SENSORY KNOWLEDGE AND EMBODIED CULTURAL CAPITAL AMONG COFFEE CONNOISSEURS IN WEST AND CENTRAL ALABAMA

by

MICHAEL DODSON

JASON DECARO, COMMITTEE CHAIR
KATHRYN OTHS
SONYA E. PRITZKER
KIRK SUMMERS

A THESIS

Submitted in partial fulfillment of the requirements for the degree of Master of Arts in the Department of Anthropology in the Graduate School of The University of Alabama

TUSCALOOSA, ALABAMA

2019
ABSTRACT

_Distinction: A Social Critique of the Judgement of Taste_ (1984) by Pierre Bourdieu is arguably the most influential book on consumption practices in anthropology. The purpose of the book is to describe the concept of cultural capital in creating and maintaining social difference. Cultural capital acts in conjunction with economic and social capital to situate individuals in social space. The contemporary popularity of artisan and craft goods calls for a reexamination of cultural capital’s role in creating class boundaries in the United States. My research explores cultural capital in the new movement of third wave coffee. Using methods developed in cognitive anthropology, namely cultural consensus analysis and residual agreement analysis, I explored cultural knowledge and cultural capital among the third wave coffee community of Tuscaloosa and Birmingham, Alabama. I was specifically focused on the cultural capital, in the form of sensory, to distinguish connoisseur consumers from casual consumers. Studies of capital and class are particularly important in third wave coffee, and related craft movements This is because these industries appear to be changing the status quo by bringing economic capital into the communities in which their product is created or sourced. While these industries may be changing one aspect of the status quo they are most likely maintaining other aspects of the status quo by recreating class divisions in modern consumption patterns.
# LIST OF ABBREVIATIONS AND SYMBOLS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCA</td>
<td>Cultural Consensus Analysis</td>
</tr>
<tr>
<td>RA</td>
<td>Residual Agreement Analysis</td>
</tr>
<tr>
<td>SCA</td>
<td>Specialty Coffee Association</td>
</tr>
<tr>
<td>SCAA</td>
<td>Specialty Coffee Association of America</td>
</tr>
</tbody>
</table>
ACKNOWLEDGEMENTS

A thesis is far from a one-person project. I am indebted to countless individuals who lent me their time, advice, expertise and wisdom. First and foremost, I’d like to express my gratitude to all my informants, without whom this research could not have been completed. I’d like to give a special thanks to my informants Vee, Evan and Kelly. Not only did they volunteer their time, but they also went out of their way to connect me with more informants. I am especially indebted to my committee chair Dr. Jason DeCaro, for his support, guidance and expertise in anthropological research. I would also like to thank my committee members, Dr. Kathryn Oths, Dr. Sonya E. Pritzker and Dr. Kirk Summers for their input and encouragement throughout my research. Without my fellow cohorts this project would have never been completed. They provided crucial advice during my research, but more importantly they provided companionship and moral support throughout my graduate school career. I am also indebted to my family who constantly encouraged me to succeed. Lastly, I’d like to thank my partner, Toni, for her expertise on the topic and her everlasting moral support.
# CONTENTS

ABSTRACT .................................................................................................................................... ii
LIST OF ABBREVIATIONS AND SYMBOLS ........................................................................... iii
ACKNOWLEDGEMENTS ........................................................................................................... iv
LIST OF TABLES ....................................................................................................................... vii
LIST OF FIGURES .................................................................................................................... viii
INTRODUCTION ....................................................................................................................... 1
  Aims ........................................................................................................................................... 1
  Objectives ................................................................................................................................. 2
  Methods ................................................................................................................................... 3
  Significance .............................................................................................................................. 4
BACKGROUND .......................................................................................................................... 5
  Identifying Third Wave Coffee ................................................................................................. 5
  Bourdieu, Consumption and Practice Theory ........................................................................... 11
  Cognitive Anthropology ........................................................................................................ 15
  Practice Theory and Cognitive Theory ................................................................................ 22
METHODS ................................................................................................................................... 25
  Design ..................................................................................................................................... 25
  Author’s Background in Third Wave Coffee ......................................................................... 26
  Population ............................................................................................................................... 28
  Sampling ................................................................................................................................. 29
  Data Collection ....................................................................................................................... 30
  Data Analysis ........................................................................................................................ 35
RESULTS ..................................................................................................................................... 39
  Interview Data ....................................................................................................................... 39
**LIST OF TABLES**

1. List of Questionnaire Items Unranked.............................................................33
2. Complete List of Items in Residual Plot..........................................................47
3. Annual Income in US Dollars...........................................................................58
4. Comparison of Group Cultural Competence Coefficients................................61
5. Comparison of Group Residual Coefficients.....................................................63
LIST OF FIGURES

1. Social Space .................................................................................................................. 12
2. Residual Plot ...................................................................................................................... 65
3. Very Familiar vs. Familiar Residual Space .................................................................. 66
5. Multidimensional Scaling of Tasting Notes – “Familiar” Group ................................. 68
INTRODUCTION

Aims

Over the last few decades artisan and craft goods, like bean to bar chocolate and craft beer, have become increasingly popular. This is partially due to the growing Slow and Local foods movement which seeks to restore products’ connections to their place of origin (Roos et al 2007). These goods seemingly disrupt the status quo by putting revenue back into local communities, as opposed to large corporate conglomerates. Of the array of artisan goods hitting the market, “third wave” coffee is particularly interesting because coffee is the second most traded commodity in the world and may be of greater significance than other slow and local industries. Third wave coffee is predominately comprised of locally owned and operated cafes and coffee roasters (Manzo 2010). The term “third wave” refers to the community driven narrative that it is the third and most recent movement in American coffee consumption, following 1st wave coffee, which is comprised mostly of grocery store and diner-style coffee, and 2nd wave coffee which is dominated by large corporate chains. On the surface this movement seems to be entirely beneficial to local communities, however there may be unforeseen consequences in the shape of class production and reproduction. Of course, here I’m referring to Pierre Bourdieu’s work Distinction (1984), in which he details the way individuals display their class and status during consumption. Individuals who are highly culturally competent in a given field of consumption are referred to as connoisseur consumers (Bourdieu 1984). Third wave coffee has contributed to a rapidly growing number of coffee connoisseurs who distinguish
themselves from regular consumers through cultural capital, which Holt (1998) defines as a rare set of skills, practices and knowledge.

There are three forms of cultural capital: objectified, institutionalized and embodied (Bourdieu 1986). The embodied form, which consists of internalized knowledge and practices, (Bourdieu 1986) is hardest to operationalize. However, it may be the most important form when it comes to American consumption (Holt 1998). This is because embodied cultural capital is mostly knowledge and skills, whereas objectified cultural capital is physical goods and institutionalized cultural capital takes the form of degrees and certificates. To measure embodied cultural capital, I incorporated methods from cognitive anthropology, a subdiscipline that views cultural as knowledge.) Specifically, I used the methods of cultural consensus analysis (Romney, Weller and Batchelder 1986) and residual agreement analysis (Boster 1986; Boster and Johnson 1989) to explore the role of embodied cultural capital in distinguishing coffee connoisseurs from casual consumers in west and central Alabama. This movement is especially new to this region, with the first “third wave” companies appearing around 2012, making it an ideal location for this study.

**Objectives**

My primary objective for this research was to identify and investigate embodied cultural capital among the study population. To do this I employed cultural consensus analysis to establish a cultural model of sensory knowledge that separates third wave coffee consumers from those of the other waves. After the cultural model was identified, I proceeded to explore individual and group differences in the understanding of the model; therefore determining which variables were related to embodied cultural capital. This was guided by three hypotheses: 1) there is a shared cultural model of sensory knowledge among the third wave coffee community
in west and central Alabama; 2) there would be differences in cultural knowledge between individuals with different occupations in the coffee industry; 3) individuals who work for different coffee companies would vary in their understanding of the cultural model.

A secondary objective of my research was to provide a methodologically satisfying and replicable technique for measuring embodied cultural capital. This is in direct response to Holt’s (1998) claim that American scholars underemphasized embodied cultural capital. This is the one the chief reasons for incorporating methods from cognitive anthropology with concepts like cultural capital that stem from Bourdieu’s practice theory.

Methods

My research followed the basic steps of cultural consensus analysis. I first explored the unique features of third wave coffee through participant observation, personal experience and open-ended interviews with coffee professionals. I then constructed a questionnaire on these features which asked respondents to rank their desirability and frequency on a 4-point Likert scale. The responses were analyzed using SPSS v.25.

Data was primarily collected on-site at coffee shops in Birmingham and Tuscaloosa, Alabama, however, there were two out-of-state phone interviews. Data collection began in July 2018 and concluded in January 2019 and was divided into two phases. The first phase consisted of open-ended interviews with 9 coffee professionals that included shop owners, managers, lead baristas and head roasters. The open-ended interviews asked my informants to identify the traits that made third wave coffee unique, with special attention to sensory experience and sensory knowledge. In the second phase I distributed a questionnaire to 70 members of the region’s third wave coffee community. The questionnaire asked respondents to rank the desirability and frequency of 32 sensory features, as well as record demographic information. Since third wave
coffee community is relatively small and difficult to distinguish from the larger coffee community, I relied heavily on chain sampling in both phases. Data analysis was also divided into two interrelated phases. Firstly, I transcribed and analyzed the open-ended interviews for recurring themes. For the quantitative questionnaire data, I used SPSSv.25. Data analysis concluded in May 2019.

**Significance**

My research has several potential benefits. At the surface level it contributes to a growing body of literature on third wave coffee, which is significant given coffee’s status as the second most internationally traded commodity. It also adds to the slightly larger body of literature covering slow and local food industries. While there is currently a vast amount of research regarding cultural capital, my research introduces the modern industry of third wave coffee to this literature. Perhaps more importantly my research introduces a methodology for studying embodied cultural capital that can be applied to any field of consumption. Lastly, my study highlights how third wave coffee may be reinforcing class boundaries even though it may seem intuitively beneficial to the communities in which it exists.
BACKGROUND

Identifying Third Wave Coffee

Third wave coffee is a relatively recent movement in American coffee consumption, that puts quality at the center of coffee preparation. It is situated within the broader slow and local foods movement which attempts to reconnect producers and consumers (Tucker 2017) and restore product identities that have been stripped in globalized consumption (Roos et al. 2007). “Local” does not necessarily mean geographically close but refers to a product that originated from a specific locale, especially emphasizing the benefit to the place of origin when purchasing the product (Roos et al. 2007). This concept of “local” is befitting for the movement of interest for two reasons. Firstly, outside of Puerto Rico and Hawaii, the US does not produce coffee, so most coffee roasted and consumed in the US is sourced from Latin America or Africa, and to a lesser extent southeast Asia. Yet, the coffee commodity chain is often long. At the bare minimum coffee goes from the producer directly to the roaster and then usually to a shop for consumption. This means any cup or bag of coffee is associated with several physical places, all of which tie themselves to the product in some way or another. For example, one of the shops I worked closely with throughout this project sourced their coffee from a roaster in Arkansas, so the bags say “Ozark Roasted” in bold letters on the back. However, they often buy green coffee directly from the coffee producers so the farm, region and country is labeled on the front. Ultimately it is brewed and consumed in Tuscaloosa, Alabama and has a relation to all three locations. Third wave coffee, therefore, fits squarely in the slow and local foods movements even when the product is cultivated on other continents
The term “third wave” is an insider term (Manzo 2010) and those outside of the community rarely know of its existence. There are no official rules to determining what is, or isn’t, third wave coffee but Manzo (2010) describes: “Third wave coffee comprises small-batch artisanal coffee roasters and independent or small-chain coffeehouses that are themselves part of a supply chain including a collection of field-to-cup actors starting with direct-trade growers with whom the coffee brokers, roasters, and café owners are understood to have relationships” (p.2). On the other hand, Liu (2016) sums up third wave coffee as a focus on “good” coffee, which is both morally good and tastes good. The moral “goodness” stems from ethical sourcing, and the taste is a result of roasting and brewing techniques that are unique to this movement. Both definitions are good starting point, but a deeper discussion will illuminate some of the true differences.

When it comes to sourcing, third wave roasters often establish direct relationships with coffee producers. The community usually refers to this as “direct trade” but there is no institutional definition or overseeing organization as there is with “fair-trade”. Direct trade is in fact a product of third wave coffee, coined by a coffee company out of Chicago that is one of the “original” third wave companies. It seems the emphasis on direct trade is due to a general mistrust of the fair-trade system. The criticisms of fair-trade by the coffee community are not far off from the criticisms of anthropologists. For example, Carolyn Fischer (2007) argues that fair-trade coffee is not de-commodifying coffee but rather re-commodifying it by making “morality” the product of marketable value. Fischer also notes that the fair-trade movement restructures the narrative to focus on the middlemen, especially the organizations with the power to certify items as “Fair-Trade,” and not the producers. This is not to say that “direct trade” does not have its associated problems, like the lack of a technical definition, but it’s important to recognize the
community’s belief that “direct trade” is superior to “fair-trade.” There is a similar belief surrounding “Certified Organic” labels which will rarely appear on third wave coffee products, even if the products are grown organically.

Direct trade, or any method of sourcing, is always linked to the rest of the commodity chain. When it comes to roasting, third wave coffee is known for roasting coffee much lighter than traditional roasters. Lightly roasted coffee highlights “natural” flavors of the beans, and further emphasizes the taste differences between coffees grown in different regions. During roasting the beans carbonize as they are exposed to heat, resulting in charcoal or ash-like flavors. The darker the roast the more natural flavors are replaced by charcoal and ash. The common narrative suggests the “masking” of natural flavors by large corporate coffee roasters was economically driven. These suppliers would roast coffee to mask defects and the tastes of overripened or under-ripened coffee and extend coffee’s shelf life. This is also connected to the removal of the products’ association to countries of origin mentioned earlier. In other words, roasting coffee so that it all tasted the same negated the need to connect it to a place so labels and advertising in the traditional coffee market show images of consumers’ lives and don’t mention or display the countries of origin. The combination of beans from multiple regions into a single package, or cup of coffee, is referred to as a blend but if the final product consists of coffee from a single location it is referred to as “single-origin.” Blends are still used in third wave coffee because they provide an alternative to higher-priced single origins for non-connoisseur consumers; however, they are less prominent than they are in second and first wave coffee.

The emphasis on single-origin coffee and its natural properties connects the consumer to the producer at the preparation (brewing) stage through an emphasis on single cup manual brewing methods. Explaining all the manual methods would be unnecessarily time consuming
but there is a lump category of methods, referred to as “pour-overs,” that are particularly prevalent in the community. As the name implies the method consists of pouring hot water over ground coffee, but with acute precision, both in terms of where one pours the water and how much water to pour. The importance of pour-overs highlights what I have discussed thus far. Chiefly it allows the consumer to select a single origin coffee thereby theoretically connecting them to the producer (or at least the country of origin). Secondly, it allows the consumer to appreciate the “natural” variety in coffee by comparing different single origins, although not necessarily at the same time.

I hope this discussion of sourcing, roasting and preparation added context and characteristics for identifying “third wave coffee.” More importantly, my objective was to demonstrate that the moral and qualitative aspects of “good coffee” (Liu 2016) are inseparable. The focus on qualitative attributes and tasting coffee’s natural variety impacts the ethical sourcing and vice-versa, all of which firmly situate this movement within the broader local foods movement.

The name “third wave” is derived from the community-driven narrative that it marks the third major shift in American coffee consumption after 1st and 2nd wave coffee. It is important to recognize that all three waves are extant, since previous waves did not cease to exist with the rise of the latter waves. First wave coffee is characterized by grocery and diner style coffees, essentially the darkly roasted coffee that is massed produced as mentioned earlier. The consumer’s only choices in first wave coffee are “decaf” or “regular” and whether to add cream and sugar. In the first wave coffee consumption mostly takes place at home, in an office or in a restaurant, not in coffee shops. The rise of coffee shops in America are a product of the second wave, which is easily recognized by the ubiquitous green coffee chain. Second wave coffee
companies keep a few house roasts on hand and allow the consumers to customize their drink through infinite combinations of styles, syrups and whipped cream. While much of the second wave is dominated by corporate coffee chains there are family owned coffee shops that better fit under the term “second wave” than “third wave.” The second wave is particularly important for my research because it is more profoundly related to the third wave. The origin of the two latter waves are one and the same, as will be discussed below, and they compete with and respond to each other more directly than either do with first wave coffee. Many of the third wave’s attributes are present in the second wave and the opposite is true. The real difference between the 2nd and 3rd waves are the attributes that take precedence over others.

