CLASS, CULTURE, OR BOTH: ASSESSING CONSUMPTION PATTERNS WITHIN MUSIC AND TECHNOLOGY

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Abstract

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What is the best way of understanding contemporary consumption patterns in the United States? Using the classical theories of Marx and Weber, and the contemporary theory of omnivorousness developed by Richard Peterson, this research examines the consumption of a symbolic good (music) and a material good (technology). The data for this research comes from two nationally representative surveys. Music analyses were done using the 2002 Survey of Public Participation in the Arts sponsored by the National Endowment for the Arts (N = 17135). Technology analyses were done using the 2006 Pew Research Center's Internet and American Life Project's Annual Gadgets Survey (N = 4100). This research uses statistical methods - correspondence analysis and classification and regression tree analysis - that classify respondents. These methods were used in order to group respondents with similar music or technology preferences together. These homogeneous groups were then compared to the predictions made by Marxian, Weberian, and Omnivorous theories. This research suggests that the best way to explain contemporary consumption patterns in the United States is through a particular combination of Marxian and Weberian indicators, and that Peterson's theory of omnivorousness is less

applicable. A new concept, lifestyle clusters, is proposed. Lifestyle clusters combine economic Marxian indicators and cultural Weberian indicators into one conceptual framework. The conclusions drawn from this dissertation suggest that the ways in which sociologists have traditionally understood consumption patterns need to be reconsidered.

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Table of Contents

List of Tables

List of Figures

Introduction

What is the best way to explain contemporary cultural preferences in the United States? For most of the twentieth century, sociologists have relied upon two perspectives to explain the cultural structure of American society. In the first half of the twentieth century, Marxian classes were used to make predictions about who consumes what. Elite, upper class people went to the opera. Middle and working class people first went to the movies, and then with the advent of television, stayed home and watched *The Honeymooners*. Then, beginning around 1960 or so, sociologists realized that using class as a predictor was a bit too crude. Weberian status groups were then proclaimed to be better predictors of cultural consumption. While class mattered, the cultural landscape had become so segmented until the best way to understand consumption was by looking at the influences of factors such as race, region, and gender. Then, at the end of the century, sociologists began to realize that educational differences and the values that are associated with education trumped both class and status. Specifically, educated people were omnivores, who consumed a wider range of culture. Educated people tended to be univores and were more exclusive in their tastes. As the logic went, this omnivore/univore dichotomy held regardless of class position or any number of status groups (race, region, and religion).

But despite these shifts in paradigms, no one perspective truly dominated. Weberians still incorporated class elements into their analysis even after class was generally viewed as a poor predictor. Similarly, researchers who use the omnivorous thesis consistently report that even within the omnivore/univores dichotomy it is still possible to identify class and status influences.

It is possible that looking at the cultural structure through only one perspective may be too narrow. The American cultural structure has become quite complex over the last fifty years. No longer can we associate a particular symbolic product such as rap, salsa, or grunge music to the cultural group from which it originated. These cultural products are quickly sampled by a wide range of cultural groups, and in time are consumed by so many different segments of society until they become one of many products considered popular or mainstream. Also, because of lower consumer prices and the market segmentation techniques used by business, material goods that at one time were considered the province of the rich can be had by middle class and working class citizens. For both material and symbolic goods, it is becoming increasingly difficult to predict the consumption of a cultural product through exclusively Marxian, Weberian, or Omnivorous perspectives.

While not purporting to be the definitive study on this issue, this dissertation systematically applies all three perspectives simultaneously to a symbolic good (music) and a material good (technology) in the hopes of identifying the perspective – or combination of perspectives – that explains contemporary cultural patterns most effectively. This dissertation found that the best way to explain contemporary cultural patterns is through a combination of Marxian and Weberian indicators. These combinations, which are conceptualized as being qualitatively distinct (not aggregates) from their class and status roots, are called lifestyle clusters. While the above is the main conclusion, several other highlights stand out:

- The applicability of classification and regression tree analysis (CART) and correspondence analysis is described and demonstrated. These methods uncover gross effects of independent

variables as opposed to the standard net effects. These methods lend themselves to analyses where groupings of individuals are sought based on categorical independent variables.

- Music genres can be condensed into four value preferences that I call identities. These identities are cosmopolitan, adult, youth, and country. Using the above methods to predict these identities, we see that overall, music is best predicted through a mixture of class and status.
- The use of technology can be understood in at least two ways: allowing individuals to maintain relationships in the absence of propinquity and allowing people to manage impressions. These two ways are together labeled social improvement. Using the above methods to predict these identities, we see that overall, technology is best predicted also through a mixture of class and status

Below I give a brief rundown of the contents of each chapter.

In Chapter 1 I outline the assumptions associated with each perspective. I discuss several bodies of research that are associated with each perspective, taking note of each perspective's strengths and weaknesses. Finally, theoretical models are presented in this chapter that will be reexamined in the final chapters.

In Chapter 2 I discuss the indicators of culture—the dependent variables—used in this research. As mentioned above, music and technology were chosen as cultural indicators. Compared to other possible indicators, these items are easy to use and easy to obtain. Second, music and technology tap into two distinct domains of consumption. Music is primarily an

indicator of the symbolic dimension and technology is primarily an indicator of the material dimension.

In Chapter 3 I describe the three analytic strategies that will be used to address my research question. These strategies are factor analysis, classification and regression tree analysis (CART), and correspondence analysis. Used together, these strategies allow the researcher an opportunity to construct a taste structure, or taste stratification system. Because these strategies, in particular CART analysis, are not common in sociological research, I spend considerable time describing these methods.

Chapter 4 is dedicated to understanding the underlying order of American musical taste patterns. I discuss some musical genres that have been historically important within the sociological discourse. Then, through factor analysis of a nationally representative, four musical identities are identified. These identities are cosmopolitan, adult, youth, and country. These identities are then predicted using CART analysis, producing the first set of homogenous groups used to assess the three perspectives outlined in Chapter 1.

In Chapter 5, I work to understand taste patterns with respect to technology. Through factor analysis, one scale is adequate for measuring general attitudes towards technology. The data analysis suggests that the taste structure for technology is quite different than the structures proposed for digital divide and digital inequality arguments.

Chapters 4 and 5 set the stage for an assessment of Marxian, Weberian, and Omnivorous perspectives in Chapter 6. The CART analyses showed that the best way to explain the consumption of music and technology was through a combination of Marxian and Weberian perspectives. I argue that these combinations are not simply aggregations of class and status, but

represent wholly different phenomena that need to be studied in their own right. I use the term lifestyle clusters to describe these new phenomena. I describe in some detail how I believe lifestyle clusters are best conceptualized. I end the chapter by comparing my understanding of lifestyle clusters to other similar notions within the sociological discourse.

