter could be substituted for cocoa butter, and what percentage of milk could be allowed in milk chocolate. This debate brought to light issues of not only what quality means, but how “chocolate” itself is defined.

In 1973, when the United Kingdom, Ireland, and Denmark entered the EU, the original six member states (Germany,

France, Italy, Belgium, Luxembourg, and the Netherlands) forbade any non-cocoa “additives,” meaning CBEs. After long negotiations, the three newcomers, along with later entrants Austria, Sweden, Portugal, and Finland, obtained exemptions to the regulations, allowing them to use any of six vegetable fats. Chocolate was actually one of the first areas of contention where states conditionally agreed to join the EU as long as their demands were met (Andrews, 1997). However, the original members of the EU insisted on the purist approach and decided that chocolate with CBEs could not be sold under the label of “chocolate” within their borders. The result was the “Two Chocolates Policy,” which endured as a temporary measure for nearly 25 years (McNeil, 2000). A similar “Two Milk Chocolates Policy” required a minimum of 25% cocoa solids in milk chocolate as a way of capping the percentage of milk at 14% in most EU member states, while the British and Irish formula (produced by Cadbury in particular) was based on 20% of each (Morrison, 2000).

By the late 1990s, as the EU moved towards ever-closer integration, increasing pressure to standardize European economic regulations had been felt by producers of numerous commodities, including feta cheese, sherry, and gouda cheese (Andrews, 1997). Meanwhile, the chocolate issue was exacerbated in 1997 when Cadbury Schweppes was sued by the Swiss chocolate manufacturers Suchard and Lindt and the Swiss chocolate trade association, Chocosuisse. Their contention was that a Cadbury product known as Swiss Chalet, whose wrapper pictured the Matterhorn and a Swiss village, tricked the consumer into thinking it was Swiss-made chocolate. Not only was the chocolate not as smooth as Swiss chocolate (presumably it was not conched for as long), but Cadbury used less cocoa as well as CBEs, the very points of contention in the Chocolate War. The British High Court agreed: “A substantial number of members of the public who regard Swiss chocolate as the name for a group of products of repute will be confused into thinking that Swiss Chalet is a member of that group” (Mason and Willman, 1997). Cadbury pointed out that their product line included Turkish Delight, Old Jamaica (chocolate with rum-soaked raisins), and Grand Seville (chocolate with bits of orange), and there was no confusion involved with those products (Beveridge, 1997). However, Jamaica and Seville are not connected to high quality chocolate, so no misunderstandings were likely to occur. What is significant about this case is that the judge’s ruling indicates that *place matters* in determining quality chocolate, where place means not just marketing associations or the source of raw materials, but the site of chocolate manufacture.

The European Parliament ended the Two Chocolates Policy a few weeks later, decreeing that while British and Irish producers could put up to 5% CBEs in their chocolates and include a higher percentage of milk, they had to label it as containing CBEs and/or as “milk chocolate with high milk content.” While this was more appealing than the terms “household chocolate” or “vegetate” suggested by the French and Belgians, the compromise was not good

enough for the British. When the European Parliament revisited the issue in 2000, they yielded to British pressure and changed the labeling requirement to “family milk chocolate,” while still allowing the 5% of vegetable fat in all chocolate products, and up to 20% of milk in milk chocolate. Spain and Italy continued to deny British chocolate access to their markets on the grounds of consumer protection, but in 2003 the European Court of Justice ruled they were violating EU trade laws. The Chocolate Directive, adopted in August 2003, set these rules in stone (Timms, 2003), effectively allowing British manufacturers to overcome the efforts of other countries to define high-quality chocolate.

Throughout this process, arguments against allowing CBEs were made on three grounds. First, there was the Belgian and French point of view that British chocolate makers were trying to cut corners by using cheaper ingredients. CBEs cost considerably less than cocoa butter, and multinational corporations such as Cadbury, Jacobs Suchard, and Nestlé favor them, which is why CAOBISCO (Association of the Chocolate, Biscuit & Confectionery Industries of the EU) supported their use (CAOBISCO, 2005). Anti-CBE groups argued that small, traditional chocolate manufacturers (particularly French and Belgian *chocolatiers*) would be priced out of business if the multinationals were allowed to use CBEs.

A second argument concerned the sourcing of raw materials. French parliamentarians raised the concern that if CBEs were allowed, the economies of former colonies such as Côte d’Ivoire and Ghana would collapse with the falling demand for cocoa beans and cocoa butter. However, this argument was countered by pointing out that other African countries such as Mali and Burkina Faso would benefit from the increased demand for shea nuts and shea nut butter (Africast.com, 2000).