Together, the second and third wave constitute specialty coffee. The term specialty coffee marks the departure from the post WWII coffee industry (1st wave), which treats all coffee as the same, to a coffee industry that offers you a “place in a cup” (Roseberry 1996). Specialty coffee focuses on variety and instilling distinguishing tastes, in the Bourdieuan sense (Roseberry 1996). Although the current chief participant of second wave coffee, Starbucks, is an international company it was initially a small experimental roaster and at one time was the epitome of specialty coffee. With the gift of retrospect, I believe Roseberry (1996), in his pivotal work on the rise of specialty coffee, pinpoints the origin of the second/third wave fission. Roseberry writes:

“A second, related development was the emergence of coffee flavors that can be sprayed on recently roasted beans. C. Melchers and Company of Bremen began operating in the United States in 1982, offering an ever-expanding variety of liquid flavors for coffee and tea. Each flavor is composed of 20 to 60 “natural” and artificial” (chemical) ingredients...Some roasters and retailers refused to deal in such coffees” (p. 740)

In the last sentence he identifies a sect within the broader movement that would rather capture the natural properties of coffee than add flavors. Given the current differences of second and
third wave coffee, it seems that Roseberry identified this coffee movement as early as 1996. While it can’t be confirmed it is also very possible that the term “third wave” was already spreading through small circles of coffee professionals and simply was not popular enough to warrant attention by the public or academics until recently.

As if to further complicate the distinction between third wave, second wave and specialty coffee, the terms “specialty coffee” and “third wave coffee” are often used interchangeably. Although both the latter waves are part of the broader movement of specialty coffee, in its pragmatic use “specialty coffee” is rarely applied to the large coffee corporations. In my experience, as a coffee professional and later during this research, “specialty coffee” is often reserved for more technical aspects of coffee production, for example brewing guidelines supplied by the Specialty Coffee Association (SCA), whereas “third wave coffee” connotates aspects of aesthetic and atmosphere in the storefront. Below is the answer I received from one of my informants when I asked them whether they use the terms interchangeably.

“Yea, I mean I probably use third wave when I wanna talk about a retail store. So, like if I say yea ‘Rose Coffee they’re a third wave shop or Philosophy’s a third wave shop’ Any time I’ll like go to a city like Nashville or Ashville I’m always looking for the quote-unquote third wave shops. Whereas like specialty coffee, ya know the SCA would define specialty coffee as anything that cups above 80”

Their mention of the SCA definition of specialty coffee refers to a point scale much like wine, where professionals grade coffee on a 100-point scale. On the scale an 85 is exponentially better than an 80, and anything above 90 is awarded the title “Cup of Excellence.” Interestingly, I’ve heard this definition multiple times, yet I can’t find the original source. While people have claimed it’s from the SCA it does not appear on their website. In fact, I can’t find a set definition of specialty coffee by the SCA at all. Perhaps this definition comes from an older source that has since ceased circulating but carries on through word of mouth.
The complicated relationship between the terms described above intensifies the exclusive nature of third wave coffee. Even within the broader specialty coffee context the term indexes certain values and knowledge not necessarily held by others.

**Bourdieu, Consumption and Practice Theory**

Within anthropology there are two primary theories that can be applied to coffee consumption (Tucker 2017), and probably consumption more broadly. The first is a political-economy perspective; originating with Eric Wolf (1982) this theoretical orientation analyzes culture as a product of economic contexts, with special attention to differences between rural/urban and rich/poor distinctions. Much of the contemporary anthropological literature on third wave and specialty coffee take a political-economy approach (Lyon 2007; Fischer 2007). While this perspective is undoubtedly important for the study of third wave coffee in its entirety, it is of little use for my research which deals exclusively with individuals on the consumer side of the commodity chain, all of which exist in an urban context in the rich global north. The second, and most suited to the purposes of my research, is Bourdieu’s (1984) theory of cultural capital and social distinction.

Bourdieu (1984) claims that individuals negotiate their position in social space by using their capital. There are three types of capital: social, economic, and cultural. Social capital is an individual’s relationships to others especially through networks and societies (Bourdieu 1986). Economic capital is in line with a traditional perspective of capital, essentially one’s financial assets (1986). Cultural capital, which is succinctly defined as “a set of socially rare and distinctive skills, knowledge and practices” (Holt 1998: 3), is the focus in *Distinction* (1984) because it is the form of capital that primarily shapes consumption. Image 1 is a depiction of
common occupations in social space, their position related to their cultural capital and economic capital.

Social Space

Adapted from Distinction (Bourdieu 1984) pg. 128-129

Bourdieu considers cultural capital the most dangerous form of capital because it often seems innate or natural and therefore passes undetected when creating class boundaries. Oths and Groves (2012) provide a prime example of the way cultural capital can mask issues of class and race, in their study of the Tuscaloosa Farmers Market. The researchers explain that the city has plans to “modernize” Tuscaloosa and one aspect of the plan is to revamp the longstanding farmers market. This traditional market benefitted, African-American, low-income and immigrant populations by providing access to nutritious and fresh produce. The city officials wanted to open the market to new specialty goods and include more than just produce vendors, thereby attracting a larger crowd. To the city officials who have more cultural and economic capital this seemed like a natural way to modernize the market, which would be inherently better.
than the traditional market. Yet the proposed changes would make the market a space for mostly middle-class white families with high cultural and/or economic capital, thereby limiting the accessibility to the underserved poorer communities. The clash between city officials and the market patrons, while seemingly about produce, were truly issues of class and race. The conflict of the Tuscaloosa Farmers Market is a manifestation of Bourdieu’s explanation of cultural capital as the most dangerous, since it is naturalized in a way that social and economic capital are not.

Cultural capital exists in three forms: objectified, institutionalized and embodied (Bourdieu 1986). Objectified cultural capital is physical goods and their symbolic meanings, for example a particularly expensive wine that wine connoisseurs recognize as rare and prestigious. Institutionalized cultural capital is “taste” inscribed in degrees and other certifications. Sticking with the world of wine, an example would be sommelier certification. Embodied cultural capital is the culturally correct knowledge, skills and practices of consumption, examples being the proper way to sip and taste wine as well as the proper way to talk about its characteristics.

According to Holt (1998), Bourdieu’s theory of cultural capital and social distinction has had relatively little support from American scholars. Americans argued that products were produced and consumed in manners accessible to a broad range of people and therefore consumption was not a marker of class in the US as it was in France. This was due largely to the misuse of theories and concepts from Distinction (1984) by American researchers. There are two chief issues with American studies of cultural capital. Firstly, American scholars have over emphasized objectified cultural capital, or physical goods, but as mentioned earlier these goods are widely available to the middle class. Holt then argues that embodied cultural capital is a better marker of social status in the contemporary US than objectified cultural capital. The second issue is that
American researchers were replicating Bourdieu’s study using the same variables. This is illogical since culture, and therefore cultural capital, changes across time and space. A better approach to the study of American cultural capital should seek markers unique to their context. The methods I chose, borrowed mostly from cognitive anthropology, resolve both issues identified by Holt.

While Holt was calling for a reexamination of cultural capital in 1998, the new face of American connoisseurship, which is undergoing two simultaneous changes (Elliot 2006), further necessitates this reexamination. The first is what Elliot (2006) adequately describes as the “democratization of connoisseurship,” or the increasing availability of high-status goods to the middle class. In addition to the physical goods (objectified cultural capital), Elliot notes the embodied cultural capital is more accessible as well, through things like wine tasting courses. Additionally, a plethora of new goods, like beer, chocolate and of course coffee have attained connoisseur status. The ultimate product is a cultural landscape of “snobs” or individuals who are connoisseurs of one or two goods but not of all elite goods (Elliot 2006). Within these subcultural contexts connoisseurs jockey for status by enacting their cultural capital (Maciel and Wallendorf 2010).

In Distinction, Bourdieu’s focus is to outline cultural capital’s role in producing and reproducing social boundaries; however, his broader theoretical approach of practice theory warrants attention. Practice theory is concerned with the intertwining of individuals in an all-encompassing system, with special attention to individual’s actions reproducing the system (Ortner 1984). There are many forms of practice theory, and many practice theorists, not all of which are easily compatible. I will focus on several broad points that transcend the works of
several theorists, allowing for easy discussion of case studies in consumption that pull from a broad range of practice theorists.

First and foremost, practice theories address the issue of structure and agency, by assigning both institutions and individual actors importance (Ortner 1984; Warde 2005). Individuals come to embody institutionalized values, what Bourdieu refers to as habitus, and engage in idiosyncratic behavior. Practice theory, then, allows for fluidity and change in a manner that previous culture theory did not. Additionally, there is no need for practices to be coordinated entities (Warde 2005), marking a divergence from Durkheimian views of societies as functioning wholes. In a similar vein, there is no need for practice theorists to distinguish between different structures/institutions/systems (i.e. political-economy, culture, society) (Ortner 1984).

In the literature the word practice is used in two distinct ways, as “Practice” which means the whole of human action and “practices” which are routinized behaviors (Reckewitz 2002). The dichotomous usage of the term mirrors the major concern proposed by Warde (2005), that consumption studies drawing on practice theory are either too abstract and theoretical, or specific case-studies. Even the strongest supporters of practice theory acknowledge that it is a heterogenous body of literature with no central methods and only minimally similar theory (Shatzki et al. 2001; Reckwitz 2002; Warde 2005; Maciel and Wallendorf 2010). Cognitive anthropology, on the other hand, is a subdiscipline with relatively unified theory and methodology and, as I will address shortly, is not incompatible with practice theory.

**Cognitive Anthropology**

Cognitive anthropology is a small, relatively recent subdiscipline of cultural anthropology. It is best known for its view of culture as cognition (Keesing 1974), specifically defining culture as the knowledge one must have to adequately function in a given society.
Goodenough 1981). This circumscribed definition of culture excludes behavior and other psycho-social constructs thereby increasing culture’s applicability in research. Dressler (2018) identifies 5 persistent issues in culture theory that are resolved by a cognitive definition of culture: (a) the ontology of culture, (b) is culture a product of the individual or the aggregate? (c) intracultural diversity, (d) addressing the relationship between culture and behavior, and (e) separating culture from other psychosocial constructs, such as beliefs. The focus for my research, is on the problem of (c) intracultural diversity and to a lesser extent (d) the link between culture and behavior.

Understanding cognitive anthropology’s concept of a cultural domain, is necessary to fully understand the resolution of the previously identified problems of culture theory. Cultural domains are essentially a set of interrelated items (Borgatti 1999). For example, there is an American cultural domain of breakfast food which includes items such as eggs, bacon and toast, but not rice. These domains exist on varying levels, to continue with our example, we can narrow it down to a cultural domain of breakfast meats or expand the domain to one of everyday American foods. The fact that these domains are shared among a given population makes them “cultural” (Dressler 2007), but individual experience influences one’s understanding of the domain leading to intracultural diversity mentioned above. Sticking with the earlier examples, Conecuh sausage, a specific type of sausage from Conecuh, Alabama, might be included in the breakfast foods domain for Alabama residents but probably not for individuals from other states, though most of the items (eggs, toast, etc.) are shared across state boundaries.

Because domains are lexical in nature, they can be elicited and explored through various techniques (Blount 2011). The methodologies for studying cultural domains originated in ethnoscientific, cognitive anthropology’s precursor. Ethnoscience reached peak popularity in the
1960’s and 1970’s. Researchers would create exhaustive lists of items in a given domain and then explore the domain’s internal organization through pile sorts or triad sorts. Pile-sort tasks ask the informants to group items based on similarity, whereas triad sorts ask informants to identify an item that is the most dissimilar from a group of three items (Borgatti 1999). These methods provided two principal advantages to the researchers: 1) they could be completed in any locale for virtually any domain (Tyler 2011), and 2) they allowed the researcher to understand underlying organization that could not easily be explained by informants (Dressler 2018). To elaborate on the second advantage, examine Romney and D’Andrade’s (1964) research on English kinship terms. Using triad sorts the researchers concluded that English speakers used three features in defining kinship terms. First of these features is male or female, e.g. whether you refer to your sibling as brother or sister. Second is generational, such as the difference between calling an older male relative father or grandfather. Lastly is the positioning, peripheral or central, in your direct ancestry: if a female relative is one generation older and your direct ancestor it’s mother, but if she’s not in your direct lineage it’s aunt. The point here is that while informants could easily tell you what they call their relatives, they could not easily say why. While ethnoscientific paved the foundations for modern cognitive anthropology it was largely criticized because its goals were too narrow and its emphasis on methods overshadowed more important insights. Using the kinship analysis as an example, it reflected the thoughts of researchers more than actual members of the studied group, and its broader implications on the study of American kinship is unclear (Dressler 2018).

In 1986, a group of researchers (Romney, Weller and Batchelder) developed what is now one of the chief methodologies for domain analysis. Known as cultural consensus analysis (CCA), it elicits items in a domain (much like ethnosciences) but then has informants answer a
series of questions to test the degree to which knowledge of the domain is shared. If the knowledge is highly shared between individuals it is referred to as a cultural model. A cultural model is not meaningfully different from a cultural domain and in the literature the terms are often used interchangeably, however to be comprehensive I will use Holland and Quinn’s (1987: 4) definition of cultural models as "pre-supposed, taken-for-granted models of the world that are widely shared by the members of a society and that play an enormous role in the understanding of their world and behavior in it.” The primary strength of the cultural consensus model is that it allows anthropologists to test a central tenant of cultural anthropology, that culture is shared (Dressler 2007).

Essentially CCA is a form of factor analysis that explores the correlation between individuals instead of variables. Correlations between individuals are considered a product of their agreement. If there is enough agreement a cultural model is assumed to exist (Romney, Weller, Batchelder 1986). In standard factor analysis the researcher can explore any amount of factors, but in CCA just the first two factors are important. Specifically, researchers using CCA are concerned with the ratio of the first factor, or eigenvalue, to the second factor with convention calling for a 3:1 ratio. The larger this ratio the more tightly shared the model. Additionally, this methodology can explore the intracultural diversity in the model through cultural competence coefficients, which express how well a given individual knows the model (Romney, Weller, Batchelder 1986). Essentially the individual whose answers most closely match all other individuals will be ascribed the highest cultural competence coefficients. These coefficients, in turn, can be used to explore differences in the understanding of a cultural model between individuals.
Since CCA measures shared knowledge it is a viable way to study embodied cultural capital rather than objectified cultural capital. Furthermore, since the model is elicited through free-listing and related techniques it allows the research to discover what variables are important to the specific context, thereby resolving Holt’s second problem with American studies of cultural capital. Prior to my research, Horowitz (2009) has recognized the potential of CCA in studies of consumption, especially in bridging the two broad paradigms of American market research dealing with culture. The first of these is the national culture paradigm, which uses cross-cultural studies to identify nomothetic principles of American consumption. The organizational paradigm is concerned with more idiographic patterns of consumption. Horowitz suggests CCA can discover both idiographic and nomothetic principles as they relate to consumption. Horowitz also recognizes that Dressler and colleagues (1996; 2000; 2007; 2015) have already used CCA to study consumption, at least in part. In these studies, the researchers identify a cultural domain of lifestyle which consists of material culture like phones, television, furniture, cars and various other items.

Shortly after Romney, Weller and Batchelder (1986) published their seminal article on CCA, Boster (1986) discovered a technique, referred to as residual agreement analysis, that further explores intragroup variation in cultural knowledge. While CCA is concerned with the first factor loadings (cultural competency scores), residual agreement analysis looks for variation in the second factor loadings. In this methodology the researcher assumes most of the variation in respondents’ answers is subsumed in the first factor and the left-over variation can be found in the second factor (Dressler et al. 2015). When the differences correspond with grouping variables there are systematic deviations from the overall model (Dressler et al. 2015). The potential patterned deviation between various groups (residual groups) is due to shared
experiences which impact individuals’ understandings of the broader cultural model. For example, Boster (1986), the first to use this technique in the social sciences, was interested in knowledge of manioc varieties among indigenous Peruvians. While there was an overall model of manioc among the population, Boster found mothers’ and daughters’ responses were highly correlated with each other. This led to the assumption that knowledge of manioc varieties is passed on through matrilineages. In 1989 Boster and Johnson developed the specific residual analysis technique that I have adopted here. Studying the folk taxonomies of fish species among American fishermen, Boster and Johnson plotted the first factor loadings (cultural competence coefficients) against the second factor loadings (residual coefficients) for a visual representation of how people were organized via their understanding of the cultural model. They found that expert and novice fisherman had different perceptions of the domain of fish species. Boster and Johnson (1989) use a second technique for studying variation in a domain which I have also adopted in this research. Using multidimensional scaling, which plots items based on their physical or hypothetical similarity, the researcher could compare the composition of the domain of fish types between the residual groups. The expert group thought of fish as similar based on their morphology and their utility, but the novice group sorted fish based mostly on their morphological similarities.