I end this work, in Chapter 7, by discussing the limitations of my research and future directions. Both the limitations and directions converge around the statistical methodology used. I suggest that the uniqueness of my methods pose a problem in that my findings are less comparable to other findings. However, these new methods also provide new opportunities for the study of consumption in general, and lifestyle clusters specifically.

Chapter 1

Theoretical Background: Marxian, Weberian, and Omnivorous Perspectives

Cultural items such as clothing, music, attendance at cultural events, and owning types of technology are often associated with particular groups in society. We assume that a certain social group is more likely to consume a particular cultural item. Maybe attending a post-modern art exhibition by a well-known artist is connected with highly educated, high income, European-Americans. Most people tend to connect Country and Western music with working class, rural European-Americans. Or, the latest video game consoles are assumed to be the providence of the young, regardless of race or ethnicity. Hip-Hop music is most closely related to urban, African-American youth. We can readily imagine these associations, and imagine numerous others.

There was a time when cultural products were fewer and the structure of society was less differentiated. In the 1950's, before the expansion of mass media, before the emergence of youth culture, and before businesses began aiming new products to niche markets with market segmentation techniques, the associations between social groups and cultural products were much easier to identify. We could point to race or ethnicity to identify a social group and their culture. We could say that first generation immigrants had their culture. Racial minorities such as Asians and African-Americans had their culture. Or, we would look to class to identify a social group and their culture. Educated white collar European-Americans had their cultures, and non-educated blue collar workers had theirs. Nowadays, upper class groups no longer restrict themselves to only "elite" tastes. As we will see, one symbol of membership in the upper class

may be the ability to not restrict oneself to elite cultures (Peterson and Kern 1996). Also, while music such as hip-hop is ostensibly associated with African-American youth, today most of the revenue from hip-hop music comes from middle class European-Americans.

Madison Avenue has done its share to complicate things. As Thomas Frank (1997) writes in *The Conquest of Cool*, marketing strategies took a dramatic turn in the 1960's, leading to a highly specialized consumer universe targeting niche ethnic and lifestyle groups. Finally, the proliferation of varied leisure activities of all shapes and forms—internet blogs, hundreds of cable television channels, tourist attractions, sporting events—create opportunities for individuals to select among a wide array of cultural products. All of these examples speak to the complexity of our current cultural world.

On the one hand, tastes appear extremely complex. On the other hand, the fact that we can still associate certain tastes or cultural objects with specific social groups speaks to some type of order. The question becomes: what can best explain this order? Can we still use a person's racial or ethnic background as a sign of the type of cultural products they will consume? How effective are concepts such as "upper class" and "middle class" at explaining what people consume? In general, what is the best way to explain contemporary cultural preferences in the United States?

My first step towards answering these questions will be through a discussion of the work of previous scholars. Three perspectives will be discussed, two of which, Marxian and Weberian, are entrenched in sociological writing on culture. A third, newer entrant onto the theoretical landscape, the Omnivorous Perspective, will also be considered.

The Marxian Perspective

A Marxian perspective takes the view that people who occupy the same class position within the social structure share similar perspectives and outlooks (Wright 1997). Given a class based perspective, the corresponding cultural structure is arranged in a hierarchical fashion, such that members of the upper class distinguish themselves from those of the lower classes, and vice versa (Levine 1988, Lamont 1992). Further, embedded in this hierarchical cultural structure is the assumption, best articulated by Bourdieu (1984), that the cultural products consumed by the higher classes are more valued than the cultural products consumed by lower classes. Scholars who apply a Marxian perspective to culture usually use income or occupation as indicators of class, but oftentimes education is also used as a measure. Table 1.1 presents a model of the Marxian perspective using musical choice, with cultures ordered by class position. In this table. Music A would be "elite/highbrow" music, as it is only consumed by the upper class, while at the other end of the spectrum, Music D would be considered "mass" culture because it is consumed by all. Music B and Music C fall somewhere in the middle, with Music C most likely being labeled "lowbrow" culture, because it is only consumed by working class people. The terms elite, highbrow, lowbrow, and mass are instructive here, as they highlight the hierarchical nature implied by a Marxian perspective on tastes. Below, I discuss in more detail several studies that employ a Marxian perspective.

Table 1.1
Cultures Ordered by Class

	Music A	Music B	Music C	Music D
Upper	✚			✚
Middle		✚		✚
Working			✚	✚

Thorstein Veblen: Conspicuous Consumption

One of the first social theorists to apply a class based perspective to the area of cultural consumption was Thorstein Veblen (1889). Veblen placed people into two classes: those employed in occupations which exploit (landowners, businessmen) and those who are relegated to drudgery (laborers):

> "…Those employments which are to be classed as exploit are worthy, honourable, noble; other employments, which do not contain this element of exploit, and especially those which imply subservience or submissions, are unworthy, debasing, ignoble" (Veblen 9: 1899).

Veblen argued that at one time, simply occupying a worthy position was enough to confer prestige. However, after the industrial revolution and the proliferation of upper class occupations, it became necessary to distinguish oneself by displaying wealth. Members of the exploitative class conducted a symbolic battle amongst themselves by conspicuously consuming symbolic goods and leisure time: "In order to gain and to hold the esteem of men it is not sufficient to merely possess wealth or power. The wealth or power must be put into evidence, for esteem is awarded only on evidence" (24: 1899).

These displays create more than prestige for the person consuming conspicuously. They also create invidious distinctions between those who can and cannot display: those who cannot afford leisure time or expensive goods are looked down upon as vulgar. This desire for esteem and distinction was not acknowledged in classical economics, which Veblen argued, saw the ultimate end of accumulation as mere consumption for base needs.

Veblen's understanding of class structure is a "classical" one, in that society was viewed as two large groups roughly analogous to the Marxian concepts of capitalist and proletariat. Such a conceptualization seems outdated. However, Veblen's understanding of why people consume and how this differential consumption affects one's prestige in society is certainly not outdated, and remains a central insight in contemporary studies of cultural consumption.

John Dollard: Caste and Class

Race is often seen as being very important for ordering values and consumption of cultural products. However, some adherents of a Marxian perspective argue that class is more important to ordering cultural consumption than race (Lareau 2003, Lacy 2007). I wish to focus on one study in particular. John Dollard's *Caste and Class in a Southern Town* (1937) is an ethnographic study of a small town in the Deep South during the Depression era. I highlight this work because it suggests that class position orders culture over and above racial differences—even in situations where one's race determines most of one's life chances.