The third argument, backed by Spain and Italy as well as France and Belgium, was that chocolate made with any fat other than cocoa butter was a fraud: in the words of a French *chocolatier*, “[this] chocolate is no longer chocolate” (Tagliabue, 2003, A4). This argument considered CBEs as something not part of the original recipe, and therefore an impurity. The quality of chocolate would be damaged to such an extent by allowing an adulteration of the product that it should have a different name altogether (thus the bizarre suggestion of the label “vegelate”). French *chocolatiers* suggested that chocolate meant something different in each country because of consumption habits, and that the high standards of French chocolate would be meaningless if adulterated products were allowed (Tagliabue, 2003). This was the argument the Swiss chocolate manufacturers used to win their lawsuit against Cadbury, and it was on the basis of this argument that Italy and Spain required British-made chocolate to be labeled as “chocolate substitute” for what they claimed to be consumer protection.

The UK led the pro-CBE faction, making two main arguments. First, they denied the charges of using CBEs merely to cut costs. CBEs had long been used by Cadbury

and its predecessors because of their more uniform nature and higher melting point. A British member of the European Parliament argued that “We aren’t talking about synthetic substitutes just to make cheaper chocolate... Historically, this is the way the British make their chocolate” (Andrews, 1997, A3). This argument was also used in regards to the percentage of milk allowed in milk chocolate, since Cadbury uses a considerably higher proportion of milk than other chocolate manufacturers. Secondly, the British argued for consumer choice. “If they really find our chocolate that bad, they don’t have to buy it,” said a Cadbury spokesman (Andrews, 1997, A3). In keeping with the neo-liberalization of trade laws and practices throughout Europe (and the world), this argument held that the market is the final arbiter of taste and quality, and as such should be allowed to run unfettered.

In the end, the British won the trade conflict by maintaining their access to foreign markets, although this victory was tempered by the labeling requirements. As we will discuss below, the Chocolate War exemplified the main argument of convention theory, that struggles over determining quality are based on disagreements over whether a set of norms and practices should be based on market, industrial, domestic, or civic ideals. Nevertheless, the Chocolate War also showed that place matters in the formation of quality, although in terms of the location and history of manufacturing rather than in terms of the sourcing of raw materials.

5. Quality and chocolate

For a highly processed food such as chocolate, it is not surprising that it is the manufacturing process, not the raw materials, that primarily determines quality. Unlike other products examined in the food quality literature such as coffee, catfish, or wine, chocolate is a mixture of different ingredients, and the proportions of the mixture is as important a factor in “quality” as the nature of the substances themselves. Nevertheless, place still matters in determining quality. In this case, it is the national location of innovation that determined the methods of production, and thus the way that chocolate “should” taste. According to convention theory, it is when actors from different stages of the commodity chain come into contact with each other that regimes and definitions of quality are contested. The case of the Chocolate War demonstrates this well.

During the arguments that various countries made before the EU, struggles over the appropriate set of rules and norms were fundamental to struggles over the definition of chocolate. First, the industry-based regime, where universalized physical standards determine the quality of a product, was unequivocally accepted as the starting point. No one questioned the necessity of standards governing the ingredients that went into a chocolate bar produced in the EU. Although the standard is enforced by each member country and not by an EU body, the definition of quality chocolate is determined by EU rules. The debate then

followed as to what exactly those standards should be, in terms of what ingredients were allowed and in what percentages. The other regimes were each invoked in different ways by different actors to make arguments for or against certain industry-based standards.

For example, the continental argument against the use of cheaper CBEs was based in part on the insistence that the British and multinational corporations were using market-based conventions, where demand for a cheap product is the main determinant of quality. They interpreted the use of CBEs as solely motivated by lowering costs, suggesting that anyone using CBEs must be thinking in market terms, rather than in domestic-based terms. The pro-CBE faction argued that what looked like market-based norms were actually domestic-based norms (i.e., the tradition of manufacturing chocolate in a certain way). However, Britain also argued that using market-based norms would show they were in the right, since consumers preferred Cadbury chocolate even if those on the Continent thought it was too milky and sweet.