Residual agreement analysis has also been used to study culture change across time. In 2015 Dressler and colleagues compared the cultural models of lifestyle among Brazilians in 2001 and 2011. While there was a consistent model that consisted of items like television, internet access, furniture and cell phones, the 2001 sample emphasized furniture and television and the 2011 sample emphasized internet access and cell phones. Residual agreement analysis, along
with CCA, are powerful methodological tools that fit the cognitive theory of intracultural diversity.

Thus far I have addressed the way cognitive anthropology resolves the problem of intracultural diversity. However, the link between culture and behavior is also important for my research, although to a lesser extent. As addressed earlier, behavior is purposefully excluded from Goodenough’s definition of culture, but behavior is certainly culturally shaped (Dressler 2007). Individuals are not passive receivers of cultural models, rather they actively use and interpret these for their own purposes (Gatewood 2012). Using the American model of achievement as an example, D'Andrade (1992) explains that cultural models, which he refers to as schemas, become highly internalized and in turn instigate action. This model of achievement defines success for Americans, but more importantly it defines how to obtain success. To be successful one must find a job, own a house, have a family and much more. Schemas are hierarchical and large schemas, like American success, are comprised of smaller schemas, like how to go about finding a job, which consists of even smaller schemas like how to apply for a job. These models are not equally salient to all members of a society; rather, members internalize the models at various degrees. The degree of internalization is what shapes behavior (Holland 1992). The highest level of internalization instigates action, while the next only guides action and the lowest level of internalization probably does not evoke much action. Holland (1992) uses the concept of internalization to explain the behavior of American college women seeking romantic relationships. Holland explains that individual women have internalized the cultural model of romance at varying degrees prompting different behaviors. Individuals with the most knowledge of the model were the most likely to act in accordance with the model. Some women even viewed most of their daily activities in relation to the model. These individuals were also more
likely to transmit knowledge ("give advice") to those with less knowledge of the model, who would then act on the advice and further internalize the model. Third wave coffee is a great hypothetical example of this same process. Just knowing the model exists does not necessarily compel an individual to get involved in the community but if someone is fully invested in the model, they might spend a lot of time and resources securing and using high-end equipment in their morning coffee routine.

Just as cognitive anthropologists have developed methods for the study of intracultural variation, methods have been developed concerning the relationship between culture and behavior, such as the concept of cultural consonance or “the degree to which individuals in their own behaviors approximate the prototypical behaviors encoded in a cultural model (p. 336). This technique is an extension of CCA in which the researchers measure which of the domain items, physical or social, individuals obtain. It has been particularly useful in studying the relationship between health and culture. Typically, individuals who are less culturally consonant consistently have higher blood pressure (Dressler and Bindon 2000) and higher scores on depression scales (Dressler et al. 2007). Yet Horowitz (2009), suggests this technique could also be applied to the study of consumption. Just as CCA can be used to study embodied capital, measuring cultural consonance may be an adequate way of measuring objectified cultural capital.

**Practice Theory and Cognitive Theory**

At first glance it may seem like cognitive theory and practice theory are inherently contradictory. The former seems strictly ideational, only concerned with knowledge and the latter seems materialistic, only concerned with observable behavior. This, however, is a false dichotomy. As expressed earlier, cognitive anthropology is concerned with behavior (D’Andrade 1992). One of its strengths is providing an explanation for the relationship between culture and
behavior. As for practice theory, observable action is not its sole focus, since mental activities (i.e., thoughts and knowledge) are also considered practices (Warde 2005). Not only are both theories interested in mental and observable behavior, they share the understanding that knowledge (as cultural models or mental practices) presupposes behavior.

This only scratches the surface of their similarities, since both theories can be conceptualized as responses to problems in earlier ideas which treated culture as bounded entities and organized wholes that are evenly distributed to members of the given “culture.” Cognitive anthropology addresses these problems by refining the definition of culture. Practice theory, on the other hand, is concerned with the relationship between individuals and a system and has no need to separate culture from other constructs like society or politics. The chief difference is that practice theory considers behavior as part of culture, whereas cognitive theory holds behavior as a separate construct that is culturally shaped.

Both theoretically account for explaining the aggregate and the individual in relation to culture. As mentioned above, practice theory is explicitly concerned with the overarching system that shapes individual behavior; so too is cognitive anthropology. For cognitive anthropologists, a cultural model, or domain shapes individuals’ thoughts and behaviors. The relationship between the individual is the mechanism by which both theories account for the fluidity of culture and behavior, which change across people, space and time.

Not only are these perspectives theoretically compatible but the concepts of “practice” and “models” are similar as well. Shatzki (1996 pp. 91-96) identifies two types of practices, dispersed and integrated. Dispersed practices are carried out by individuals across social contexts, such as obeying rules. As humans we are almost always following rules, whether they are traffic laws, the rules of a sport, or religious codes of behavior. So “following rules” is a
practice that is practiced across a theoretically infinite number of social contexts. Integrated practices, on the other hand, are defined as largely shared bodies of knowledge and actions in various social domains. For example, there are integrated practices of business, farming and various other things. The integrated practices concept is similar to the concept of cultural models, the difference being the inclusion of behavior in integrated practices. The fact the cognitive anthropology does not have a unit like dispersed practices is unimportant because practice theorists, especially those interested in consumption, are far more concerned with integrated practices (Warde 2005). It seems any consumer good would have an associated integrated practice around consumption and production.

Although I believe I’ve demonstrated that the two schools of thought are compatible, perhaps this discussion was not necessary since interdisciplinary studies are common in modern academia. Methods developed in one discipline are often applicable to other disciplines, such as the use of ethnoarchaeological tracking in linguistic anthropology (Paugh 2008). In fact, the primary methods of this study, CCA and residual agreement analysis as forms of factor analysis, were mostly borrowed from more statistically oriented fields. As Bernard (2017) says. methods are not owned by their parent disciplines but are to be used where applicable for the benefit of scholarly research. Theories too are social constructs and don’t exist outside of the minds of those who use them. Just like methods, theories are tools for researchers and, so long as their use is logically justified, there should be no limitations to the use of theory.
METHODS

Design

This project employs the most common research design in ethnographic studies, the *ex post facto* design (Bernard 2017). The *ex post facto* design measures an outcome in a population after an intervention. The intervention does not have to be a sudden or immediate event but can be a slow gradual process (Bernard 2017). In this case the intervention is the growing third wave coffee industry and the population is coffee connoisseurs. To study this movement, I employed a mixed-methods approach which included traditional ethnographic techniques and statistical methodologies generated in cognitive anthropology. The qualitative data is based in semi-structured interviews and participant observation. The quantitative data was collected and analyzed using cultural consensus analysis and residual agreement analysis.

As explained earlier, embodied cultural capital is the specific knowledge that individuals have of the “proper” way to consume items (i.e., knowing that you should not add ice to wine, or mix an expensive Scotch with Coca-Cola) (Bourdieu 1986; Holt 1998). Since cultural competence coefficients represent individuals’ cultural knowledge, these scores were used as proxies for embodied cultural capital in statistical analyses. Specifically, cultural competence scores were used alongside other variables to explore differences in embodied cultural capital between informant groups (i.e., baristas vs. customers). In conjunction with CCA, I used residual agreement analysis to further explore the systematic distribution of cultural knowledge in the model.
Author’s Background in Third Wave Coffee

Before continuing to outline my methodological practices, I believe it is important to contextualize my interest in this topic by describing my experience in this industry prior to my research. Not only will this discussion shed light on one source of my topical knowledge, it will also illustrate my foundational connections to the community which I heavily relied on.

I began working in coffee in 2013 for a corporate coffee shop in southern California. The shop I worked for fits squarely in the “second wave,” and aside from the branding one could hardly distinguish it from a Starbucks. With this company I learned foundational principles about brewing and serving coffee, and to a lesser extent general knowledge about the world coffee trade. Over the next couple years, I developed a greater knowledge of coffee and its properties. I slowly began to appreciate coffee as a craft product and began drinking it in a “connoisseur-fashion.” In other words, I stopped drinking flavored beverages or blended coffees and began to experiment with new single-origins and brewing techniques. Soon thereafter I was introduced to “third wave coffee” from a colleague. During my free time I began to pursue a deeper knowledge of coffee through internet research, attending community events like “coffee cuppings” and latte art competitions, and of course visiting as many specialty roasters and cafes as possible. I worked for this company until I moved to Alabama to attend graduate school in 2017, however I had essentially stopped drinking their coffees and almost exclusively consumed “third wave”/specialty coffees (I literally brought my own coffee into work at a coffee shop every day).

The third wave coffee community is so tight knit that before moving to Alabama I received recommendations for coffee shops in Birmingham from baristas in Long Beach, CA. Upon moving to Alabama, I wasted no time in exploring the local coffee scene and met several people who shared my passion. My partner, who moved with me and has even more experience
in coffee, was hired at one of the Tuscaloosa shops within a month of moving. I bring this up because it was a major source of support and connections to the Tuscaloosa coffee community. Additionally, the shop she worked for invited me on a “barista training” retreat because they were aware of my passion for coffee. Before and during my research I attended, and usually competed in, several latte art competitions in Birmingham, Tuscaloosa, Montgomery and even Gulf Shores. This led to even more connections in the Alabama third wave coffee community.

The knowledge I gained while working in coffee and being an active member in the southern California and Alabama coffee community is essential to my current understanding of the coffee industry. This emic perspective excellently complements my perspective as a researcher. As an anthropologist I understand that the characteristics that seemingly make third wave coffee superior are subjective, but I understand how real and concrete they can feel to those involved. My connections to the industry were also indispensable to my project; without them data collection may have been a much longer endeavor.

In many ways my prior experience in the industry is beneficial to my research. However, it also increases the risk of bias. While I tried my best to limit the possibility, there is a chance that my experience has led to the misinterpretation of my informants’ statements during the interview phase. Additionally, it may have contributed to confirmation bias during the statistical analyses. However, it is impossible to completely remove bias from research and my experience does not necessarily lead to more bias but just a specific bias.
**Population**

This study mostly recruited informants from the Birmingham and Tuscaloosa areas, however additional interview data was collected through webcam and phone calls with informants from outside of Alabama. The methods used for recruiting varied depending on the specific stage of data collection. The different methods will be explored further under the *Sampling* subheading. The first phase of data collection, which used semi-structured interviews, targeted individuals who were likely to be highly competent in the domain of third wave coffee. Since there is no easy way to identify culturally competent individuals, I targeted occupations that required or indexed experience in the industry. Specifically, I targeted owners, managers and lead baristas of local third wave coffee shops. The first phase participants have all been given pseudonyms for privacy reasons.

The second phase of data collection, based on questionnaire questionnaires, did not require that all respondents be highly competent and so the criteria was relaxed to include coffee professionals of various experience levels and consumers. However, it was necessary that respondents were familiar with third wave coffee in some capacity. The first question of the questionnaire was a screening question to exclude those who had no familiarity with the term “third wave coffee.” Specifically, I had respondents report whether they were (a) not familiar at all, (b) slightly familiar, (c) familiar or (d) very familiar, with third wave coffee. Names were not collected in questionnaire responses.

Whether coffee professionals or casual consumers the logical starting place to find informants were the local coffee companies, which also have been given pseudonyms. I targeted several shops based on the criteria discussed in Background chapter but was only able to recruit participants from six of them. They include Caterpillar Coffee, Lively Coffee and Garden Coffee in Tuscaloosa and Disc Coffee, Philosophy Coffee and Prose Roasting from Birmingham.
Sampling

This study reached a total of 78 potential informants, including both interview and questionnaire phases. However, 29 individuals were removed from the study after the screening question. I relied on a combination of targeted and chain-sampling. I chose this strategy because the third wave coffee community is small. Even with chain sampling I concluded data collection with 29 individuals who were unaware of third wave coffee’s existence and thus were screened out. A random sampling technique may have greatly increased this number of unaware persons.

Semi-structured Interviews:

It was particularly important to target culturally knowledgeable individuals for the first phase of data collection, since the CCA questionnaire was built on this data. For this I relied mostly on coffee shop owners and managers, under the assumption that these positions required a certain level of cultural knowledge to be done effectively. I approached these individuals in person when possible and through email when necessary. These individuals were informed the goals and purpose of the study, and when agreed to participate interview times were scheduled. This phase of data collection lasted from July to September of 2018. During this time period a total of 9 interviews were conducted with owners, managers, head roasters, and lead baristas. While most of these interviews were conducted with individuals from Birmingham or Tuscaloosa, I completed two phone interviews with professionals from out-of-state.

CCA Questionnaire:

The data from the semi-structured interviews and my personal experience was used to build a CCA questionnaire which would elicit the cultural model from a wider array of informants. Sampling for this phase of data collection relied on chain-sampling which was grounded in the network I established in the first phase of data collection. After constructing the questionnaire for this phase, I returned to my earlier informants and asked them to refer me to
others in their respective companies who would be interested in participating. In this phase I asked my informants to introduce me to industry professionals and customers who may be interested. Since the questionnaire could be completed online it wasn’t necessary for me to meet these individuals in person, although I preferred to do this when possible. Even though the questionnaire could be distributed virtually, I restricted this phase of data collection to residents of the Birmingham and Tuscaloosa areas. The individuals who agreed to participate were sent a link to the online questionnaire as well as a copy of the consent form for them to sign. Although chain-sampling supplied most participants, I made use of convenience sampling opportunities when they presented themselves. These were mostly “latte art competitions” hosted at various coffee shops in the area (more on this later). This phase of data collection spanned roughly two and half months from mid November 2018 until the end of January 2019.

Data Collection

Data collection consisted of two main phases, preliminary semi-structured interviews paired with participant observation, followed by cultural consensus questionnaires. My study strategically deviated from the typical format of cultural consensus analysis which has three steps: (1) exploring the domain through interviews and observations, (2) free-listing tasks to elicit terms in the domain and (3) interview schedules for the identification of a cultural model (Borgatti 1999). The first step was unnecessary given my background in third wave coffee. I was in less jeopardy of misunderstanding the informants culturally specific terms and knowledge because of my five years as a community member. Free-list tasks were replaced with semi-structured interviews in order to create a less-structured exploration of how the community perceives third wave coffee. These interviews were audio recorded with permission of the informant. By allowing for naturally developing conversations I could explore more than just the
“items” in the domain but how the items relate to each other and how the participants viewed the overall narrative of the industry. This still allowed me to elicit the important parts of the domain and as an added benefit, which resulted in a format of data that would not usually be available in cultural consensus studies. The second and last step of data collection used a structured questionnaire in the typical format of CCA.

Since the main purpose of the first phase is to explore the domain, questions focused on the ways in which third wave coffee was identifiably different from earlier waves, with special attention to sensory knowledge and experience. While most questions were concerned with the totality of sensory experience in third wave coffee, including tastes, sights, smells and feels of participating in the industry, the first few questions focused on the participants’ background in the industry. Participants were asked how long they have worked in the entire coffee industry and how long they have worked in what they specifically considered third wave coffee. In addition, informants were asked how many third wave coffee companies they have worked for. They were then asked to describe their current position along with the roles and duties associated with that position. The last of the questions about the individuals themselves asked them to state any industry certifications they might have, such as Specialty Coffee Association of America (SCAA) Certified Roaster or Barista.