Dollard begins by noting that African-Americans were categorically barred from accumulating social prestige and from participating fully in society through voting. Further, all whites were seen as above blacks in social prestige, regardless of income or qualification.

Dollard argued that because of a lack of social mobility---upward for blacks and downward for whites, the town under study, called Southerntown, operated as a caste system.[1] This caste categorization might seem to pre-empt a Marxian perspective. On the contrary, Dollard's work serves as a prime example of how class can override status group differences—even in the extreme case of caste-like social exclusion that Dollard details.

Dollard presented evidence that middle class blacks and middle class whites shared the same values. Their day to day actions and their abilities to realize their ends were strongly influenced by their membership in different racial groups, but the type of lives they wish to lead are essentially identical. The members of both of these classes were the professionals and businessmen of Southerntown. Dollard describes middle class whites (and blacks in so many words), as "like an army on the march, they are provident, industrious, vigilant, and determined" (Dollard 1937: 78).

The middle class whites were the largest group in Southerntown, and dominated political and economic life. Their capital holdings were smaller than the upper class whites, but their desire to engage in political life and lead community activities made them the driving force in Southerntown society. Middle class whites adhered to high moral standards. They eschewed drinking, were steady churchgoers, did not use profanity freely, and frowned upon lax sexual behavior. Middle class men took pride that their wives did not work outside of the home, and invested heavily in their children's education.

Middle class blacks were a very much smaller group and did not possess the numbers or capital to influence political life (not to mention that they couldn't vote). Nevertheless, middle

[1] Dollard's research was conducted in Indianola, Mississippi.

class blacks were the professionals and leaders of their caste. Like their middle class white counterparts, they valued stringent moral behavior – especially in sexual matters (Dollard 1937). Also, middle class blacks invested heavy amounts in education in order to retain their class position: "The most extraordinary sacrifices may be made by their parents to give their children opportunities for status advancement through education" (Dollard 1937: 87). Looking at the particular behaviors of middle class blacks and middle class whites, Dollard makes clear that over and above the racial caste differences, there was a commonality of values, due to similar class position.

Caste and Class in a Southern Town was an ethnographic study that looks at how class position influences culture over and above racial differences. Even with a racial caste system firmly in place that barred members of different castes from any type of meaningful association and guaranteed that blacks and whites would have divergent life chances, we see the convergence of cultural values around social position.

Herbert Gans: Class-Culture Typology

Gans' *Popular Culture and High Culture: an Analysis and Evaluation of Taste*, first written in 1974 and revised in 1999, remains a strong argument for one's social position ordering one's cultural consumption. Gans stated unequivocally that "the main source of differentiation…is socioeconomic level or *class* [emphasis in original]" (Gans 1999: 95). Gans' typology of class aesthetics made this study unique. In a simple sense, Gans posited a class taste structure that ranged from higher classes emphasizing the form and process of culture to lower classes

emphasizing the function and product of culture. Below, I discuss some major themes in Gans' typology.

Gans argued that the intellectuals and professionals within the upper class and upper-middle class concentrated their interests on how culture is created, and on those who create it. They enjoyed the process and form by which culture is created. Thus, a film retrospective on a groundbreaking director such as Woody Allen or Wong Kar Wai would be of interest to this group. Or, music that emphasizes composition and reflection, such as classical music and jazz would also be consumed by these groups. Gans argued that because members of these classes are the power brokers in society, they are interested in reading nonfiction books about politicians, businessmen, and academics that are at the vanguard of their occupations. Thus, these members watch Book TV or attend book signings at book stores. A great example of this is the CSPAN weekly show entitled "Q and A" (http://www.q-and-a.org). On this show, academics, politicians, and other professionals are interviewed and given time to discuss their views on salient issues of the day.

On the other end of the spectrum, lower classes enjoy culture for its functional use. They are more likely to consume cultural products that evoke emotions or reaffirm cultural mores. Soap operas and prime time sitcoms are highly popular with this group. Also, the literature preferred by lower class groups tends to be fiction. In direct opposition to the upper classes, the music consumed by these groups tends to evoke an emotional response, such as rock, hip-hop, or country.

Further, while upper classes tend to glorify the creators of cultural products, lower classes are more apt to glorify the product or the actors. These groups are the starmakers who consume tabloids and contribute to the cult of personality surrounding many of today's celebrities.

Gans' first edition and latest edition of Popular Culture and High Culture span the birth and growth of studies that make competing claims to his seminal work. Yet, his general claims have not changed much during that time. Although he asserted that class orders cultural choices more than other categories such as race, gender, geography, and ethnicity he did note that "class explains only part of why people choose the culture they do, some choices producing large differences by class but others only small ones" (Gans 1999: 9). In his latest edition, he submitted some possible explanations for the blurring of taste lines between classes, including the increased education of the population, growing wealth inequality, and the takeover of family owned newspapers by corporations.

Pierre Bourdieu: Class and The Uses of Photography

So far, I have detailed works that support a general Marxian perspective, and that use class as a means to understand the general values applied to a range of goods. Through the work of Gans I have shown that social position leads to differences in values which then lead to general differences in orientation to culture. Now, I wish to highlight a work that focuses more sharply on a particular cultural item, and how this item is used differently by different classes. The relationship between class and the appropriation of a specific product gets closer to the heart of this dissertation. In *Photography: A Middle Brow Art*, Pierre Bourdieu (1965) uses the

seemingly innocuous practice of taking photographs, and illustrates how this activity is highly correlated with class position.

Bourdieu argued that for members of the working class, photography is "an index and instrument of social integration" (Bourdieu 1965: 19). The camera, usually owned jointly by the family, is used to take photographs of family gatherings, social events, and festivals. "[T]here is no wedding without photographs," Bourdieu noted (1965:20). Taking photographs during social events is a way to commemorate and consecrate the group. For example, in the case of weddings, these photographs are used to commemorate the coming together of two previously unconnected families. For the working class, the photograph is nothing more than a cataloguing of an individual's role within the social group:

> "What is photographed and what is perceived by the reader of the photograph is not, properly speaking, individuals in their capacity as individuals, but social roles, the husband, first communicant, soldier, or social relationships, the American uncle or the aunt from Sauvagnon" (Bourdieu 1965: 24).