Secondly, the anti-CBE group tried to use the civic-based regime in two ways, only one of which was successful in arguing that the larger social context matters in determining quality. Going further back along the commodity chain, France argued that reducing the required amount of cocoa butter in European chocolate would harm cocoa producers in former colonies. However, Britain countered this argument by showing that shea nut and other CBE producers would benefit. The French strategy to apply a civic-based approach to chocolate production was more successful. [Terrio \(2000\)](#) noted that the French standard of higher percentages of cocoa solids was codified after a drop in cocoa prices in the mid-1980s. In order to keep their product competitive, they not only crafted regulations that kept the percentage of cocoa solids high, but emphasized the hand-made nature of their product. French *chocolateries* often have glass partitions that enable customers to watch the chocolate being made, displaying the importance of labor in the production process. “In contrast to foreign franchises, French artisans must make visible both the human labor embodied in the goods and a particular form of production: artisanship” ([Terrio, 2000, p. 59](#)). Though the legal arguments France made in the Chocolate War had to do with percentages of ingredients, they also framed their struggle as one against mass-market, industrially-produced food that does not take into account tradition or the importance of place. Without soil or climate to fall back on, they had to use artisanal labor as the place-based characteristic that made French chocolate superior to others.

However, it is only the final stages of the production process that are artisanal. The section above described how the millions of smallholders that produce cocoa make it impossible to base quality on ingredients’ origins. Furthermore, the roasting is carried out by huge agro-industrial corporations ([Fold, 2001](#)), and the chocolate that the French *chocolatiers* use is produced by large multinational corporations such as Barry Callebaut ([Terrio, 2000](#)). The

coverture, or melting chocolate, that enrobes the centers of French chocolates is produced in mass quantities and sold to the many small chocolate makers of the “artisanal” chocolate industry. Because the French *chocolatiers* control only the final stages of the commodity chain, they have to claim that is where quality lies, not in the raw materials or even the initial stages of processing.

Finally, there is the domestic-based regime. Both sides argued that their consumers trusted the definition of chocolate to have a particular meaning in terms of material characteristics. We have shown that these characteristics are based on different national histories of manufacturing; therefore, what the average British or Irish consumer considers to be “quality” chocolate is different from what the average Swiss or German consumer thinks (allowing, of course, for variation in individuals’ preferences). *Choco-suisse* won its lawsuit against Cadbury by convincing the judge that Cadbury was jeopardizing consumer trust by passing off an inferior product as being of higher (namely, Swiss) quality. When Spain and Italy refused to allow British products to be labeled as chocolate, they argued that their consumers would be harmed for the same reason, and that the British were allowing market-based norms to overcome domestic-based ones. The British maintained, however, that they *were* governed by domestic-based norms, and that the methods and mixture of ingredients Cadbury used were what their consumers expected. Changing the rules to disallow CBEs would break the trust that had been established between consumers and manufacturers. Likewise, the anti-CBE coalition argued that allowing CBEs would break the trust between them and *their* consumers.

The compromise reached allowed both sides to win in terms of maintaining trust: British chocolate could continue to be made with a higher milk content and with CBEs, and other countries such as Spain and Germany could rest assured that labeling would inform the consumer that while a product might meet EU standards, it did not meet the national definition of quality chocolate. In fact, Belgium established the Traditional and Quality Chocolate Association, known as *Ambao*, shortly before the EU’s ruling came out in 2000. This association consists of chocolate manufacturers who maintain the pre-harmonization standards: no CBEs, and cocoa solids above 59% for chocolate and 32.5% for milk chocolate. *Ambao* certification enables Belgian manufacturers to maintain their position that the EU rules have corrupted the definition of chocolate, even though British “family milk chocolate” is available on Belgian store shelves. In addition to showing the importance of considering the question of quality in different regimes, these controversies illustrate the difficulty of implementing EU-wide standards when countries continue to believe in the importance of domestic-based regimes based on national borders.

6. Conclusion

Confectionary historian Tim Richardson has said that “it is dangerous to suggest that taste preferences for any

food, including chocolate and other sweets, are the result of the climate or geography of a nation, still less race or religion. The most important variables in determining the tastes of nations are the availability of raw materials, and pre-existing food habits” (Richardson, 2003, 231). However, these “pre-existing food habits” and their concomitant definitions of “quality” are not formed from thin air. Rather, they are based on cultural and economic factors. Our study of the multinational histories of chocolate shows that histories of innovation in the production process play a major role in determining definitions of food quality and consumption habits.

Geographic research on food quality has considered many of the ways in which quality is socially constructed; however, its focus has been the place-based aspects of the raw materials of food production. In large part, that is because the foods under study have been relatively less complex products such as coffee, wine, or cheese, where a single substance is processed in particular ways. Here, we show how place associations can extend to manufacturing for a highly processed food such as chocolate that is a mixture of multiple substances, including cocoa beans, vegetable fats, sugar, and milk. Because the commodity chain of cocoa and chocolate includes millions of smallholders at the input end, it is difficult to distinguish quality based on raw materials. Furthermore, the production and processing locations are in different parts of the world because of the physical requirements of cocoa plants and of producing and preserving chocolate. With this double disconnect between producers and consumers, it is primarily at the manufacturing stages where quality is defined, based on the mixture of ingredients and the methods by which they are processed. Place association is still part of the definition of quality, but in terms of manufacturing, not raw materials.