From this point on questions focused on the industry as a whole, and informants were asked to answer with this in mind. The first of these questions asked the informants if they believed third wave coffee was different from the rest of the coffee industry. This was immediately followed by asking them what those differences were and asking them to identify one or two core differences. They were then asked what sensory criteria they used to judge a coffee’s quality. Since coffee gets judged at different stages (i.e. the batch of roasted coffee
versus the brewed cup of coffee) and in different forms (i.e. different preparation methods) this question most often resulted in two or more answers. The next pair of questions specifically asked for taste characteristics that make for “good” coffee and whether institutional tools such as the SCA Flavor Wheel or Sensory Lexicon were helpful in determining these characteristics. This was followed by a question about non-taste criteria in determining “good” coffee. It was crucial to split this into separate questions rather than asking it as one question because tasting criteria is the most salient aspect of quality in third wave coffee, and even with the questions separated it was difficult for some informants to think of non-tasting criteria. The last question asked informants to discuss the sensory experience of the space in which coffee is consumed. This is perhaps the most important, and interesting, question of the interview because spatial-contextual sensory knowledge often takes a back seat to the discussion of “tasting notes” and “flavor profiles,” yet these attributes are fundamental in distinguishing between third wave and non-third wave coffee.

The second phase of data collection used the interview data to construct a CCA questionnaire. I chose to use the survey software Qualtrics for this task due to familiarity. The questionnaire is split into two sections. The first section’s purpose is collecting demographic data of the individuals and the second section is the multiple-choice questions used in analyzing the existence and distribution of the cultural model. Before participants could answer questions in the two sections, there was a screening question intended to prevent non-community members from taking the questionnaire. The screening question asked informants to identify their level of familiarity with the term “third wave coffee.” Possible answers were “not familiar,” “slightly familiar,” “familiar” or “very familiar.” Those who selected “not familiar” were thanked for their participation and prohibited from completing the rest of the questionnaire.
For the qualified participants demographic data was collected on age, gender, ethnicity, income, level of education, city of residence and their relationship to the industry (i.e. consumer or employee). If they were a member of the industry, they were asked their position, company name, how many total years they have worked in the industry and if they had any industry certifications. Lastly, everyone was asked how many times a week they bought coffee from a “non-third wave” shop in order to gauge their dedication to the craft.

The rest of the questionnaire consisted of 64 multiple-choice questions about 32 sensory experience attributes. The 32 items were split into two groups corresponding with the semi-structured interview questions. The first 16 items were focused on the taste attributes of coffee, while the other half asked about spatial-contextual attributes. Informants were asked about the “desirability” and “commonness” of all 32 items in the context of third wave coffee, resulting in 64 total questions, which are displayed in detail in Table 1. Answers were on a 4-point Likert scale that ranged from “not desirable/common” to “very desirable/common.” A few of the items were reverse coded so the expected answer was “undesirable” or “uncommon.” This served two purposes. Firstly, this prevented acquiescent response patterns. More importantly it was not always clear what the desirable or common trait was. For example, my interviewees were better at describing undesirable sounds and music in coffee shops than they were at describing desirable ones.

<table>
<thead>
<tr>
<th>Table 1 - List of Questionnaire Items- Unranked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taste Items</td>
</tr>
<tr>
<td>1. Blueberry</td>
</tr>
<tr>
<td>2. Tomatoey</td>
</tr>
<tr>
<td>3. Potato-like</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>4.</td>
</tr>
<tr>
<td>5.</td>
</tr>
<tr>
<td>6.</td>
</tr>
<tr>
<td>7.</td>
</tr>
<tr>
<td>8.</td>
</tr>
<tr>
<td>9.</td>
</tr>
<tr>
<td>10.</td>
</tr>
<tr>
<td>11.</td>
</tr>
<tr>
<td>12.</td>
</tr>
<tr>
<td>13.</td>
</tr>
<tr>
<td>14.</td>
</tr>
<tr>
<td>15.</td>
</tr>
<tr>
<td>16.</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.</td>
<td>Music that fits the identity of the shop</td>
</tr>
<tr>
<td>5.</td>
<td>Fast and convenient coffee</td>
</tr>
<tr>
<td>6.</td>
<td>A barista who enjoys their job</td>
</tr>
<tr>
<td>7.</td>
<td>Every coffee shop has the same “vibe”</td>
</tr>
<tr>
<td>8.</td>
<td>Direct relationships between coffee producers and coffee roasters</td>
</tr>
<tr>
<td>9.</td>
<td>Handmade ceramics</td>
</tr>
<tr>
<td>10.</td>
<td>Espresso that gets better as it cools</td>
</tr>
<tr>
<td>11.</td>
<td>Coffee with clear predominant flavor notes</td>
</tr>
<tr>
<td>12.</td>
<td>Pretentious baristas</td>
</tr>
<tr>
<td>13.</td>
<td>Baristas will remake a latte if it is not aesthetically pleasing lattes</td>
</tr>
<tr>
<td>14.</td>
<td>Thoughtful conversations between baristas and customers</td>
</tr>
<tr>
<td>15.</td>
<td>Coffee companies refuse to work with other local companies</td>
</tr>
<tr>
<td>16.</td>
<td>A barista that can tell the difference between a Columbia and Ethiopia in a blind taste test</td>
</tr>
</tbody>
</table>
This Qualtrics questionnaire was distributed to 70 Alabama residents through chain and convenience sampling as discussed above. Only 41 of the individuals qualified to answer the full questionnaire after the screening question. Responses were exported from Qualtrics to SPSS version 25 for data analysis.

**Data Analysis**

Data was analyzed at two different points of the study. First, the semi-structured interviews were transcribed and coded for recurring themes. A few months later the questionnaire data were analyzed in SPSS for quantitative results. All statistical tests used a .05 alpha level.

The interviews were transcribed using ExpressScribe and then hand coded for themes using the highlight and comment functions in Microsoft Word. Since this step replaced free-listing tasks, I counted how many interviews the identified themes appeared in, so a single theme could appear a maximum of 9 times (once for each interview). These interviews were also revisited after data analysis in SPSS to explore where the quantitative and qualitative data converged or deviated from each other.

Data analysis in SPSS was done in four steps: calculating demographic frequencies and running cultural consensus analysis, running residual agreement analysis, and hypothesis testing along with general explorations of the relationship between the demographic variables and the coefficients produced by cultural consensus analysis and residual agreement analysis.

Frequency tables were constructed for all categorical and nominal data. This included gender, ethnicity, level of education, city of residence, familiarity with third wave coffee, relation to the industry, position in the industry, company name and industry certifications. Descriptive statistics, including mean, standard deviation, skewness, and kurtosis were calculated.
for continuous data. These data included age, income, years in the industry and commitment to craft.

The next step was running cultural consensus analysis. CCA builds a correlation matrix of individuals from the items in the questionnaire. The degree to which any two informants correlate or “agree” is considered a product of their shared knowledge (Romney, Weller, Batchelder 1986). If there is enough agreement between all the informants, we can say there is a shared cultural model. This is essentially a product of probability theory; if there was nothing influencing the respondents’ answers we would expect answers to be sporadic and randomly distributed. However, if there is an underlying cultural model there will be an identifiable pattern of agreement (Romney, Weller, Batchelder 1986). As discussed above, CCA results in a new continuous variable, cultural competence coefficients. Descriptive statistics were run on these coefficients in the same fashion as the other continuous variables. In addition to cultural competence coefficients, CCA produces another key statistic necessary for residual agreement analysis: this is the estimated cultural answer key.

The estimated cultural answer key weighs informants’ answers based on their cultural competence score and predicts the culturally correct answer to each item (Romney, Weller, Batchelder 1986). This is crucial to residual agreement analysis because this technique is rooted in systematic deviations from the cultural answer key. Just as CCA produces cultural competence coefficients, residual agreement results in another set of coefficients called residual agreement coefficients. The relationship between these coefficients and demographic variables can be explored to identify patterned deviations from the overall model.

The first hypothesis, that there is a shared cultural model of third wave coffee, was tested using the eigenvalue ratios from CCA. Eigenvalues are a measure of the variation explained by a
latent variable. In this case the latent variable would be a cultural model. If the ratio between the first and second eigenvalue is greater than 3:1 a shared cultural model can be said to exist (Romney, Weller and Batchelder 1986). The second hypothesis is that some positions in the industry will have more cultural knowledge than others. To test this hypothesis differences in mean cultural competence coefficients between the different positions were explored using t-tests and ANOVAs. The last of the main hypotheses predicts that there will be systematic deviations based on the company informants worked for. To test this hypothesis, I first used t-tests and ANOVAs to explore differences in residual agreement coefficients. When significant differences in residual coefficients were found between groups, I plotted the cultural competence coefficients against residual coefficients and labeled them by the grouping variable.

After testing the main hypotheses, I ran a series of tests that explored the cultural competence coefficients and their relation to various industry demographics. These included correlations between cultural competence and years in the industry and income among industry members. These tests were informed by the logic that those with more experience would be more culturally competent and have higher incomes in third wave coffee. Obviously, it would not make sense to explore this relationship among non-industry members. I used a t-test to see if there was a significant difference in cultural competence between residents of Birmingham and Tuscaloosa due to the longer, and larger, presence of third wave coffee in the bigger city of Birmingham.

I then expanded my analysis of intragroup variation by comparing MDS plots of the 16 tasting items between the residual groups. The main statistic determining the validity of MDS plots are stress values. The lower this value the more accurately the graph represents a structural or “real” relationship between the points (Sturrock and Rocha 2000). The items can be plotted in
an infinite number of dimensions but due to issues of interpretation I plotted them in two dimensions. A valid MDS plot of 16 items across two dimensions should have a stress value no larger than .242 (Sturrock and Rocha 2000).

Lastly, I ran a set of tests informed by a general concern among the community that third wave coffee, just like many industries, is dominated by ethnically white males. I used t-tests to explore differences in competence scores based on gender and ethnicity.
RESULTS

This chapter is divided into two subsections, corresponding to the two phases of data collection, semi-structured interviews and questionnaire data. Both sections are further subdivided for organizational purposes. While separate, the sections are inextricably linked since the primary purpose of the interview data was to construct the questionnaire. Throughout this chapter I attribute the term “respondents” to individuals who answered the questionnaire-, and “informants” to the individuals I interviewed; the term “item” describes a question or statement in the cultural consensus questionnaire. In the first section I highlight my informants and coffee companies that participated in my research. I then move on to discuss the prevalent interview themes that determined the questionnaire items. The questionnaire section reports basic frequencies and descriptives, and results of CCA and residual agreement analysis as they relate to my three hypotheses. The names of all individuals and companies have been changed for confidentiality.

Interview Data

Structured Interview

Phase 1 of data collection lasted from June of 2018 to October of the same year. During this span I interviewed 9 coffee professionals, including 3 coffee shop owners, 2 head roasters, one coffee shop manager, one experienced barista, one “Community Director” and one generalist employee who worked closely with roasters and baristas. My initial search for informants began by targeting reputable coffee companies and approaching representatives in person or through email. There were three cases in which I targeted individuals instead of companies because I had
preexisting relationships with the individuals. Six of the interviews were done on-site at the coffee company or shop the individual worked for, one was done at a local bar (per interviewee’s request) and two were done over the phone.

Since I relied heavily on chain-sampling, I began by approaching the owners of Tuscaloosa’s Caterpillar Coffee, Jake and Vee. At the time I had known them for roughly a year and a half and had a good understanding of their coffee experience, knowledge and connections. Caterpillar Coffee is what is commonly referred to as a “multi-roaster,” a shop that doesn’t roast their own coffee but carries coffee from multiple other roasters. By default, a multi-roaster will have business connections with other coffee companies. When I first approached Caterpillar, they were carrying coffee from a roaster in Arkansas, and Philosophy Coffee, a Birmingham based roaster. I would come to use both these connections during data collection. Moreover, Caterpillar is arguably the first third wave coffee shop in Tuscaloosa. It opened in February 2017 and because of its status as the original, Vee and Jake knew many of the specialty coffee consumers in the area. After explaining my project goals Vee, who runs day-to-day operations, agreed to participate. I wouldn’t officially interview Vee for another few months, but she immediately had suggestions of individuals and companies for me to reach out to.

With Vee’s suggestions I began to approach coffee companies in Birmingham, starting with Disc Coffee. Perry, the owner, immediately agreed to participate and we sat down for his interview then and there. Disc Coffee was very modern, with a simple wood and dark gray tile aesthetic. It is in the leasing office of a seemingly upscale apartment complex. While its location was interesting, it was not necessarily surprising. Due to the rising popularity of third wave coffee it is becoming increasingly common to use space within another structure for a small coffee bar, and as American cities gentrify these shops are often local coffee companies instead.
of chains. While this is most common in hotels, I have seen this in museums, craft beer breweries and even larger full-service restaurants. The menu at Disc Coffee is exemplary of the third wave. There was about 15 options and 4-5 of those are just manually brewed coffee with different countries of origin. Fifteen options may sound like a lot but relative to a full-on Starbucks menu, which contains roughly 40 items and infinite customizations, these menus are rather brief. The rest of the menu is comprised of espresso beverages, like cappuccinos and lattes, and a few smoothies. Because smoothies are not usually coffee-based, they are somewhat of an outlier on third wave menus. It is not unlikely to find them, but they are the exception, not the norm. During my research only one other shop offered smoothies.

While on the topic of beverages and menus, it is worth noting that the same beverages have different associations and meanings in second and third wave coffee. This is especially prevalent when it comes to cappuccinos and lattes, two classic beverages prepared with espresso and milk. Understanding this difference will draw attention to some of the core differences between the waves and perhaps provide at least one meaningful trait in identifying a “third wave” coffee shop. In most corporate cafes you can order a cappuccino or latte in any of their main sizes. What distinguishes the two is the ratio of fluid steamed milk to aerated milk, also called foam. A cappuccino would be roughly half foam and half milk with the espresso at the bottom, while a latte has about 75% milk and 25% foam on top of the espresso. The third wave community sees this as an American bastardization of what a true cappuccino is. Instead a “true” cappuccino is not half foam but rather less steamed milk in comparison to a latte, it comes in a single size, usually about 6oz and a latte is usually 10-12oz. Moreover, third wave coffee doesn’t distinguish between foam and milk in the same sense. Rather when milk is steamed it should be aerated, creating a silky smooth “microfoam” that is not separate from the milk but rather part of
the totality of quality steamed milk. In the steamed milk there is a spectrum from the densest liquid milk at the bottom to the lighter aerated milk at the top. The difference is rooted in the general concept that a cappuccino has “less milk.” In second wave coffee milk is replaced with foam and in third wave coffee there is just less total milk in a cappuccino. When it comes to espresso beverages, third wave coffee doesn’t recognize different sizes at all. Instead the type of beverage dictates the specific size and style of vessel it is served in. If you’re wondering where first wave coffee fits into this discussion, it doesn’t, because Italian-style beverages do not exist in the first wave. There are several more “disagreements” between the waves, but this issue comes up quite often and can be a point of frustration for local coffee companies that lose customers because of the disconnect. This may seem like a tangent, but I hope my readers have gained a deeper understanding of the complicated relationship between the “waves” and may even be able to recognize these differences in their future coffee excursions.

After Perry’s interview, I emailed the Regional Director of Philosophy Coffee, Evan. Philosophy Coffee is based in Birmingham but has several locations throughout the southeast, and two locations as far north as Boston. While much of the third wave community is comprised of locally owned and operated shops, Philosophy Coffee is one of the few larger companies that have maintained a high level of quality and maintain respect from the rest of the community. Evan introduced me to Kelly, the General Manager of one of the Philosophy Coffee Birmingham locations. Evan and Kelly both became key resources in the second phase of data collection by connecting me with potential respondents.

The storefront that Kelly managed is on the bottom floor of a large hotel, adjacent to the lobby; an example of larger institutions leasing space to local coffee companies. Inside there was a large bar made of wood with a white marble countertop. Most of the outer walls were large
windows allowing for bright natural light. The menu was a printed list kept near the register. Just like Disc Coffee, there were traditional espresso options like espresso, macchiatos, cortados, cappuccinos, lattes and americanos and then there were pour-over options from different origins. There were also a few tea and flavored beverage options, such as a mocha (a latte with chocolate). Espresso beverages with syrups are mostly associated with the second wave but are common within the third wave coffee. After all, third wave coffee shops still need to be profitable and compete for the same customers as the other waves. As one informant put it:

_I don’t wanna create an atmosphere that’s only for specialty coffee consumers, because I don’t know. In the past 5 years I’ve learned that, in Alabama you’re not gonna make your money on specialty coffee, that’s the fun side and that’s the goal but the average blue-collar customer who comes in everyday is what pays the bills._

The community does try to distinguish their flavored beverages by making house-made flavors, adding garnishes or creating novel flavors like bourbon reduction syrup. It is rare to see more than five syrup options at a third wave shop.