Bourdieu argued that differences in class values lead to divergent orientations towards photography. Bourdieu noted that the desire to purchase a camera and to take artistic photographs is most intense among the middle, professional classes (clerical workers and junior executives) (1965: 43). These members of the middle class import their aesthetic sensibilities into the production of photographs.

Members of the upper classes take a different approach from their middle and lower class counterparts. A larger percentage of upper class members have photographic equipment due to their economic resources, however "While a higher proportion of senior executives own cameras, this does not in any way indicate a more frequent or, more particularly, a more fervent practice" (Bourdieu 1965: 64). The upper classes tend to use cameras either for more traditional picture taking or only for seasonal, sporadic attempts at photography as art. Bourdieu explains that the upper classes can play the dilettante, or even go so far as to take a working class stance towards photography, because they can comfortably distinguish themselves from the lower classes through their ability to consume legitimate, high art. The vigorous attitudes of the middle class to legitimate photography are a manifestation of their desire to distance themselves from the working class.

Bourdieu's most notable work, *Distinction* also discusses tastes ordered by class. I will return to this seminal work in later chapters. However, Bourdieu's work on photography in French society during the 1960's presents a clear example of how social position orders a specific cultural practice. This work on photography is one of the best examples of how class orders the appropriation of a specific good.

From the early work of Veblen and his now famous concept of conspicuous consumption, class and culture have been intricately linked. I have selected several studies in order to show how, (1) class often trumps the most salient of social categories (race), (2) class creates values that traverse cultural products, and (3) in cases where the same product is consumed across social strata, class differences can order the way in which this product is used.

There are, however, problems with a Marxian perspective. Everyday experiences in modern society do not seem to fit the notion that one's job and work environment are the main reasons that people choose one cultural item over the other. Today's society provides work environments where less educated people must intermingle with those of other backgrounds and educational levels Also, since the mid-twentieth century, marketers have been extremely effective in using market-segmentation strategies to create wants for niches, especially for ethnic groups (Halter 2000). In this more complex cultural environment, a pure class-based study can often seem anachronistic. A perspective that may be more appropriate in the light of these changes is discussed below.

The Weberian Perspective

A Weberian perspective emphasizes the association of cultural tastes with status groups. Shared social condition is associated with similar values, outlooks on life, and to use a Weberian term, a "stylization" of life (Weber 1946). Youth in the United States and other Western countries, since the 1960's, consume cultural products wholly different than their parents. Or, minority groups such as African-Americans, Hispanic-Americans, and newer entrants into the United States from Asia and Africa consume distinct cultural products. From a Weberian perspective, cultural groups can be arranged both hierarchically and horizontally. Cultural products and tastes of different ethnic groups may not necessarily be considered of higher value than another, yet become horizontally differentiated. However, cases may arise where one group dominates the economic or political sphere, and thus their cultural products become more valued. Indicators of status groups include race, ethnicity, and gender, but some scholars have included education,

religion, and geographic location. Table 1.2 presents a model of the Weberian perspective, of cultures ordered by status group. In this model, Music A is shared by whites and Asians. A concrete example of this would be easy listening music. Music B is shared by Blacks and Hispanics, of which an example might be hip-hop music. Music C is almost exclusively listened to by Blacks, of which Rhythm and Blues is a prime example. Finally, Music D is "Top 40" music listened to by all racial groups.

Table 1.2
Cultures Ordered by Status Group

	Music A	Music B	Music C	Music D
White	+			+
Black		+	+	+
Hispanic		+		+
Asian	+			+

Weberian analyses have become more prominent, in part due to the limitations of class based arguments in explaining changes in American cultural practices. Wilensky (1964) combined observations about the changes in the educational structure of society and the growth of the mass media to make prescient observations about the future of cultural stratification in American society. Recognizing that the proportion of college graduates from elite schools was declining as education levels rose, while at the same time the spread of mass media into the homes and lives of all Americans continued to grow, Wilensky noted:

> "The problem is not that the taste of the masses has been debased, but rather that the creators and maintainers of high culture in the humanities, the arts, the sciences, have an increasingly difficult time doing their proper work. Intellectuals are increasingly tempted to play to mass

audiences and expose themselves to mass culture, and this has the effect of reducing their versatility of taste and opinion, their subtlety of expression and feeling." (190).

To be sure, Wilensky is not arguing that distinct cultures based upon social condition are arising in place of the breakdown in class differences. His argument, taken to its logical conclusion, would be that due to the effects of mass education and mass media, high culture would wither away or at any rate become just another component of mass culture. This, as we shall see, has not happened.

However, Wilensky's observations foreshadowed work recognizing that social class may not be the most accurate way of explaining cultural patterns in the United States. Below, I discuss studies that take a Weberian perspective in understanding cultural patterns. These studies present evidence that social condition is the primary determinant of taste.

The Spread of Country Music through the Spread of Values

Peterson and DiMaggio's (1975) study of the spread of country music highlights the relationship between social condition and musical taste. Their study assessed the degree to which country music, a historically regional cultural form, was withering away in the presence of mass-produced popular music.

Their research documented a growth in the number of country music listeners, rather than a decline. Country music had not only remained a Southern music staple but had spread from its regional base to major urban centers in the Northeast and Midwest. Peterson and Dimaggio argued that this spread could best be described as a three stage process powered mainly through the spread of social groups who shared the same values. First, country music became a viable

segment of the music industry with a firm hold in the American South. Over time, country music migrated out of the South, because southerners who listened to this music carried their musical tastes with them as they migrated to different parts of the country. Third, an interest in country music spread from transplanted southerners to others who shared similar values:

> "We will call it the diffusion hypothesis—that a new trait would be adopted only by those elements of an indigenous population for whom the trait fits their lifeways…country music will diffuse to person most like the culture bearers—the white, post-adolescent, upwardly mobile working class" (Peterson and Dimmagio 1975: 501).

As evidence of the above, the authors discuss the importance of hillbilly bars that sprang up in the industrial centers of the Midwest and Northeast. These bars catered to southern migrants working in these centers, and became places where country music was spread from these migrants to the native population. This observation that people who share similar social conditions—not necessarily a similar economic position—will come to share similar tastes led to this conclusion:

> "Sociologists have usually grouped persons into *social classes* [emphasis in the original] on the basis of income, occupation, education, and other indicators of the amount, or means, of making money…rather than begin with social classes, it may prove fruitful to categorize persons in terms of *cultural classes* [emphasis in original]…" (Peterson and Dimaggio 1975: 504).