Also unlike many other foods, because of the ways in which chocolate manufacturing is regulated, place association is based at the national or supranational level, not the regional level. The political-economic considerations of defining food quality therefore become of international concern, as in the case of the European Chocolate War. Other foods such as wine or cheese have strong place associations centered on a region within a country, in keeping with the idea of specific climate, soils, and other local physical characteristics. The place associations of chocolate, by contrast, are linked to where each stage of the chocolate manufacturing process was invented, from sweetened drinking chocolate in Spain, to milk chocolate in the UK, to smoothly conched chocolate in Switzerland.

This study of chocolate demonstrates the contributions that can be made to convention theory and food quality more generally by focusing on more highly-processed foods with multiple ingredients. Raw materials matter more to the construction of quality in foods like coffee or cheese because beyond the point of origin, it is only the processing of the coffee bean or milk that matters in shaping the end product, and the quality of the raw material translates very directly into the quality of the final product. In the case of

chocolate, however, it is not just the quality of the ingredients (whether determined by location of origin or some other means), but the proportions in which they are mixed and the ways in which they are processed, that determine quality. Those proportions and processing, as we have shown, are tied to different places based on the economic geography and history of innovation. The study of food quality could therefore be greatly enriched by investigating more highly-processed foods to see how different geographies matter in determining flavor and quality.

References

- Africast.com, 2000. EU chocolate rules could not be sweeter for Mali. <<http://www.Africast.com>>, August 25 (viewed 18.07.04).
- AMBAAO, 2005. <<http://www.ambao.com>> (viewed 04.09.05).
- Andrews, E., 1997. Great Chocolate War reveals dark side of Europe. *New York Times*, October 24, A3.
- Barham, E., 2003. Translating terroir: the global challenge of French AOC labeling. *Journal of Rural Studies* 19, 127–138.
- Bessiere, J., 1998. Local development and heritage: traditional food and cuisine as tourist attractions in rural areas. *Sociologia Ruralis* 38 (1), 21–34.
- Beveridge, D., 1997. Cadbury told to Stop Marketing ‘Swiss’ Chocolate Bars. Associated Press, October 29.
- Brenner, J., 2000. *The Emperors of Chocolate: Inside the Secret World of Hershey and Mars*. Broadway, New York.
- CAOBISCO (Association of the Chocolate, Biscuit & Confectionery Industries of the EU), 2005. Ranking of consumption: chocolate confectionery. <<http://www.caobisco.com/english/pdf/consumptionchocolate.pdf>> (accessed 03.09.05).
- Coe, S., Coe, M., 1996. *The True History of Chocolate*. Thames and Hudson, London.
- Cone, C., Myhre, A., 2000. Community-supported agriculture: a sustainable alternative to industrial agriculture? *Human Organization* 59 (2), 187–197.
- Daviron, B., 2002. Small Farm Production and the Standardization of Tropical Products. *Journal of Agrarian Change* 2 (2), 162–184.
- Duval-Diop, Dominique, Grimes, John, 2005. Tales from two deltas: catfish fillets, high-value foods, and globalization. *Economic Geography* 81 (2), 177–200.
- Fabricant, F., 1998. The intense pleasures of dark chocolate. *New York Times*, December 16, F1.
- Fold, N., 2000. A matter of good taste? Quality and the construction of standards for chocolate products in the European Union. *Cahiers d'économie et sociologie rurales* 55–56, 91–110.
- Fold, N., 2001. Restructuring of the European chocolate industry and its impact on cocoa production in West Africa. *Journal of Economic Geography* 1, 405–420.
- Fold, N., 2002. Lead firms and competition in ‘bi-polar’ commodity chains: grinders and branders in the global cocoa-chocolate industry. *Journal of Agrarian Change* 2 (2), 228–247.
- Guthman, J., 2004. *Agrarian Dreams: The Paradox of Organic Farming in California*. University of California Press, Berkeley, CA.
- Hinrichs, C., 2003. The practice and politics of food system localization. *Journal of Rural Studies* 19 (1), 33–45.
- ICCO (International Cocoa Organization), 2003. ICCO Quarterly Bulletin of Cocoa Statistics. 29:3. <<http://www.icco.org/questions/production.htm>> (viewed 18.08.05).
- Ilbery, B., Kneafsey, M., 2000a. Producer constructions of quality in regional speciality food production: a case study from Southwest England. *Journal of Rural Studies* 16, 217–230.
- Ilbery, B., Kneafsey, M., 2000b. Registering regional speciality food and drink products in the UK: the case of PDOs and PGIs. *Area* 32 (3), 317–325.