After my interview with Kelly, I emailed a representative from Prose Coffee Roasters in Birmingham. This company roasts coffee and wholesales it to other companies. Since Prose does not serve their coffee, they do not have a store-front, making an in-person approach impossible. Once connected, I was able to set up an interview with Mark, the company’s head-roaster. This interview was one of my lengthier ones, lasting about an hour. Mark and I talked in the roasting warehouse of the company, giving me a unique “behind-the-scenes” look. We sat down in a meeting room adorned with coffee reference tools, like a poster titled “The Art of Aroma Perception in Coffee.” The whole building was abounding with the smell of roasting coffee, which smells kind of like burning grassy plants. I’m not quite sure, nor did I think to ask, why it smells remarkably different from the final product, but it’s rather unpleasant. Mark had an abundance of work experience as a barista and a roaster. He worked for three different
Birmingham coffee companies and was the first roaster I interviewed. Roasters seemed to have slightly different perspectives from those who work with customers, emphasizing science, quality and process over interpersonal relationships.

Shortly after my time with Mark, Garden Coffee, a reputable third wave coffee shop from Northern Alabama, was opening a second location in Tuscaloosa. Through a chain of informants and colleagues from Caterpillar Coffee I was introduced to Harry, Garden’s owner. I completed my interview with Harry while the shop was still under construction, which made it hard to get a full observational experience, but the main color scheme was already apparent. The walls and structures were mostly wood, with a cement floor complemented by white tables and countertops.

My next interviewee was Dean, the Community Director for Lively Coffee in Tuscaloosa. I was introduced to him through a fellow graduate student who, at the time, was attending the same church. As his title suggests, he was the occupational outlier in my sample. Most of his concerns were people-oriented, reporting the main characteristic of third wave coffee as “story.” To him each beverage or bag of coffee told a story of connections in the commodity chain. For Dean if you didn’t appreciate the coffee for its relationships to people and places (country of origin, roasting facility, baristas and local community), you weren’t experiencing all third wave coffee has to offer. It is no coincidence that Lively Coffee was also an aesthetic outlier. Instead of sleek modern look with white, black or wood as the main visual, it was bright and colorful, the walls covered in posters about public events. Lively Coffee is also a non-profit shop, associated with a local church. This shop is so unique that if it were dependent on atmosphere alone, I may not have considered them for this project. However, they are very precise in their preparation of coffee, they weigh out every dose of espresso and have incredibly
accurate (and expensive) scales. They also have a semi-customized espresso machine, which I recognized as being quite expensive. This espresso machine is the epitome of minimalism, the bulky components are hidden beneath the counter and only slender stainless-steel spouts are visible. Although deviating from the characteristics of the other shops may seem like a reason to exclude Lively, it provided some welcomed variation.

After my interview with Dean, I begin to lose momentum within my network. I had contacted several other potential informants with little success, so I expanded my sampling strategy to include phone and webcam interviews. I got in contact with an old coffee colleague of mine, John, who now works for a roaster in Iceland. He agreed to a FaceTime interview. Our prior relationship made this interview one of the more interesting and challenging ones. It was challenging because John had a good grasp of my prior coffee knowledge and lacked depth in his responses. Yet, our closeness created a naturally developing conversation and unlike the other interviewees, who were trying to remain carefully inoffensive, John was not afraid to misspeak. This led to a barrage of true feelings about “shitty” coffee, referring to the dark roasts of both first and second wave coffee. It was quite clear that for him the central tenant of third wave coffee was a high-quality product built on what he considers objectively better tasting coffee.

For my next interview I set up a phone interview with Drake, the head roaster for Melbourne Roasters located in Southern California. I was introduced to Drake while living in southern California, he was the head roaster at the shop my partner previously worked for. More so than Mark, Drake really honed in on the qualitative aspects of coffee. He stated the most important distinguishing feature of third wave coffee was the “level of detail” that goes into roasting and brewing coffee. He believed that second wave coffee is all about efficiency,
whereas third wave coffee’s goal is the best possible product. Similarly to John, Drake thought of this coffee as objectively superior.

After my phone and FaceTime interviews I was introduced to Rue, again by the employees of Caterpillar coffee. Rue was formerly a barista for the Arkansas based roaster that supplies Caterpillar and had recently moved to Tuscaloosa. While most of my preliminary interviewees were with roasters, owners or managers, I felt comfortable that Rue was an experienced barista because of his history in the industry. His former company has an outstanding reputation among the national third wave community. They supply coffee all over the country to multi-roasters and every year they have multiple individuals competing in the US Coffee Championships. Moreover, this company has earned so much respect from the rest of the community that other shops often send their employees to the Arkansas headquarters for training courses. When I was a barista, I was able to visit this roaster’s headquarters and took courses on sourcing coffee, latter art, and espresso theory (yes, there is theory in coffee). For Rue’s interview we decided to meet at a local bar, but ultimately this was insignificant since I had already been to all the targeted Tuscaloosa shops. Much like the roasters, Rue emphasized coffee quality, not interpersonal relationships.

My closing interview completed the circle in the network I had created. As mentioned earlier, I did not interview Vee immediately after approaching her about my project, instead we waited till October. We sat down outside of Caterpillar Coffee on a warm day. The chairs and table were wooden, which by then I had realized was the dominant “look” in the various shops I had visited. Vee, like Dean, emphasized relationships over qualitative aspects, although she recognized these were significant too. The network I created through Vee and the Caterpillar
employees continued to develop and I would continue to lean on it throughout the second phase of data collection.

Recurring Themes

The prevalent themes in the interview can be divided into three categories. The first category is comprised of explicit themes mentioned by name by several participants. For example, the exact words “minimalism” or “minimalist” were used by several individuals. The second category are general themes that were being discussed in subtle and varied ways, like tasting coffee based on origin. None of my informants were suggesting it was a necessary to distinguish between countries of origin when drinking coffee but almost all my informants were associating specific tasting notes with countries of origin. The last category are things that were only mentioned by one or two informants, but observations and personal experience led to their inclusion. All items can be found in Table 2.

<table>
<thead>
<tr>
<th>Taste Items</th>
<th>Desirability</th>
<th>How Common</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blueberry</td>
<td>DBLUE</td>
<td>CBLUE</td>
</tr>
<tr>
<td>Fruit-Forward</td>
<td>DFRUITF</td>
<td>CFRUITF</td>
</tr>
<tr>
<td>Tomato</td>
<td>DTOMATO</td>
<td>CTOMATO</td>
</tr>
<tr>
<td>Smoky</td>
<td>DSMOKY</td>
<td>CSMOKY</td>
</tr>
<tr>
<td>Earthy</td>
<td>DEARTH</td>
<td>CEARTH</td>
</tr>
<tr>
<td>Nutty</td>
<td>DNUTTY</td>
<td>CNUTTY</td>
</tr>
<tr>
<td>Chocolatey</td>
<td>DCHOC</td>
<td>CCHOC</td>
</tr>
<tr>
<td>Toasty</td>
<td>DTOAST</td>
<td>CTOAST</td>
</tr>
<tr>
<td>Potato</td>
<td>DPOTATO</td>
<td>CPOTATO</td>
</tr>
<tr>
<td>Citrusy</td>
<td>DCTIRUSY</td>
<td>CCITRUSY</td>
</tr>
<tr>
<td>Complexity</td>
<td>DCOMPLEX</td>
<td>CCOMPLEX</td>
</tr>
<tr>
<td>Moderate Acidity</td>
<td>DACID</td>
<td>CACID</td>
</tr>
<tr>
<td>Juicy</td>
<td>DJUICY</td>
<td>CJUICY</td>
</tr>
<tr>
<td>Bright</td>
<td>DBRIGHT</td>
<td>CBRIGHT</td>
</tr>
<tr>
<td>Clean</td>
<td>DCLEAN</td>
<td>CCLEAN</td>
</tr>
<tr>
<td>Heavy/Lingering Body</td>
<td>DBODY</td>
<td>CBODY</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spatial-Contextual Items</th>
<th>Desirability</th>
<th>How Characteristic</th>
</tr>
</thead>
</table>

Table 2 - Complete List of Items in Residual Plot
| La Marzocco Espresso Machine | DLAMAR | CLAMAR |
| Everybody in café on phone, laptop or tablet | DSCREEN | CSCREEN |
| Baristas who enjoy their job | DENJOY | CENJOY |
| Beverages served in handmade ceramics | DCERAM | CCERAM |
| Fast and convenient coffee | DFAST | CFAST |
| Baristas and customers have thoughtful conversations | DCONV | CCONV |
| Barista can tell the difference between Ethiopia and Columbia in blind test | DBLIND | CBLIND |
| Coffee roasters have direct relationships with coffee producer | DDIRECT | CDIRECT |
| Espresso that gets better as it cools | DSPRO | CSPRO |
| Pretentious baristas | DPRETENSE | CPRETENSE |
| Playlist fits the identity of the shop | DPLAY | CPLAY |
| Barista will remake a latte if not aesthetically pleasing | DLATTE | CLATTE |
| Minimalist decor | DMINIMAL | CMINIMAL |
| Coffee companies are not willing to work with other local companies | DLOCAL | CLOCAL |
| Coffee with clear predominant tasting notes | DCLEAR | CCLEAR |
| Every coffee shop has the same “vibe” | DVIBE | CVIBE |

First and foremost, when I asked my informants if they believed third wave coffee was significantly different from other forms of coffee consumption, they all remarked it was. Most informants listed several differences, so to narrow it down I followed up by asking them to
choose one or two pivotal differences. Responses to this question fell into two broad categories: it was either about personal connections or a qualitative difference. The split was not random, with most individuals in management roles suggesting that the personal relationships are the main difference. As Vee states:

*I think the most important thing is relationships that people have with a certain café. Starbucks can drop business relationships really quickly when it’s convenient. And I don’t hate on Starbucks because they really paved the way for a lot of things but just a comparison there’s a more big business mindset. Whereas I think in specialty coffee people recognize whether it’s the farmer, or the roaster, or the café that a lot times are individuals and not big corporations and so you feel however you’re going to treat that person is gonna have more of an effect on their lives and so usually I think that leads to a stronger sense of community within the industry that wouldn’t necessarily be found in other industries.*

On the other hand, some informants were more concerned with qualitative differences in the methodologies used in third wave coffee. While there is not a quote that sums this up, Drake said the most important difference was the “level of detail” in all steps of the commodity chain, including harvesting, roasting and brewing.

Unsurprisingly, most items in the first category (i.e. explicitly mentioned items) were tasting notes. This is because many tasting notes are referential in nature; they compare natural coffee flavors to other existing foods like blueberries, tomatoes or chocolate. The most common taste item was “chocolate”, which was mentioned by 8 of my informants. This was followed by “fruit-forward,” mentioned by 7 informants, and “blueberries” which was noted by 6 informants. Rounding out the referential taste items were “nutty” with 4 mentions, “tomato” with 3 mentions and “earthy,” “smoky,” “juicy,” and “citrusy” with 2 mentions. I added the last two referential taste items, “toasty,” and “potato” for specific reasons. I added “toasty” as a proxy for a “burnt” flavor in coffee. As a community, third wave coffee tends to dislike darkly roasted coffee and will often say it is burnt or put politely “over-roasted.” Using the word burnt would prompt an automatic negative response, which is why it was replaced with the more refined “toasty.” Potato
has an association with a defect known to affect east African coffees. The defect, known simply as “the potato defect,” was mentioned by two of my informants, both of whom mentioned that it made coffee smell and sometimes taste like fries, or greasy potatoes.

The remaining tasting items are what I will call descriptive items. These are items that refer to the properties of coffee but don’t necessarily refer to existing food items. They include “bright,” “complex,” “heavy,” “moderate acidity,” and “clean.” These terms are particularly interesting because they’re indexical of connoisseur status and are not typically part of the lexicon of casual third coffee consumers. Clean refers to a coffee’s taste that is not muddled by flavors associated with brewing and roasting errors. For example, under-extracted coffee has an intense saltiness. If saltiness, due to poor extraction, is masking other flavors it would not be “clean” tasting. Heavy refers both to viscosity and a general lingering on the tongue. Complexity refers to subtle changes in flavor over time and across the pallet. Many of my informants discussed acidity, but acidity was only desirable within a narrow range. Too much or too little acidity was not desirable, so I had to include the descriptive “moderate.” Bright is a tough term to define. It is mostly discussed in association with east African coffees. It is also partially used in opposition to “heavy.” Perry uses the term bright in a common way in his comparison of South American and East African coffees:

Again, I’m not an expert but heavy would be more the Brazil. In terms of flavor notes and mouthfeel. And then Ethiopian would be lighter, brighter, not weak but brighter, clean. The aroma the mouthfeel, the taste, how it changes flavor as it cools is really fun.

The term “light” is also used but I get the sense there is a preference for “bright,” because light can also be used to describe a coffee’s roast. Alternatively, bright is only used when discussing taste. In all “bright,” “complex,” and “heavy” were used by 4 informants, “moderate acidity” by 3 informants, and “clean” by 2 informants.
The tasting notes were easiest to document, because they were easiest for informants to talk about. It was quite rare for informants to talk about the spatial-contextual cues in concrete ways. This is probably because it’s outside of the normal day-to-day discourse for coffee professionals, but it is quite common to talk about the taste profiles of coffee multiple times a day. There a few spatial-atmospheric items that were explicitly mentioned, most notably “minimalist” décor and “direct trade” relationships.

Minimalist décor usually refers to a very basic monochromatic scheme, lack of visual clutter, and use of functional square furniture. Three of my informants specifically used the words “minimalism” or “minimalist” but others were discussing this in other ways such as “a lack of clutter” or “visually clean.” The use of minimalism in these shops was further confirmed through my observations. Most of the shops I visited had wooden décor with one main color on the countertops, usually white but sometimes black or gray. Most shops had their registers and coffee equipment as the only things on their counter. This becomes an important difference when compared to large coffee chains which are cluttered with impulse items for customers to grab at the counter.

Direct trade relationships were mentioned by five of my informants. The direct trade concept originated in third wave coffee and is often perceived as a successor to Fair-Trade. However, it wasn’t always central to third wave coffee. Many people that have been involved in the movement since its early days recognize that this is a recent part of the story. The original goal was quality and ethical sourcing was a by-product. This statement by Harry exemplifies this point.

*Now I think we’ve entered into a fourth wave, someone like Parlor (reference to a NY coffee company) doesn’t go through an importer like I do. They go straight to the farm and they know that farmer personally and they commit to their crop and supporting their family*
Regardless of whether direct trade relationships signify the coming of a new wave or not, it is clearly an important part of the status quo. Even when participants did not explicitly mention direct trade, they often mentioned related points. As I’ve mentioned earlier, Drake suggested the difference between third wave coffee and traditional coffee is the level of detail at every step in the commodity chain. This includes the production. While this is not an explicit mention of “direct trade” it does imply the importance of careful sourcing. Other informants also mentioned relationships as important, which although not explicitly referring to direct trade, implies importance of the relationships between consumers and producers.

The remainder of the spatial-contextual questionnaire items were not as easily elicited because my informants did not have well developed ways of describing things outside of coffee taste. Taking music, for example, six of my participants recognized music’s importance in a café atmosphere but they could not speak as fluently about sensory knowledge of music as they could about taste. This is to be expected, since my informants were coffee professionals not musicians. My informants described music mostly by giving several examples of what you do, and don’t, want to hear in a coffee shop. Mark couldn’t find an exact example of what should be playing but was sure that it should not be too energetic like “heavy metal” and “house music.” Harry on the other hand mentioned that Tame Impala, an indie rock band, is the prototype of music in cafes. Perry, rather than giving a specific style, was more concerned with the volume, he remarked that music volume should be constantly increased or decreased depending on the abundance of other sounds in the café. I reconciled the variability in these statements by using a broad question that captured the importance of music but removed the burden of naming a specific genre. The music item ultimately asked, “how desirable/common is a playlist of music that fits the identity of the coffee shop it’s played in?”
In a similar fashion, my informants spoke subtly about different tasting notes associated with coffees from different countries. This came very naturally to my informants; they were never asked to match tasting notes to countries of origin, but they could not help themselves from speaking about them in association. In its most extreme form, the countries literally replaced tasting notes, as it does below in Perry’s interview. In this circumstance I had a follow up question for him regarding his personal taste that followed his explanation of teaching new customers that coffee from different origins have different tastes.