Peterson and DiMaggio's study is important first and foremost because of the understanding that non-economic social groups who share similar social conditions—in this case similar values and ways of life—will also share distinct cultural products. Also, this study opposes Wilensky's view that mass media and mass education leads to a homogenized culture. Instead, this study argues that the opposite has happened – a proliferation of "culture classes".

Halle's Inside Culture and the Determinants of Home Art

One of the more innovative studies in cultural consumption is Halle's work, *Inside Culture: Art and Class in the American Home*, on the visual art displayed in the homes of New York residents (1993). Halle's research fits within a Weberian perspective in that the meanings individuals attribute to the art (i.e. why they buy art) is more determined through historical context, and not class position. Halle interviewed residents of two upper class neighborhoods and two working class neighborhoods, cataloguing the types of visual art (including photographs) that these residents displayed in their homes and the meanings attached to this art. These meanings, Halle argues, are not congruent with common understandings of the role of art in society.

Halle noted the prevalence of landscape paintings within all of the social classes studied. These landscapes are in the main tranquil, sedate, and depopulated. These landscapes, Halle asserted, allowed residents to satisfy their desire for vacations and trips to nature without risk:

> "Whether landscape pictures are viewed as an easy substitute for the real experience of nature as a leisure activity or as evoking actual experiences, what is wanted, in fact and

> therefore in depiction, is a landscape that is calm and serene, free of excessive wind, rain, or turbulence that might mar the enjoyment of the spectator or participant" (72).

Another cross-class preference was for depopulated contemporary landscape paintings. Like the preference for landscapes in general, this preference for depopulated landscapes of contemporary society speaks to the modern person's orientation to nature. Modern nature, as a place for vacationing and leisure, is a place to "get away" from humanity—contemporary landscapes that have people in them sully this image.

Like Bourdieu, Halle explored the meaning of the photography displayed in homes. However, the two researchers come to separate, but parallel explanations for the types of photography shown. Halle observed that photos are second only to landscapes in their prevalence, and that these pictures are almost always of family members in leisurely, social scenes. Halle noted that "Family pictures here serve as records and reminders…of good times. Over and again, respondents, asked why they took so many photos, said they wanted to record each moment" (Halle 1993: 115). The frequency of photographs and their role as social instruments are also highlighted by Bourdieu, however there is a key difference. Bourdieu argued that in French society, formal photographs are pegged to one's class position, such that the working class took numerous formal photographs, while the middle classes, trying to turn the medium into an art, reject formality in photography. Halle, however, focused on the social conditions upon which picture taking is done, and argued that there is a cross-class decline in formal pictures, and this is a reflection of a general decline of formality within the United States.

In sum, Halle argued that theories commonly used to describe cultural consumption cannot adequately explain why people choose the art that they do. Halle argued that many theories of culture assume incorrectly that art only has the meanings infused into it by the upper classes and corporations, or that upper classes are using art to exclude other classes. To be sure, there are observed class differences. For example, landscapes owned by upper class people tend to portray more foreign societies (As his study was conducted in the early to mid 80's, this finding foreshadowed the emphasis on cosmopolitanism that undergirds the omnivorous thesis). However, the great value in Halle's work is the assertion that cultural consumption need not be a matter of conspicuous consumption nor of distancing oneself from the class immediately below. Other factors such as historical situation are just as important for determining cultural preferences.

Lifestyle Indicators

Katz-Gerro (1999) using the 1993 General Social Survey (GSS) culture module, assessed the extent to which Weberian status groups are associated with cultural choices. Of note in this particular study is how dependent variables were operationalized. Instead of looking at stratification within one cultural item (for example, music or art), Katz-Gerro used factor analysis to construct dependent variables composed of several types of cultural items that she called "lifestyle indicators" – implying that the multiple cultural products used in this analysis were indicators of a general latent set of cultural values. By taking this unique approach, Weberian status groups were found to be important correlates of these lifestyle clusters.

These clusters are composed of musical styles and recreational activities (e,g, watch movies, attend sports, visit art, hunt, etc.). Two of the clusters she identified conform to the broad definitions of highbrow culture and lowbrow culture, respectively. A third consisted of outdoor recreation and music identified with rural music. A fourth cluster consisted of indoor recreational activities and urban music. These clusters, as Katz-Gerro argues, are not necessarily ordered by class:

> "The findings suggest that traditional class distinctions run parallel to cultural consumption divisions only to a certain extent, meaning that individuals from different classes also differ in their lifestyle and cultural preferences," (Katz-Gerro 1999: 641).

Education, race, and gender (social condition) are all significantly correlated with the lifestyle clusters used in Katz-Gerro's research—over and above a measure of class (social position). This is not to say that class is not important. Like Halle's work, class is still a factor in determining cultural preferences. Two of her lifestyle clusters do show signs of class boundaries:

> "As to the highbrow and rural dimensions if we were to draw a line in the class structure according to lifestyle practices, it would separate professionals, managers, and routine white-collar workers from proprietors, skilled, and unskilled workers…these findings indicate that class analysis of cultural behavior should not be abandoned" (Katz-Gerro 1999: 641).

Later, in a comparative study of culture and class boundaries in Italy, Israel, West Germany, Sweden, and the United States, Katz-Gerro also found that despite the presence of Weberian status groups, lifestyle choices in western countries are still strongly patterned by occupation (2002). Similar to the study detailed above, Katz-Gerro used factor analysis to create lifestyle clusters for each individual country. Using these lifestyle cultures as dependent variables, the study found that the cultural groupings of age, gender, and in some countries ethnicity (surprisingly not the United States) still structured lifestyle choices. However, over and above these status group associations, class still has an effect on lifestyle consumption (Katz-Gerro 2002).

Despite these qualifications, these two Katz-Gerro studies using lifestyle clusters as dependent variables illustrate the utility of applying a Weberian perspective to understanding cultural consumption. In some ways, Katz-Gerro's use of lifestyle clusters mirrors Gans' taste typology. Although the former supports a Weberian perspective, and the latter supports a Marxian perspective, both studies emphasize as dependent variables collections of cultural preferences connected by a common value orientation. It may seem self-evident, but it is worth acknowledging that cultural choices are usually connected, and that social groups usually consume these connected media and tastes as a whole. Both Gans and Katz-Gerro's research supports this notion.

Kingston and the Classless Society

Kingston developed an empirically-derived argument against the concept of class in *The Classless Society* (2000). Kingston argued through a copious amount of supporting data that in contemporary American society individuals are not organized based upon their social class. While granting that there are great economic inequalities in society, he argued that "groups of people having a common economic position do not share distinct, life-defining experiences" (Kingston 2000:4).