- Januszewska, R., Viaene, J., 2001. Acceptance of chocolate by preference cluster mapping across Belgium and Poland. *Journal of Euromarketing* 11 (1), 61–86.
- Khodorowsky, K., Robert, H., 2001. *The Little Book of Chocolate*. Translated by Mellor, B. Luçon, France, Flammarion.
- Leiter, J., Harding, S., 2004. Trinidad, Brazil, and Ghana: three melting moments in the history of cocoa. *Journal of Rural Studies* 20, 113–130.
- Mansfield, B., 2003a. Fish, factory trawlers, and imitation crab: the nature of quality in the seafood industry. *Journal of Rural Studies* 19, 9–21.
- Mansfield, B., 2003b. From catfish to organic fish: making distinctions about nature as cultural economic practice. *Geoforum* 34, 329–342.
- Mansfield, B., 2003c. Spatializing globalization: a ‘geography of quality’ in the seafood industry. *Economic Geography* 79 (1), 1–16.
- Marsden, T., 1997. Creating Space for Food: The Distinctiveness of Recent Agrarian Development. In: Goodman, D., Watts, M. (Eds.), *Globalising Food: Agrarian Questions and Global Reconstructing*. Routledge, London, pp. 169–192.
- Mason, J., Willman, J., 1997. Swiss win Cadbury chocolate ruling; name and packaging was misleading. *The Financial Times* (London), October 30, p. 9.
- McNeil, D., 2000. Britain’s sweet victory: Europe accepts candy. *New York Times*, March 16, A4.
- Morrison, R., 2000. Send in the chocolate soldiers. *The Times* (London), February 23.
- Murdoch, J., Marsden, T., Banks, J., 2000. Quality, nature, and embeddedness: some theoretical considerations in the context of the food sector. *Economic Geography* 76 (2), 107–125.
- Parrott, N., Wilson, N., Murdoch, J., 2002. Spatializing Quality: Regional Protection and the Alternative Geography of Food. *European Urban and Regional Studies* 9, 241–261.
- Ponte, S., 2002. The ‘Latte Revolution’? Regionalization, markets and consumption in the global coffee chain. *World Development* 30 (7), 1099–1122.
- Ponte, S., Gibbon, P., 2005. Quality standards, conventions and the governance of global value chains. *Economy and Society* 34 (1), 1–31.
- Raikes, P., Jensen, M., Ponte, S., 2000. Global commodity chain analysis and the French filière approach: comparison and critique. *Economy and Society* 29 (3), 390–417.
- Renting, H., Marsden, T., Banks, J., 2003. Understanding alternative food networks: exploring the role of short food supply chains in rural development. *Environment and Planning A* 35, 393–411.
- Richardson, T., 2003. *Sweets: A History of Candy*. Bloomsbury, New York.
- Rinzler, C., 1977. *The Book of Chocolate*. St. Martin’s Press, New York.
- Severson, K., 2006. Chocolate that flashes its passport. *New York Times*, February 8.
- Skuras, D., Dimara, E., 2004. Regional image and the consumption of regionally denominated products. *Urban Studies* 41 (4), 801–815.
- Smith, D., 2002. The truth about industrial country tariffs. *Finance and Development* 39 (3).
- Tagliabue, J., 2003. The end of chocolate (as a chocolatier knows it). *New York Times*, September 5, A4.
- Telfer, David, 2001. Strategic alliances along the Niagara Wine Route. *Tourism Management* 22 (1), 21–30.
- Terrio, S., 2000. *Crafting the Culture and History of French Chocolate*. UC Press, Berkeley, CA.
- Tiffen, P., 2002. A chocolate-coated case for alternative international business models. *Development in Practice* 12 (3–4), 383–397.
- Timms, R., 2003. Chocolate, chocolate fats and the EU Chocolate Directive. *Journal of the Science of Food and Agriculture* 83, 1539–1540.
- Treager, A., Kuznesof, S., Moxey, A., 1998. Policy initiatives for regional foods: some insights from consumer research. *Food Policy* 23 (5), 383–394.
- Watts, D., Ilbery, B., Maye, D., 2005. Making reconstructions in agro-food geography: alternative systems of food provision. *Progress in Human Geography* 29 (1), 22–40.
- Whatmore, S., Stassart, P., Renting, H., 2003. What’s alternative about alternative food networks? *Environment and Planning A* 35, 389–391.
- Winter, M., 2003. Embeddedness, the new food economy and defensive localism. *Journal of Rural Studies* 19 (1), 23–32.