Me: *What do you look for in terms of coffee flavor, thinking about single origin? What tasting notes do you prefer?*

Perry: ...*I probably wouldn’t lean toward, ya know like a Brazil or a Guatemala, a little more mainstream, if that makes sense. It’s an excellent coffee but I think I enjoy the outlier notes, whether its fruit, whether its earthy and tart.*

Notice that Perry didn’t mention any tastes associated with Brazil or Guatemala but rather used them as a reference assuming I knew the tasting notes associated with them. He was not wrong; through my experience and research I have learned the notes that are generally associated with these origins. In general, although a definite over-generalization, Latin American coffees are associated with chocolate and nutty flavors, and East African coffees are more associated with fruit-like flavors. Another great example of this comes from Harry’s interview, in which you can see his comments about Latin American and African coffees:

> We just use Latin American to try to keep that same profile but um really chocolatey, something that can really push through that milk, but also really nutty. In single origin stuff for pour overs I really like uh Kenyas, Ethiopias, something very bright, uh I like natural processed so something very fruity, but I would say my favorite pour over is some sorta washed Kenya, something that’s very light like a white peach or some sorta lemony sort of citrus candy or something

In total seven of my informants had similar associations, or at least associated specific notes to specific countries. This manifested itself in an item stating, “baristas can tell the difference between a Columbia and Ethiopia in a blind taste test.” This statement captured the importance
of these associations between countries and tasting notes but was consistent with cultural logic that baristas, not casual consumers, must know the difference.

The remaining questionnaire items were constructed in a more complex way. They were conjured from even more muddled themes or were used to capture multiple themes. One item asked respondent to rank the desirability and frequency of “baristas have long thoughtful conversations with customers.” This question captured two themes from my interviews. The first has already been mentioned, the interpersonal relationships that are formed in the community. The second is what I ultimately deemed “method.” A few of my informants mentioned that third wave coffee slows down the process, of course this means slowing down the producing, roasting and brewing, but this also referred to slowing down the ordering process, or as Harry described it “being intentional with customers.” Both Perry and Mark specifically mentioned that slower brewing methods, like pour-overs, provide opportunities for conversing with the customers, further suggesting an association between the method and relationships with customers. The idea of slowing down the process was also incorporated into a reverse coded questionnaire item, the desirability and frequency of “fast and convenient coffee.” I chose “coffee” instead of “service” to elicit the notion of slower manual brewing techniques and added “convenient” to juxtapose the fast-paced second wave environment, which focuses on quantity over quality. Service would not have worked because generally customers want service to be quick anywhere, the time scale just works differently in third wave coffee. A pour-over might take 5 minutes instead of 1 minute to prepare but customers would generally still be dissatisfied if it takes longer than necessary.

As mentioned earlier, three of my informants were coffee shop owners, and Dean as a community director tended to align with the owners. These informants were not asked about their companies’ goals, but it was clear that each one had goals in mind about what their shop
should portray. It is not surprising that each owner had a vision for their shop, since they are in competition with other shops and probably feel the need to make theirs unique. This led to a second reverse coded item stating, “every shop has the same vibe.”

Many of the remaining items relied heavily on my observations. First of these is “the presence of a La Marzocco espresso machine.” La Marzocco is a popular brand of Italian espresso machines used by many coffee shops. A La Marzocco is like the iPhone of espresso machines. There are several other high-quality machines available on the market, but this is a very common machine with an easy-to-use interface, which keeps loyal customers coming back. One of my informants explicitly mentioned this machine as a prominent component of third wave coffee when I asked her to follow up on visual cues of a desirable coffee shop.

Me: Would you mind unpacking that a little bit? Like what are the visual cues that let you know.
Kelly: equipment, you’re generally gonna see a Marzocco or a Slayer or some kinda high-end high-volume espresso machine.

Kelly’s comment was confirmed by my observations. Two of the three Tuscaloosa shops had La Marzocco models, and the third had a modified La Marzocco, called a Mod-Bar, briefly mentioned earlier. Out of the three interviews I did in Birmingham, one was at a roasting facility, so an espresso machine was not visible. Out of the remaining two shops one had a La Marzocco, so out of the five sites with espresso machines, three had La Marzocco and one had a machine built with La Marzocco parts.

The next observation-based item was constructed from the frequency of artisan ceramics used in the third wave coffee context. Given the emphasis on quality coffee and relationship building, most shops emphasize “for here,” as opposed to “to-go,” beverages. This places a greater importance on the vessels that coffee is served in, leading to the item “beverages served in hand-made ceramics.” While most shops need too many ceramics for them to truly be hand-
made (although it does happen), I felt this statement was representational of the “artisan” feel of the ceramics.

The next few items were only mentioned by one informant, but my previous experience suggests they are important. For instance, one item was “everyone in a café is on a laptop, tablet or smart phone,” this was brought up by Mark in a negative light but even those unfamiliar with third wave coffee can see the prevalence of coffee shops being used as working sites. For Mark this presented a problem because it prohibits the relationship building that was so important to many of my informants. In a very similar fashion, there is concern that many baristas in third wave coffee have connoisseur knowledge but have trouble communicating to specialty coffee novices, leading to judgmental or pretentious interactions. Again, this conflicts with the value of connecting with other people. This concern was brought up by both John, who used a far less polite word than pretentious, and Mark who was concerned with snobby baristas. The corresponding item was “judgmental or pretentious baristas.”

The final two items were supplemental, they did not stem from my interviews or observations, but rather outside suggestions and cultural logic acquired in my experience as a barista. The first of these was “A barista will remake a latte if it’s not aesthetically pleasing.” This was suggested by one of my committee members and makes sense given the current emphasis on presentation in modern food culture. The next item, “baristas who enjoy their jobs,” was added because of the general “artisan” nature of third wave coffee. Because of its connoisseur status it generally takes more skill to produce a quality beverage in third wave coffee than the other waves (picture starting a pot of coffee in a diner vs. creating an espresso beverage with latte art on top) and therefore is often a source of pride for the creators.
**Questionnaire Data**

**Descriptives**

My questionnaire was ultimately distributed to 70 respondents, but only 42 were eligible after the screening question. One of those was a duplicate response, leaving 41 responses for statistical analyses. Out of these 41, 6 identified as “slightly familiar” with third wave coffee, 20 identified as “familiar” and 15 identified as “very familiar.” The number of respondents who work in the industry versus consumers was roughly even. Eighteen respondents were employed in the industry when they took the questionnaire, 4 were formerly employed in the industry and 19 had never worked in third wave coffee. Among those who worked in the industry, 5 reported obtaining various supervisor positions, such as owner, manager, or lead barista, and 13 were baristas or bakers or a combination of both. Eight of these respondents came from Caterpillar Coffee, 3 came from Philosophy Coffee and the remaining 4 were each from a different company. The average number of years in the industry was 1.9, however the distribution was widespread with a standard deviation of 1.6. The shortest time employed in the industry by any respondent was 4 months and the longest was 6 years.

The average age of my sample was 24.5, with a standard deviation of 4.8, the oldest respondent was 38 and the youngest was 19. The gender split was roughly even with 20 males and 21 females. I purposefully used open-ended questions for gender, but all respondents identified in traditional binary categories. Ethnically my sample was overwhelmingly white. As with gender, ethnicity was fill-in with 37 respondents identifying as white or Caucasian, 1 identified as Asian-American, 1 as Korean-American, 1 as Hispanic and 1 as Mexican-American. Since the sample size for ethnicities other than “white” was so small I collapsed the four outliers into a “non-white” category for statistical analyses.
The majority of my respondents, 32, lived in the Tuscaloosa area, 8 came from Birmingham and one respondent chose not to answer. Level of education was diverse with 2 individuals attaining no degree, 14 with a high school diploma, 3 with an Associates or trade degree, 15 with a BA/BS and 7 with a Graduate degree. I reported these two demographic categories consecutively because they are deeply intertwined. The population of Tuscaloosa consist of a larger percentage of students. Tuscaloosa county is home to roughly 207,000 residents (US Census Bureau) and hosts 3 colleges, University of Alabama, Stillman College and Shelton State Community College, totaling about 47,000 (22.7%) students. While Jefferson County, the county Birmingham belongs to, is home to 660,000 residents and only 30,000 (4.5%) students among the 3 major colleges in the area. Given that I collected data in downtown Tuscaloosa, it is likely that most of my Tuscaloosa informants were students, either grad or undergrad. This probably explains why most people reported having either a High school diploma or a BA/BS degree. The average income for my population was 21,700 with a standard deviation of 19,600. Again, this was heavily influenced by the context. Many individuals reported little or no income, likely students who did not work or had part-time jobs. The average was being heavily influenced by two outliers reporting an $85,000 annual income. Without the two outliers the average income drops to $18,000. A categorical breakdown of income can be found in Table 2.

<table>
<thead>
<tr>
<th>Table 3 - Annual Income in US Dollars by Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10,000</td>
</tr>
<tr>
<td>10,001-20,000</td>
</tr>
<tr>
<td>20,001-30,000</td>
</tr>
<tr>
<td>&gt;30,000</td>
</tr>
</tbody>
</table>
CCA and RA

There were three main hypotheses to test during data analysis. The first was the existence of a cultural model of sensory experience, the second was that there would be differences in cultural competencies based on industry occupation, and lastly individuals from different coffee companies would have patterned differences in their understanding of the model. Ultimately, the first hypothesis was supported and the other two rejected.

The primary statistic for testing the first hypothesis is the eigenvalue ratio, which was 6.94. This is more than twice as large as the conventional 3:1, suggesting a tightly shared cultural model of sensory experience among the third wave coffee community in the study area. In this model there were two subdomains, tasting notes and spatial-atmospheric cues. Before testing the second and third hypothesis, I ran CCA on the two sub-domains independently. The resulting eigenvalue ratios were 4.27 for the tasting items, and 6.79 for the spatial-atmospheric items. There is tighter agreement among the spatial-contextual traits than taste attributes but there is most agreement when the subdomains are combined. The main reason for running CCA on the domains separately was to confirm that they are truly part of a single domain. This is tested by exploring the correlations between competency scores of the two domains. If they are highly correlated the two sub-domains are most likely part of a larger cultural model (Romney, Weller, Batchelder 1986). The competency scores in each subdomain had an $r$ of .88, significant at the .01 level, suggesting they are indeed part of one larger domain.

Overall the competence coefficients were normally distributed and had a relatively high mean competency of .65 with a standard deviation of .12. The lowest reported competency score was .36 and the highest was .82. Since the mean is high and the standard deviation low it seems in general my sample was competent in the model. Its unsurprising then, that the second
hypothesis was rejected. There were not significant differences in mean competencies between
the 5 supervisors and 13 baristas. The average competence of supervisors was .69 and baristas
was .68, but it was not significant (t=.248; p=.808). Next, I tested the difference in competencies
between individuals who have experience in the industry, the 18 current employees plus the 4
former employees, against the 19 respondents who had never worked in the industry. This test
resulted in a -1.57 t-value and a p-value of .125. Those with coffee experience had an average
competency of .68 and those without averaged .62 (t=-1.57; p=.125). While there was a
difference in competency scores between casual consumers and those with experience, it was not
significant. Perhaps a larger sample would’ve yielded significant results.

The most significant difference in mean competencies is between individuals with
differing familiarity of third wave coffee. As reported above, 6 respondents were “slightly
familiar,” 20 “familiar” and 15 “very familiar.” Since there are three groups it was most
appropriate to use an ANOVA to test for differences in means. The resulting F-value was 3.816,
with a p-value of .031. The “slightly familiar” group had a mean competency of .69. The
“familiar” group had an average competency of .60 and the “very familiar” group had an average
of .70 (F=3.816; p=.031). According to a post-hoc Tukey the difference between “familiar” and
“very familiar” was significant at the .05 level, but the difference between “slightly familiar” and
“very familiar,” and the difference between “familiar” and “slightly familiar” were not
significant. The lack of difference between “slightly familiar” and the other groups is probably
because there were notably fewer respondents in this category. This would also explain why the
“slightly familiar” group had an average competency that was much closer the “very familiar”
group than it was to the “familiar” group. I collapsed the “slightly familiar” and “familiar”
categories and kept the “familiar” label and then tested the new groups. The corresponding t-test
was statistically significant \( (t=-2.641; p=.012) \). The mean competency of the very familiar group was .70 and .62 for the familiar group. Birmingham residents had an average competency of .70 and Tuscaloosa residents had a mean competency of .65. This test was insignificant \( (t=1.712; p=.10) \).

Mean competencies were also tested for differences based on ethnicity, gender, years in the industry and “commitment to craft.” The average competency of those who identified as ethnically “white” was .65 and the 4 who identified as anything but “white” had an average competency of .67, which was not a significant difference \( (t=.975; p=.758) \). This may have been due to the small number of respondents who did not identify as ethnically white. The average competency for males was .63 and for females it was .67, but this was insignificant \( (t=.839; p=.406) \). This could not have been due to small sample size of either gender because my sample was comprised of 21 males and 20 females. There was no significant correlation between cultural competence and any other continuous variable. The correlation between “years in the industry” and cultural competence was -.30 \( (p=.895) \). Cultural competence and commitment to craft had a correlation pf -.166 \( (p=.299) \), and income had a -.171 correlation with cultural competence \( (p=.320) \).

<table>
<thead>
<tr>
<th>Groups (A vs B)</th>
<th>Group A Mean</th>
<th>Group B Mean</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisors vs. Baristas</td>
<td>.69</td>
<td>.68</td>
<td>.248</td>
<td>.808</td>
</tr>
<tr>
<td>Professionals vs. Casual consumer</td>
<td>.68</td>
<td>.62</td>
<td>-.157</td>
<td>.125</td>
</tr>
</tbody>
</table>

Table 4 -Comparison of Groups Cultural Competence Coefficients
The third and final hypothesis was tested using residual agreement analysis. The results were strikingly like the explorations of cultural competence coefficients. There were not significant differences in residual coefficients between individuals from different companies, so the hypothesis was rejected. However, there were differences in residual coefficients based on other grouping variables. It should be noted that unlike cultural competence coefficients, there is not an easy real-world analogy to describe residual agreement coefficients. Like other residuals it just represents the distance between observed and expected values, in this case the expected values come from the culturally estimated answer key.

Since only Caterpillar had a noteworthy representation in the sample of industry professionals, I recoded this variable into a dichotomous variable with Caterpillar employees and everyone else. Caterpillar employees had a mean residual coefficient of .03 and the other industry members had a mean of -.09 (t=-1.304; p=.211). The third hypothesis was therefore rejected. There was also not a significant difference between consumers and industry professionals (t=.915; p=.366). However, just like cultural competence coefficients, there was a
significant between familiarity groups. Additionally, there was a significant difference between residents of Birmingham and Tuscaloosa.

Since there were three familiarity groups, an ANOVA was the most appropriate technique for testing mean differences between the “slightly familiar,” “familiar” and “very familiar” groups. The “slightly familiar” group had a mean of .070, while the “familiar” group had a mean of .124 and the “very familiar” group averaged -.147. A post-hoc Tukey revealed that there was a significant difference between “very familiar” and “familiar” but not between “slightly familiar” and the other groups. This too was probably a product of the small sample size of “slightly familiar.” Again, I collapsed this group into “familiar” and ran another t-test of residual coefficients, which was significant (t=4.067; p=.000). The new “familiar” group had a mean of .111. Since the “very familiar” group was unchanged the mean remained the same.

The t-test between Tuscaloosa and Birmingham residents was also significant (t=2.748; p=.009). The Tuscaloosa residents had a mean of .055 and the Birmingham residents had a mean of -.174. The real difference is still most likely being carried by the familiarity groups. This is not surprising considering the larger and longer presence of third wave coffee in the city of Birmingham. Additionally, according to the significance and t-values of the two t-tests it seems there is a more distinct difference in residual coefficients between familiarity groups than there are between groups of residents.