Instead, Kingston asserted that one should one should use bivariate correlations to analyze differences within classes and between classes—no parceling of variables, or regression, is needed. If a researcher is to make a claim that individuals are organized along class lines with respect to a certain pertinent variable, at least a majority of people within each class should orient themselves similarly with respect to the variable, and this percentage should not be similar to that found in other classes.

To make this clear, I provide two fictitious examples. First, imagine that 35% of upper class respondents on a survey report owning a laptop. This is hardly enough justification for arguing that laptop ownership is a class based phenomenon given the simple fact the 65% of those defined as upper class *do not* own a laptop. For another example, imagine that a majority of upper class respondents do own a laptop, say 70%. This is a solid beginning, but if a majority of middle class respondents also own a laptop, say 55%, this is again not a class based phenomenon as laptop ownership is similar across classes.

Kingston applied this approach to studies correlating class to lifestyle choices. He argued that "surveys of attendance at classical music concerts…do show that the audience is primarily

composed of affluent managers and professionals….But this crucial matter is also true: only a small minority of any [emphasis in the original] class goes regularly to these concerts" (Kingston: 2000: 136). In a study correlating occupational groups to music consumption, Peterson and Simkus (1992) argued that class explains musical consumption patterns, and that certain occupations are related to certain musical choices. However, Kingston took the same findings used to justify a class-based argument, and argued that despite these correlations, actual class structuration does not exist because there is tremendous variation within classes: "segments of the economic elite like classical music more than anyone else, but in all classes significant numbers like jazz, folk, big band, rock, musicals, country, gospel, and so on" (Kingston 137:2000).

Kingston went on to argue that American culture is a niche culture that is "linked to many social identities – diverse, cross cutting, and often impermanent" (Kingston 147:2000). He ends by suggesting that a finer differentiation is needed.

The value in Kingston's work lies in its simple and cogent critique of class. It forces scholars to look at research that supports class with a more critical eye. Weak correlations that link cultural tastes to class should be questioned, and more attention should be given to racial, ethnic, religious, and geographic factors.

To summarize, the Weberian perspective acknowledges the cultural complexity of modern society. Groups, based upon similar social conditions, may choose similar cultural products. An understanding that shared history and shared values supersede class position is vital to an accurate representation of modern cultural stratification.

However, the Weberian perspective is not without its faults. Kingston notwithstanding, most studies acknowledge that at significant proportion of the variance in cultural choices is still explained through class indicators (Halle 1993, Katz-Gerro 1999, 2002). Further, and I think more important, taking a Weberian perspective leaves one in a permanent ad hoc state – first you find the groups that share a culture, and then you try and figure out why they share that culture. Contrast this with a class analysis, where one can begin with the class structure, and make more or less mutually exclusive hypotheses concerning each class. From a Weberian perspective it is difficult to make conjectures about future structural changes in cultural patterns.

The Omnivorousness Perspective

A third, and more recently developed perspective is the cultural omnivore thesis (Peterson and Kern 1996). This thesis asserts that high status individuals consume a broad range of cultural products and enjoy cultural activities that traverse the taste spectrum. Omnivorousness is usually associated with education. This value of omnivorousness cross-cuts status group and class lines, such that highly educated people from different racial, ethnic, and occupational groups will tend to share the same values towards culture.

The omnivorous perspective argues that individuals who are highly educated value cultural diversity and are therefore more "omnivorous" in their taste patterns than less educated people. Highly educated individuals consume cultural products up and down the taste structure, from "high culture" to "low culture". Further, they consume cultural products across the taste structure, and consume the items produced by different racial and ethnic groups. This omnivorous behavior is positively associated with years of education, such that as education

increases the degree of omnivorousness increases. Omnivores are in contradistinction to univores—individuals who consume one type of product more intensely and shun others. We can say that univorousness is negatively associated with education.

Note that the breadth and depth of cultural consumption displayed by omnivores does not imply a utopian dismantling of cultural boundaries between groups. Being omnivorous in its various manifestations--cultural diversity, cosmopolitanism, and racial inclusion--creates boundaries of its own. Groups that are more limited in their cultural choices or tastes – univores – can face repercussions by being symbolically excluded from powerful omnivorous social groups. Table 1.3 presents a model of the Omnivorous perspective. Full omnivores in this model consume all of the music present, while full univores consume only one musical genre. The intermediate groups (presumably possessing education somewhere in between the full omnivores and the full univores) consume two or three music genres.

Table 1.3
Cultures Ordered by the Omnivorous Perspective

	Music A	Music B	Music C	Music D
Omnivores	+	+	+	+
Semi-Omnivore		+	+	+
Semi-Univore			+	+
Univore				+

Omnivorous Research: From Simple to Complex

Peterson and Kern's (1996) seminal article initially operationalized the omnivorousness scale as the number of middlebrow (mood/easy listening, Broadway musicals, big band) and lowbrow (country and western, bluegrass, rock, blues) musical genres a person liked. People who

reported liking more of these genres are more omnivorous. Peterson and Kern showed that between the years of 1982 and 1992, the taste of the United States population as a whole had increased in breadth. People who traditionally would have consumed only highbrow music were by 1992 consuming both middlebrow and lowbrow music at higher rates.

Bryson (1996), instead of analyzing tastes in the manner of Peterson and Kern, focused on musical dislikes. Bryson found that highly educated people are indeed more omnivorous, but that this omnivorousness is selective. As education increases, disliking music associated with racial and ethnic groups decreases—thus increasing overall omnivorousness. However, these same high status people continue to dislike certain music that is traditionally connected to groups perceived to be of lower education (e.g. rap, country, and gospel). Bryson argued that what in the past was racial exclusion being exhibited through musical preference, now appears to be class exclusion also exhibited through musical preference.

Han (2003) combined the liking dimension from Peterson and Kern and the disliking dimension of Bryson. In Han's study, the likes dimension of omnivorousness corresponds to "what" music people consume and the dislikes dimension corresponds to "how" a person consumes music. Han identified three groups of people based upon these two dimensions. These groups can be mapped onto the familiar class-based trichotomy of highbrow-middlebrow-lowbrow taste categories (Gans, 1999). One group is composed of highbrow consumers who are omnivorous and characterize themselves by disliking certain genres. A second group is composed of highly omnivorous middlebrow consumers who tend to shy away from disliking many music genres. A third group is composed of lowbrow consumers. This group tends to be very univorous and dislike many genres, especially highbrow genres. The important insight of

Han's work is the recognition that omnivorousness is not a linear phenomenon such that amount of omnivorousness increases steadily with level of education. Instead, several discrete of groups can be identified that tend to cluster around certain parts of the omnivorous scale.

Chan and Goldthorpe (2007b) tested the adequacy of omnivorousness in explaining music consumption patterns in England. In the process, they further refined how omnivorousness should be understood and measured. The authors gave a status score to respondents, such that individuals were ranked along a gradient based upon social prestige. Understanding that discrete taste groups form along the dimension of omnivorousness, Chan and Goldthorpe used latent class analysis to identify three taste groups labeled Univores, Omnivore-Listeners (a group that listens to a lot of music through media outlets), and True Omnivores. In predicting these three groups, Chan and Goldthorpe found that education and their measure of status were the two most important predictors, with occupation and income being non-significant. As mentioned previously, education had been the prime determinant of omnivorousness, and the results of Chan and Goldthorpe's work does not contradict these findings. What this research adds is another potential determinant in predicting omnivorous groups. Social prestige is positively correlated with omnivorousness.

In sum, recent research on omnivorous has presented fairly consistent findings. By using breadth of musical selection as a proxy for cultural openness in general, respondents can be demarcated into distinct groups determined by education primarily but also social prestige. People with more education and in higher prestige occupations tend to be more omnivorous, whereas people of lesser education and tend to restrict their cultural consumption to specific products. Further, omnivorousness is not completely linear. While there is clearly a positive

association between omnivorousness and education, distinct groups of people can be defined based upon their level of omnivorousness. Finally, research suggests that some measure of status as prestige could be used to further understand omnivorous groupings.

Like the other perspectives discussed, the omnivorous perspective has drawbacks. First, not enough is known about omnivorousness. As noted by Peterson himself, there are questions as to its permanence—the value of omnivorousness may be only a cohort effect. A second drawback, related to the first, is the seeming convergence of omnivorousness with the Weberian perspective. The main difference between the omnivorous perspective and other perspectives is that omnivorousness implies a recent breakdown in the cultural hierarchy: snobbishness is replaced with cultural diversity. This is not in doubt. However, the very act of consuming diverse cultures is in itself a sign of cultural superiority. A person who is able to speak about varied musical styles, or speak about their travels to other countries, is displaying markers in the same way that someone may have casually mentioned they had attended the opera fifty years ago. Considering that it is becoming clear that omnivorousness is not a linear phenomenon but instead a clustered one, with groups – generally based upon education—gathering along different intervals of the omnivorous scale, it may be that omnivorousness is simply a passing phenomenon on the way to a more rigid cultural hierarchy based upon a well educated, cosmopolitan elite and a less educated, provincial mass.

Summary

These three perspectives clearly make different assertions about the cultural structure of society. However, it appears as if there is no consensus as to the most adequate perspective. The old

pattern of Highbrow /Lowbrow taste (Levine 1988), firmly entrenched within a Marxian perspective, gave way beginning in the 1970's to a more Weberian model emphasizing consumption patterns based upon status groups. This model has in turn given way to the omnivorousness thesis. While this latest paradigm appears to provide a better theoretical framework, questions still abound. Its originator questioned the stability of omnivorousness, and has suggested that omnivorousness may be a transitional cohort effect instead of a stable sociological phenomenon (Rossman and Peterson 2005). Further, new studies have shown that the omnivorousness thesis needs to be refined, and should incorporate class and status groups in order to fully explain the taste structure (Alderson et al. 2007, Garcia-Alvarez et al. 2007, Chan and Goldthorpe 2007a,2007b, 2007c, Sullivan and Katz-Gerro 2007)—the very perspectives that were superseded within the discourse by omnivorousness.

As shown in Table 1.4, The Marxian, Weberian, and Omnivorous perspectives all make different assertions about the nature of cultural consumption. Of note in Table 1.4 is the use of education as an indicator in all three perspectives. This thorny problem of education and taste will be addressed in a future chapter. We see from this table, how all three perspectives also posit that the cultural structure is hierarchical—more powerful social groups are associated with more prestigious or valued cultures. However the Weberian perspective allows for parallel cultures, where one culture is not labeled as better than another.

Table 1.4
Summary of Theoretical Perspectives

Perspective	Social Structure	Common Indicators	Cultural Structure
Marxian	Social Position (Class)	Income, Education, Occupation	Hierarchical
Weberian	Social Condition (Status Group)	Gender, Race, Ethnicity, Values, Education, etc.	Hierarchical and Parallel
Omnivorousness Thesis	Manifestations of Omnivorousness	Education, Prestige	Hierarchical

I have shown the strengths of these perspectives by discussing the insights gained by research that has applied these perspectives. Also, I have discussed what I believe are the weaknesses of each perspective. Strengths and weaknesses notwithstanding, these perspectives cover all of the determinants, or independent variables, that will be assessed in this work. In the next chapter I will focus on the indicators of cultural consumption—the dependent variables—that will be assessed empirically.

Chapter 2

Theoretical Background: Music as Symbolic Consumption, Technology as Material Consumption

In the previous chapter I outlined several determinants, or independent variables, of cultural consumption through three perspectives – Marxian, Weberian, and Omnivorousness. My next question becomes: Where should a sociologist look to assess the adequacy of these three perspectives? Because there are a myriad of items and practices we might use to explain consumption patterns, a more appropriate question would be: what particular cultural items should be chosen to illustrate current cultural trends in the United States? I argue that choice in music genre and usages of technology are both good indicators of recent cultural trends.

Both music and technology are widely used in our society, and they provide many choices for consumers. In the case of music, a researcher can easily identify tastes in terms of the particular kinds or genres of music a person listens to. In the case of technology, tastes can be identified through the particular types of gadgets a person owns, and the ways that people use the Internet. Further, these are relatively inexpensive and widely used products. Many people in our society have access to them and have developed preferences in these realms. If we want to understand contemporary consumption patterns, these two areas are good places to look for new as well as old social structures affecting taste. I therefore argue that studying these "easy access" and "easy-to-use" cultural products will provide insight into general cultural consumption patterns.