<table>
<thead>
<tr>
<th>Groups (A vs. B)</th>
<th>Group A</th>
<th>Group B</th>
<th>T-Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caterpillar Coffee vs Others</td>
<td>.03</td>
<td>-.09</td>
<td>-1.304</td>
<td>.211</td>
</tr>
<tr>
<td></td>
<td>Industry Professionals vs Casual Consumers</td>
<td>Birmingham vs Tuscaloosa</td>
<td>“Very Familiar” vs “Familiar”</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------------------------</td>
<td>--------------------------</td>
<td>-----------------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-.014</td>
<td>.052</td>
<td>.915</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.052</td>
<td>.915</td>
<td>.366</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-.174</td>
<td>2.748</td>
<td>.009</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.055</td>
<td>.009</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-147</td>
<td>4.067</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.111</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The difference in residual coefficients represent one group’s tendency to rank different items higher or lower than the other group. For instance, those who are “Very Familiar” tended to rank “blueberry” as more desirable than the “Familiar” group. Image 1-Residual Plot is a residual plot, the points are the items in the questionnaire, the y-axis are “high residuals”, or those who ranked these items higher than the consensus and the x-axis is “low residuals”. The items in the bottom right corner are being ranked higher by the Very Familiar group, and the items in the top left corner are being ranked higher by the Familiar group.
It seems the very familiar group are emphasizing tasting notes, such as juicy, citrusy and blueberry, that are novel and unique to third wave coffee. The familiar group on the other hand is emphasizing notes that are reminiscent of traditional coffee flavors, like nutty, earthy and smoky. Plotting the informants’ cultural competence coefficients against their residual coefficients provides a visual representation of how the groups diverge. In Image 2 the “Very Familiar” group, labelled “v,” cluster together in the bottom right quadrant, while the “familiar” group, labeled “f,” is distributed throughout the graph.
After residual agreement analysis revealed the two groups, “very familiar” and “familiar,” and the items in disagreement, I used MDS to analyze how the different groups conceived of the items in the domain. During the interview phase certain tasting items were associated with other items and with certain countries but the spatial-atmospheric items did not have comparable associations, so they were excluded from MDS. The 16-item plot for the “Very Familiar” group (Image 3) has a stress value of .070, while the plot for the “familiar” group (Image 4) has a stress value of .115. Both are well under the threshold set by Sturrock and Rocha (2000), but the lower stress value of the second MDS plots suggests there is a stronger structural relationship between the items for the “very familiar” group. Just like my informants, it seems that the “Very Familiar” respondents associate tasting items with certain countries of origin.

The first MDS plot has 4 clusters of similar items, the first three are related to regions of the world in which coffee comes from, the fourth seems to be a cluster of generally undesirable items, and the tasting note “earthy” seems to be an outlier.
The cluster in the top left consists of items associated with Latin American coffee, like chocolatey and nutty. The cluster that sits on the x-axis on the far left of the graph are tasting notes associated with East African coffees. Both assumptions are supported by an informant interviewed in phase 1 who was describing the target flavor for espresso and manually crafted cup of coffee ("pour-over").

*We just use Latin American to try to keep that same profile but um really chocolatey, something that can really push through that milk, but also really nutty. In single origin stuff for pour-overs I really like uh Kenyas, Ethiopias, something very bright, uh I like natural processed so something very fruity, but I would say my favorite pour-over is some sorta washed Kenya, something that’s very light like a white peach or some sorta lemony sort of citrus candy or something*
The two-item cluster in the bottom left quadrant has an even more geographically specific association with Ethiopia, as described by one of my informants.

“For example, Ethiopia generally always taste like blueberries...”

It’s not just the country but also the processing method most common to Ethiopia that is associated with blueberry, and berries more generally. The process is called “natural processing” and is alluded to in the first quotation. As for juicy, the intense blueberry flavor probably provides a more intuitive association. The association between items in the “Familiar” MDS (Figure 4) plot is unclear, however it is clear this group does not have the same associations as the “very familiar” group. Perhaps there is a more intuitive or natural association between the items.

Figure 5 - Familiar MDS Plot

Of the three hypotheses only the first was supported, there is a cultural model of sensory experience in the third wave coffee community of Tuscaloosa and Birmingham, Alabama. There
are no significant differences in cultural competence coefficients between occupational groups, but there are differences between familiarity groups. The “Very Familiar” is more competent in the model, perhaps reflecting more embodied cultural capital. Although there was not residual agreement between the hypothesized groups, there was between the familiar groups. Residual agreement analysis, along with MDS, shed light on how the different groups conceptualize the model. The very familiar group, which was the more culturally competent group, emphasized tasting items that are novel and unique. The MDS results fit well with responses from the interview phase, confirming that the most culturally competent individuals not only understand the relative desirability of tasting notes but also how they are associated to different countries of origin.
DISCUSSION AND CONCLUSION

The recent third wave coffee movement is changing American coffee consumption. One of the most pressing inquiries regarding this industry is the role of cultural capital. When it comes to consumption, cultural capital is the primary mechanism by which individuals distinguish themselves in social space. There are three forms of cultural capital, embodied, objectified and institutionalized. Embodied cultural capital is not easily operationalizable for research purposes, but it is the most important form in American consumption (Holt 1998). This is because embodied cultural capital is the knowledge and practices of proper consumption and it is not as widely available as objectified cultural capital. Methods developed in cognitive anthropology are well suited to measuring the variation in cultural knowledge and therefore are appropriate methods to study embodied cultural capital. I explored the role of cultural capital in the Birmingham and Tuscaloosa, Alabama third wave coffee community using cultural consensus analysis and residual agreement analysis.

My research was grounded in three hypotheses: 1) There is a cultural model of sensory experience shared among the third wave coffee community in Tuscaloosa and Birmingham, Alabama, 2) There are differences in cultural knowledge, measured by cultural competency coefficients, between individuals with different industry occupations, and 3) there is residual agreement between individuals from different coffee companies. Of these three hypotheses the first one was accepted and the latter two rejected. In addition to the primary analyses several
peripheral analyses were completed, including the MDS of tasting items and explorations of differences in cultural competencies related to other variables.

**Hypothesis 1**

The first hypothesis was dependent on the results of CCA, which had respondents rank the desirability and prevalence of 32 sensory items. Half of the sensory items were tasting notes and the other half were more general spatial-atmospheric items. The questionnaire items were determined through prevalent themes identified in interviews with 9 coffee professionals. The questionnaire was distributed to 41 qualified respondents and collected data on demographic and industry-specific variables.

The main statistic in determining the existence of a cultural model is an eigenvalue ratio. In this case the eigenvalue ratio was 6.94, more than double the conventional threshold. Such a high eigenvalue ratio implies that this is a strongly shared cultural model. It’s likely that some of the cultural model is specific to the Alabama third wave coffee scene, however the core aspects are probably shared by the national third wave community. Within the larger cultural model there were two subdomains, one of taste and one of spatial-atmospheric cues. Each of these also exceeded the 3:1 threshold and can be considered a stand-alone cultural model, with eigenvalue ratios at 4.27 and 6.79 respectively. However, competency scores in each model have a correlation of .88 so they can be considered part of one larger model.

There are two probable factors explaining the higher degree of sharing in the spatial-atmospheric domain. The first is the relationship between many of the spatial-atmospheric and wider societal values. The second factor is difference in knowledge between residual groups. Although there are a few spatial-atmospheric items that the residual groups disagree on, it seems that most of the items in contention are tasting notes, like blueberry, citrus, smoky and earthy.
All items in the questionnaire have socially determined value, however the social value of the tasting items and spatial-atmospheric items are slightly different. All the referential tasting items (i.e., chocolate or blueberry), and even most of the descriptive tasting items, exist outside of third wave coffee. However, their relative value is very contextually specific. For instance, a chocolate flavor is generally desirable in the world of pastries and desserts, but not so much in dinner dishes. On the other hand, the value of many of the spatial-atmospheric items is less contextually specific. The desirability of items like “direct trade” and “friendly baristas” go beyond third wave coffee. Of course, the term “barista” is specific to the coffee industry, but friendly staff is desirable in almost any business setting. Similarly, “direct trade” is a coffee industry term but ethical sourcing (i.e., fair-trade, Rainforest Alliance Certified) applies to a countless number of commodities. Even some items that may seem more specific to third wave coffee, like “minimalist décor” and “baristas can taste the difference between an Ethiopia and Columbia” have social value that is more generalizable. Minimalism is a trendy style used in art, interior design, fashion, etc. Tasting the difference between coffee origins is really a contextually specific statement of “knowledgeable staff,” which is also valuable in most other contexts. These are just a few examples of the many spatial-atmospheric items that have social value outside of third wave coffee.

If the higher degree of sharing in the spatial-atmospheric model is due to the generalizable values, it further highlights the distinction between coffee connoisseurs and casual consumers in my sample. Essentially there is less sharing in the cultural model of tasting items because there is more disagreement about the tasting items. As residual agreement analysis and MDS plots exhibit the “disagreement” is due to the deeper level of knowledge of the connoisseurs, which is especially displayed in the tasting items. In contrast, casual consumers
need not be connoisseurs to understand the value of some of the “spatial-atmospheric” items because their value is constant across different social contexts.

**Hypothesis 2**

The second hypothesis was rejected because no significant differences in cultural competence scores were found between individuals with different industry occupations. The logic behind this hypothesis is that some occupations, like café manager and head roaster would require deeper knowledge of the model. While this is likely still the case it wasn’t identifiable in my sample, probably due to the lack of variation regarding occupations. In the interview phase there was a mix of managers, baristas, owners and roasters but this was not the case during the questionnaire phase. Most of the professionals were baristas or bakers, 13 out of the 18, so it was difficult to identify any hypothetical differences in competency scores.

There were also no identifiable differences in cultural competency scores between consumers and industry professionals, even though it seems intuitive that the professionals would be more culturally competent. The t-test of competency scores between these groups was insignificant but it could not the result of an uneven sample since there were 18 consumers and 23 were former or current professionals. This is probably the result of few interrelated phenomena. Firstly, the recency of third wave coffee in Tuscaloosa, which was home to 32 of my 41 respondents. The first Tuscaloosa third wave shop opened in 2017, giving the residents far less time to absorb the model than their Birmingham counterparts. This would impact the understanding of the model of both consumers and baristas. It’s unlikely that there was a surplus of baristas familiar with third wave coffee available for hire when Caterpillar coffee first opened. The average number of years employed in the industry, 1.9, further supports this. Especially
since this average was partially impacted by a few outliers reporting 5 or 6 years employed, so most of my industry respondents had been working in coffee for about a year.

As for the consumers, many people were unfamiliar with third wave coffee at all. Even though I gathered participants on site at third wave coffee shops 29 people reported no familiarity with the term. This is not completely surprising given the status of “third wave coffee” as an insider’s term (Manzo 2010), it is possible, and my data would suggest common, for a consumer to visit a third wave shop without realizing it. Given the growing local foods movement many consumers are emphasizing buying local. When it comes to coffee shops it is easy for consumers to distinguish between corporate and local businesses but many of the same consumers are unaware of the distinction between second and third wave shops. The result is a group of consumers might frequently patronize third wave shops but have not fully absorbed the model. Ultimately third wave coffee is relatively new to Tuscaloosa employees and consumers alike, resulting in the lack of difference between their average competencies. Perhaps if my sample had been mostly from Birmingham differences between professionals and consumers would have manifested.

The second major factor influencing the lack of variation in cultural competency between consumers and professionals is the interrelation of the second and third waves. Second and third wave coffee are really two sides of the same coin, together they constitute a phenomenon called specialty coffee. Many of the items in my questionnaire also exist in second wave coffee, the main difference is the value placed on items. Since second wave coffee shops are ubiquitous in American cities it’s likely that many consumers are familiar with it. Perhaps the respondents who were less familiar with third wave coffee were able lean on their knowledge of second wave coffee when responding to the questionnaire, resulting in modest competence.
The complicated relationship between second and third wave coffee, and how it intertwines with locally owned coffee shops can be conceptualized in social space much like cultural and economic capital. In place of economic capital, the vertical axis would be a spectrum of locally owned to corporate coffee shops. The horizontal axis would represent a spectrum from second to third wave. Since the chart mimics the chart by Bourdieu (1984) the left end of the horizontal axis would represent third wave coffee (high cultural capital) and the right side would be second wave coffee (less cultural capital). The points on the plot would be coffee shops or companies instead of occupations. There is no need to include 1st wave coffee because, as mentioned in the Background chapter, there are no coffee shops in 1st wave coffee. Reiterating what Manzo (2010) stated, the third wave is most comprised of locally owned shops, so the bottom left quadrant would be where most of the third wave companies sit. The top right quadrant would house the large national and international coffee corporations. The bottom right would be full of locally owned whose menus emulate the large chains more than the third wave shops. And the top left would have a very small number of companies that have expanded but remained true to the third wave movement.

The last, and I believe most important, factor masking differences in cultural competence between consumers and professionals is the “hobbyist” nature of third wave coffee. Much like art, music people can envelope themselves in the coffee culture. They can strive to learn more about it or not, all while amassing cultural capital. This is true for both customers and employees. Recall the pragmatic use of “specialty coffee,” which according to at least one of my informants, refers to the more technical aspects of the job. These technical skills are necessary to working in a third wave coffee and are explicitly taught, but the cultural model at hand is comprised largely of tacit information. A barista does not need to know that “citrus” or “juicy”
flavors are more desirable than “smoky” to make a pour-over that yields any of these flavor
notes. This is not particularly surprising given that most cultural models studied, like American
Romance (Holland 1992), or Brazilian Lifestyle (Dressler et al. 2007; Dressler et al. 2015) are
tacitly learned. If cultural models were being explicitly taught there would hardly be a need for
techniques like cultural consensus and residual agreement analysis.

The “hobbyist” nature of third wave coffee, as it impacts cultural competence, is
particularly intriguing given the fact that Tuscaloosa is home to the University of Alabama. Of
the 13 baristas 9 were recruited in downtown Tuscaloosa, most of them, although probably not
all, were college students. To be clear, I did not collect data on current enrollment just “highest
degree obtained” so there is no way to tell for sure how many were college students but I have
maintained relationships with some of them since data collection and can now confirm that at
least 6 of the 9 were college students. The college students may not have had the drive to further
their knowledge about third wave coffee. Not to say that all college students don’t care about
their jobs but “college jobs,” as they are often referred to, can be more about the ends than the
means. If many of the college students working in third wave coffee are not devoted to their craft
it is not surprising that their cultural competence is comparable to an average consumer.

I had originally attempted to account for the “hobbyist” nature of third wave coffee with
the variable “commitment to craft,” which asked informants to report how often they bought
coffee from somewhere outside of the third wave movement but this turned out to be an
unhelpful variable. For industry employees there was not really a need to buy coffee from other
places, since they often had a free source at work. On the other hand, most of the consumers that
took the questionnaire were devoted customers to the shops where I approached them, so they
too had no need to buy coffee outside of the movement. The reason most of my respondents were
“regulars,” as they are called, is because of chain sampling. I relied on a network of coffee professionals to introduce me to consumers, and the consumers they introduced me to were frequent customers.

While there were no differences in competency scores between industry professionals and consumers, there was a significant difference between familiarity groups. The “very familiar” group had an average competency of .70, the “familiar” .62, this was significant at the .05 alpha level. The difference between these two groups is to be expected and ultimately boils down to socialization. Those who are more familiar have been further socialized, and as Bourdieu (1984; 1986) notes, cultural capital is amassed during socialization. The more interesting concern is where the “familiarity” is coming from if “years in the industry” is not indicative of higher cultural competency. Again, I look to the craft, or hobbyist nature of the industry. Individuals are free to invest as much or as little time as they’d like. They can push themselves to learn more, either through reading, or personal interaction, or they can be satisfied with their current knowledge of third wave coffee. This wasn’t picked up in “commitment to craft” because the variable was flawed, not because the logic was flawed. In a way, respondents’ commitment to third wave coffee was better measured by “familiarity” than “commitment to craft.”

There were additional t-tests run on competence scores between males and females and informants who identified as ethnically white and non-white. Neither of these tests yielded significant results. While they were not part of the three main hypotheses, an important aspect of cultural capital is that it is mostly held by the dominant social class. In the modern American context, white males best summarize the dominant social class. Additionally, there are movements in specialty coffee to increase the representation of women and minorities, such as
all-female latte art competitions, or SCA scholarships for underrepresented communities. Unfortunately, there were only 4 respondents who identified as anything besides “white” or “Caucasian” which is why they were lumped into the “non-white” category. This sample is not large enough to identify significant results in a t-test, but the sheer lack of ethnic diversity is alarming. This reaffirms both Bourdieu’s claim that cultural capital is mostly held by the dominant class and the more specific concern within the community that minorities are unrepresented. The lack of difference between males and females was not due to a small sample size, since there 21 male respondents and 20 female respondents. It seems gender does not impact cultural competency in the model, at least in this community. However, that does not mean the Alabama third wave coffee industry is not male dominated. My sample was mostly baristas and customers and it may be that women are well represented in those positions but not well represented in supervisory, technical and owner positions. In fact, the interview phase may shed some light on this very issue. Of my original 9 interviewees only 2 were female. Admittedly this is a small sample size and perhaps should not be overanalyzed, but it might be indicative of gender inequality in the industry.

**Hypothesis 3**

The final hypothesis was rejected because there was no difference in residual agreement between employees from different companies. There was only one company with enough respondents to constitute a valid sample, Caterpillar Coffee with 8 respondents. There were 3 employees from Philosophy coffee, and the other four respondents each worked for a different company. This was an unfortunate by-product of chain sampling, my preestablished network within Caterpillar Coffee provided most of my respondents and I couldn’t develop a large network from the other companies. To no surprise there was residual agreement between the
same familiar groups that had differences in cultural competency scores. Most of the residual agreement was carried in the tasting domain, with the “very familiar” group emphasizing items like blueberry, citrusy and juicy and the other group emphasizing nutty and smoky. However, there were a few spatial-atmospheric items in contention, like “everyone in a café on smartphone, tablet or laptop,” and “the presence of a La Marzocco espresso machine.”

The residual agreement over tasting items is due to several of the earlier points. To start, the distinction between regular and connoisseur consumers is carried in tasting items. As I’ve already argued, it takes a deeper level of knowledge to know the relative value and associations of the tasting items. The spatial-atmospheric have internal value and do not require a deep internalization of the model. Secondly, the overlap in second and third wave coffee seems to be playing a part as well. The “very familiar” group is emphasizing taste items that are novel and unique to third wave coffee like blueberry. The “familiar” group is emphasizing tasting items that are more reminiscent of second and even first wave coffee, like earthy, smoky and nutty. Lastly, these residual groups manifest because the “very familiar” group have more than just knowledge about singular tasting notes, but knowledge of how they exist in relation to each other. As seen in the MDS the “very familiar” group understands how these tasting items relate to countries of origin. The “familiar” group has no such associations. There were probably additional associations not picked up in my analyses. I assume that the “very familiar” was already aware that some of the tasting notes are associated with second wave coffee and others with third wave coffee. This is probably a major influence on the desirability rankings by the “very familiar” group. Yet again this is a perfect example of embodied cultural capital, individuals are displaying their “taste” by ranking tasting notes as more desirable, and more common, if they are associated with third wave coffee.
Greater Importance

On the surface this research is a case-study of the growing third wave coffee movement. If this movement continues to grow it has the potential to make a significant impact in the global coffee trade, for better or worse. More importantly, there are theoretical and methodological developments. Firstly, the apparent social distinction in this study serves as an example of the subtle classist problems of the slow and local foods movements, which, to many people, seems obviously beneficial. Additionally, my findings support Holt’s (1998) claim that cultural capital certainly does shape American consumption and emphasizes the importance of embodied cultural capital in contemporary America. The methodological development is essentially applying cultural consensus analysis, along with residual agreement and MDS, to measure embodied cultural capital. Of course, the methods themselves are not new but they can be used to operationalize, and measure embodied cultural capital in research. These methods can shed light on the concentration, distribution and organization of embodied cultural capital (i.e., knowledge). The methodological and theoretical developments are not separate; if this methodology is used in similar future studies the relationship between embodied cultural capital and American consumption will become clearer.

Conclusions

It remains clear that there is a cultural model of sensory experience among the third wave coffee community in Tuscaloosa and Birmingham Alabama. Within the community there are differences in cultural competencies between groups. Cultural competence scores are a valid proxy for cultural capital, which is playing a large role in distinguishing connoisseurs from casual consumers. Further explorations of residual agreement and MDS provided insight into the specific differences in cultural capital. One group has a deeper knowledge of the arbitrary value of tasting items, along with the associations between tasting notes and coffee growing countries,
showing connoisseurship, the other group does not have the same distinction. The distinction seems to be rooted in socialization, which is in part, dependent on the commitment of individuals to third wave coffee.

Cultural capital is undoubtedly playing a role in this community, and likely the national third wave coffee community. The consumption of related craft goods is also likely influenced by embodied cultural capital. A reexamination of cultural capital’s role in American consumption is long overdue (Holt 1998), but it seems the rapid increase of specialty goods, like coffee, chocolate and beer provides optimal study populations. Perhaps the recent increase in specialty and craft goods has created a resurgence of cultural capital in American consumption, but it’s more likely that Holt was correct in suggesting American scholars were not properly measuring cultural capital. Cultural consensus analysis provided a means for studying embodied cultural capital in my study and could be used in future studies for the same purposes. Future studies could also incorporate measures of objectified and institutionalized cultural capital for a complete exploration of cultural capital in American consumption.
REFERENCES


Interview Schedule

1. How long have you worked in the coffee industry?
   1a. How long have you worked in third wave or specialty coffee specifically?
   1b. How many third wave coffee shops have you worked for in total?

2. What is your current position or job title?
   2a. Do you have any industry certifications? (SCAA certified roaster, Licensed Q Grader, etc.)
   2b. What roles/responsibilities come with your occupation?

3. Do you believe third wave coffee is different from other forms of coffee consumption?
   3a. What makes it different?
   3b. Of these differences, what do you believe is the most important difference?

4. How do you judge a coffee's quality?
   4a. What characteristics do you look for in either a cup of coffee or just coffee beans in general?
   4b. What specifically do you look for in terms of taste or flavor characteristics?

5. How much, if at all, do you rely on or use the SCAA flavorwheel or World Coffee Research Institute Sensory Lexicon? Do you use other tools to judge a coffee's flavor?
5a. Besides "flavor" what other qualities do you judge when tasting coffee? (e.g. "mouthfeel")

5b. How many times a week do you participate in a coffee "cupping"?

5c. Do you ever teach coffee "cupping" classes to other employees or customers?

6. Besides "taste" or "flavor" what other sensory qualities do you believe are important to third wave coffee as a whole, including beverages and the space they are consumed? (sights, smells, feels).

6a. When visiting a shop that’s not your own what details do you look for to determine the quality of the shop?

6b. What do you look for in these shops before tasting any beverages?

**Cultural Consensus Questionnaire**

How familiar are you with the concept of "third wave coffee"?

- ☐ Not familiar at all
- ☐ Slightly familiar
- ☐ Familiar
- ☐ Very familiar

1 Ethnicity

________________________________________________________________

2 Gender

________________________________________________________________
3 Age in years

4 What is the highest degree you have obtained?

- No degree
- Highschool diploma
- Associate's degree
- Bachelor's degree
- Graduate school degree
- Trade-specific degree

5 What is your annual income?

6. What city do you currently reside in?

7 Are you currently, or have you ever been employed by a third wave coffee company?

- Currently employed in third wave coffee
- Formerly employed in third wave coffee
- Never been employed in third wave coffee
8 If you are currently employed by a third wave coffee company, please indicate the company's name.

○ N/A

○ Company name ________________________________

9 If you are currently employed by a third wave coffee company, please indicate your occupational title. (i.e. barista, roaster, owner, etc.)

○ N/A

○ Position ________________________________

10 How many years in total have you worked in third wave coffee?

○ N/A

○ Total years ________________________________

11 Do you have any certifications from the Specialty Coffee Association of America?

○ Yes

○ No

12 How many times a week do you buy coffee from somewhere you WOULD NOT consider to be "third wave"?

___________________________________________

89
13 Please rate these coffee flavor attributes in terms of their DESIRABILITY. When answering please do not use personal preference, instead try to think of its desirability in the third wave coffee community as a whole
<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Not desirable (1)</th>
<th>Somewhat desirable (2)</th>
<th>Desirable (3)</th>
<th>Very desirable (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutty (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruit-forward (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citrusy (4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complexity (15)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chocolatey (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tomatoey (5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoky (7)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potato (10)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A heavy lingering body (13)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earthy (6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Clean&quot; tasting (14)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blueberry (8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toasty (9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brightness (16)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juicy (11)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate acidity</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>-----------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>(17)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
14 How COMMON are each of these taste attributes in Third Wave Coffee?
<table>
<thead>
<tr>
<th>Flavor</th>
<th>Not common (1)</th>
<th>Somewhat common (2)</th>
<th>Common (3)</th>
<th>Very common (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutty (2)</td>
<td>o</td>
<td></td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Fruit-forward (3)</td>
<td>o</td>
<td></td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Citrusy (4)</td>
<td>o</td>
<td></td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Complexity (15)</td>
<td>o</td>
<td></td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Chocolatey (1)</td>
<td>o</td>
<td></td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Tomatoey (5)</td>
<td>o</td>
<td></td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Smoky (7)</td>
<td>o</td>
<td></td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Potato (10)</td>
<td>o</td>
<td></td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>A heavy lingering body</td>
<td>o</td>
<td></td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Earthy (6)</td>
<td>o</td>
<td></td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>&quot;Clean&quot; tasting (14)</td>
<td>o</td>
<td></td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Blueberry (8)</td>
<td>o</td>
<td></td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Toasty (9)</td>
<td>o</td>
<td></td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Brightness (16)</td>
<td>o</td>
<td></td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Juicy (11)</td>
<td>o</td>
<td></td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Moderate acidity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>
15 How DESIRABLE are each of these statements in third wave coffee? When answering please do not use personal preference, instead try to think of its desirability in the third wave coffee community as a whole.
<table>
<thead>
<tr>
<th></th>
<th>Not desirable (1)</th>
<th>Somewhat desirable (2)</th>
<th>Desirable (3)</th>
<th>Very desirable (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coffee shops with &quot;minimalist&quot; decor (1)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The presence of a La Marzocco Espresso Machine (2)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Everyone in a café is on a tablet, laptop or smartphone. (14)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>A playlist of music that fits the identity of the coffee shop its played in (3)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Fast and convenient coffee (4)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>A barista who enjoys their job (5)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Every coffee shop has the same &quot;vibe&quot; (10)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Coffee roasters have direct relationships with coffee producers (6)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Beverages are served in handmade ceramics (7)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Espresso that gets better as it cools (8)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Coffee with clear predominant flavor notes (9)

Judgmental or pretentious baristas (15)

A barista will remake a latte if it is not aesthetically pleasing (11)

Baristas and customers will have long thoughtful conversations (12)

Coffee companies refuse to work with other local companies (16)

A barista can taste the difference between an Ethiopian and Colombian coffee in a blind test. (13)

16 How CHARACTERISTIC of third wave coffee are each of these items?
<table>
<thead>
<tr>
<th></th>
<th>Not characteristic (1)</th>
<th>Somewhat characteristic (2)</th>
<th>Characteristic (3)</th>
<th>Very characteristic (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coffee shops with &quot;minimalist&quot; decor (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The presence of a La Marzocco Espresso Machine (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A playlist of music that fits the identity of the coffee shop its played in (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fast and convenient coffee (4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A barista who enjoys their job (5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judgmental or pretentious baristas (15)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coffee roasters have direct relationships with coffee producers (6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beverages are served in handmade ceramics (7)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Espresso that gets better as it cools (8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coffee with clear pre-dominant flavor notes (9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Everyone in a café is on a tablet, laptop or smartphone. (14)

Every coffee shop has the same "vibe" (10)

A barista will remake a latte if it is not aesthetically pleasing (11)

Coffee companies refuse to work with other local companies (16)

Baristas and customers will have long thoughtful conversations (12)

A barista can taste the difference between an Ethiopian and Columbian coffee in a blind test. (13)
July 6, 2018

Michael Dodson  
Department of Anthropology  
The University of Alabama  
Box 870358

Re: IRB # 18-OR-241: “Sensory Experience and Embodiment in Third Wave Coffee”

Dear Mr. Dodson,

The University of Alabama Institutional Review Board has granted approval for your proposed research. Your application has been given expedited approval according to 45 CFR part 46. Approval has been given under expedited review category 7 as outlined below:

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Your approval will expire on July 5, 2019. If the study will continue beyond that date, you must complete and submit the Continuing Review Form within e-Protocol. If you need to modify the IRB protocol, please complete and submit the Amendment Form. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants. When the study closes, please complete the Final Report Form. Please use the IRB-stamped Consent Form.

Should you need to submit any further correspondence regarding this application, please include the assigned IRB approval number. Good luck with your research.

Sincerely,

[Signature]

Carpantito T. Myles, MSM, CIM, CIP  
Director & Research Compliance Officer  
Office for Research Compliance

cc: Dr. Jason DeCaro
UNIVERSITY OF ALABAMA
HUMAN RESEARCH PROTECTION PROGRAM

Informed Consent

Project: Sensory Experience and Embodiment in Third Wave Coffee
Michael Dodson Graduate Student
University of Alabama

You are being asked to take part in a research study.
This study is called Sensory Experience and Embodiment in Third Wave Coffee. The study is being
done by Michael Dodson, who is a graduate student at the University of Alabama. Mr. Dodson is
being supervised by Dr. Jason DeCaro who is a professor of anthropology at the University of
Alabama.

Is the researcher being paid for this study? The researcher is not being paid for this study.
Is this research developing a product that will be sold, and if so, will the investigator profit
from it? This research is not being used to develop a product.

Does the investigator have any conflict of interest in this study? There is no conflict of
interest

What is this study about? What is the investigator trying to learn?
This study is being done to explore the shared beliefs and practices in third wave coffee which make it
unique. This study will look at how these practices relate to the five senses. This study will also look at
how these practices relate to class, ethnicity, gender and identity.

Why is this study important or useful?
This knowledge is important because it will help the researcher understand the cultural practices that
separate third wave coffee from other coffee industries. This study will add to a growing body of
knowledge about the impacts this industry has on individuals.

Why have I been asked to be in this study?
You have been asked to be in this study because you either work in this industry or are heavily
involved in industry events.

How many people will be in this study?
About 60 other people will be in this study.

What will I be asked to do in this study?
If you meet the criteria and agree to be in this study, you will be asked to complete an interview with
the researcher. Your interview will be audio recorded with your consent. You may still take part in this
research if you choose not to be audio recorded. Notes on your interview responses will be taken by
hand.

How much time will I spend being this study?
The interview will take 30-60 minutes.
Will being in this study cost me anything?
The only cost to you is your time

Will I be compensated for being in this study?
You will not be compensated for being in this study.

What are the risks (dangers or harms) to me if I am in this study?
Little or no risk is foreseen.

What are the benefits (good things) that may happen if I am in this study?
There are no direct benefits to you.

What are the benefits to science or society?
This study will help researchers understand the possible impacts of third wave coffee on coffee consumers

How will my privacy be protected?
You will be interviewed at a site of your choosing.
You will mostly be asked about non-sensitive information, including things that you think are important to third wave coffee. You will also be asked questions about ethnicity, gender, education and class. You do not have to answer any questions that you don’t want to.

How will my confidentiality be protected?
Signed consent forms will be kept separate from sheets with interview answers. For data collection you will be assigned a number to avoid recording your name. All information will be safeguarded on a password protected laptop or in a locked file cabinet.

What are the alternatives to being in this study? Do I have other choices?
The alternative to being in this study is not to participate.

What are my rights as a participant in this study?
Taking part in this study is voluntary. It is your free choice. You can refuse to be in it at all. If you start the study, you can stop at any time. There will be no effect on your relations with the University of Alabama.

The University of Alabama Institutional Review Board (“the IRB”) is the committee that protects the rights of people in research studies. The IRB may review study records from time to time to be sure that people in research studies are being treated fairly and that the study is being carried out as planned.

Who do I call if I have questions or problems?
If you have questions, concerns, or complaints about the study right now, please ask them. If you have questions, concerns, or complaints about the study later on, please call the investigator Michael Dodson at (714) 884-0323 or Dr. Jason DeCaro at (205) 348-9061.

You may also ask questions, make suggestions, or file complaints and concerns through the IRB Outreach Website at http://ovpred.ua.edu/research-compliance/prco/. You may e-mail the Research Compliance Office at rscpliance@research.ua.edu.
If you have questions about your rights as a person in a research study, call Ms. Tanta Myles, the Research Compliance Officer of the University, at 205-348-8461 or toll-free at 1-877-820-3066.

After you participate, you are encouraged to complete the survey for research participants that is online at the outreach website or you may ask the investigator for a copy of it and mail it to the University Office for Research Compliance, Box 870127, 358 Rose Administration Building, Tuscaloosa, AL 35487-0127.

Will you allow audiotapes of your voice to be used for this research? YES____ NO_____

I have read this consent form. I have had a chance to ask questions. I agree to take part in it. I will receive a copy of this consent form to keep.

________________________________________  __________________________
Signature of Research Participant Date

________________________________________  __________________________
Signature of Investigator Date