There is another, more theoretical reason why music and technology as a tandem are appropriate. These two items represent two distinct dimensions of culture. Music represents the immaterial, symbolic dimension of cultural choice. One's musical selection says much about one's identity (Frith 1996). Choice in music is strongly associated with choice in values. I can imagine social contexts where I will not mention my teenage and early adulthood listening habits for fear that my past interest in gangster rap may mark me, especially as a black male, as someone who is a cultural risk. Similarly, a stated interest in Country and Western music can immediately mark a person as from a rural region and socially conservative. Music also marks one's generation. People whose formative years were during the 1970's may make cultural references to James Taylor, the Bee Gees, or The Commodores. A generation later, those references become Nirvana, R.E.M, or Tupac Shakur. This quality of music, its ability to demarcate symbolically one's membership in a social group, makes music a good indicator of the symbolic dimension of cultural taste.

Technology represents the material dimension of culture. People have to engage themselves with technology through usage or display. Indeed, differential use has been most interesting in the study of technology, as differential usage patterns lead to differential benefits accrued. This is the impetus for the Digital Inequality arguments that have dominated the literature on technology within the social sciences. To be sure, there are symbolic dimensions of technology as well, just as people can engage in material aspects of musical consumption. However, as I primarily view music as a symbolic culture, I primarily view technology as a material culture.

In sum, if one wants to assess contemporary cultural patterns in the United States, musical choice and technology consumption are two of the more informative items. Not only are they widely available but in tandem they represent two important dimensions of consumption. Below, I will discuss music and technology in more detail. Considerable time is spent looking at the *consequences* of differential consumption by social groups. Music is seen as a mechanism for the development of symbolic boundaries between social groups. Technology is seen as a mechanism for social exclusion. While this dissertation is ultimately about determinants of taste, engaging in the literature through the lens of consequences further sharpens the understanding of music as a symbolic dimension and technology as a material dimension.

Music and Distinction

On Music Genres

Sociological research of the type that has informed the present work rarely discusses individual music genres. Usually collections of genres are either lumped into highbrow (e.g. classical, opera, operetta) and popular (e.g. hip-hop, country and western, rock). Or, genres are combined together using data reduction techniques. This last approach has been used increasingly by scholars as the highbrow/lowbrow spatial metaphor has fallen out of favor. In relation to the highbrow/lowbrow split, factor data reduction techniques provide a little more nuance. Lowbrow music is divided into several subcategories, such as hip-hop and rhythm and blues forming a construct representing African-American music, or country and western and bluegrass combing to form a type of regional music. I too will use data reduction techniques. Reducing the number of variables without reducing explanatory power provides parsimony to the

explanation. However, I believe that understanding the particular values that are associated with different music genres will later provide additional understanding when attempting to evaluate statistical findings. Thus, I discuss several of the more popular genres below.

Genres are "systems of orientations, expectations, and conventions that bind together an industry, performers, critics, and fans making what they identify as a distinctive sort of music" (Lena and Peterson 2008: 698). In the study from which this definition comes from, the authors make a distinction between genre as a sociological construct and commercial lists or music created for market purposes. Thus, "pop" and "easy listening" are not genres as much as they are compilations of music derived from distinct genres. For example, a pop chart that one sees in a magazine such as *Billboard* (the industry standard) will be composed of several types of music genres including hip-hop, rock, salsa, and country.

With this in mind, I present four types of music genres. These genres are selected because of the wealth of secondary sources describing these genres and preliminary data analysis (not shown) shows that for the most part, these were the most common selections made by my survey population. Table 2.1 lists the values and social groups (by condition and position) most closely associated with each genre.

Table 2.1
Statistically Important Music Genres

Genre	Genre Values	Condition (Main Audience)	Position
Classical	Nonreferential and ahistorical music focused on composition.	European-American, Older People.	Upper Class.
Country and Western	Authenticity. Everyday experiences of southern and western rural life.	Rural, European-American.	Middle Class/Working Class.
Rap	Youth oriented, sexual bravado, physicality.	Urban, African-American and Hispanic, Inner City, Younger People.	Middle Class/Working Class/Lower Class.
Rock	Anti-establishment, youth-oriented, hedonistic.	European-American, Suburbia, Younger People.	Middle Class/Working Class.

Classical

Since the late 19th century consumption of classical music has mainly been the province of upper class and highly educated people (Levine 1990). Classical music is different from the three other genres detailed here in that it is assumed not to be liked to by a large proportion of the population (Peterson and Simkus 1992, Johnson 2002).[2] However, this exclusiveness of classical music, combined with the power and prestige of its consumers, is the main reason why Bourdieu and

[2] Interestingly, the dataset used for this research shows that 27% of the population reported liking classical music. This is not the most popular music in my dataset, but not an insignificant percentage.

others have used this music to understand the dynamics of music and symbolic boundaries. Classical music deviates from other genres in another important respect. This music is not connected to the life experiences or contemporary events of the artists—it is not performance based but instead composition based (Gans 1999, Johnson 2002). Classical music as a general rule is not danced to, but instead listened to and reflected upon. High value is placed on "careful communication of mood and feeling, on introspection rather than action, and on subtlety…" (Gans 1999: 101).

Country and Western

Country and Western music is generally associated with working class European-Americans. While country and western music is no longer a regional music (Peterson and Dimaggio 1975), it continues to reference its Southern and rural past (Peterson 1997). The subject matter of this music is often about the daily trials and tribulations of the common man. Peterson writes about Hank Williams, the star whose songs are emblematic of the genre:

"Hank Williams exemplified in his song lyrics…the stark contrasts of hard work and dissipation, family loyalty and alienation, home and the open road, profound love and bitter hatred, good and evil…" (1997: 178).

While the lyrics of country music still evoke agrarian and working class theme, the listener demographics of this music are beginning to reflect the demographics of the United States as a whole (Fetto 2000). During the 1990's this genre produced several chart-topping performers, including Garth Brooks, Shania Twain, and Dixie Chicks. However, traditionally (and after the aforementioned artists' popularity waned), country music does not place as many artists on the pop charts or produce as many top selling artists as other genres. Still, due to its listener base of

middle and working class European-Americans, this music has often been the leading musical radio format in the United States (Lewis 1997).

Rap

Rap music is the newest of the four forms presented here. It is generally agreed that this music germinated in the South Bronx in the late 70's and early 80's (Rose 1994). This genre is generally associated with working class African-American youth. While the association with African-American youth is a valid one, there have been times when Hip-Hop has been the most popular musical form in the United States. This popularity speaks to its appeal to many social groups. The semantic content of this music is often about sexual encounters and materialism, but in this genre the largest amount of sales and airplay is generated through songs about dancing and partying (Lena 2006). Because of its connection to both class (underclass and lower class) and status (African-American, Hispanic) groups whose values are often considered inferior by wider society, rap music has been at the heart of culture wars since the 80's (George 1988).

Rock

Rock and roll began with European-American musicians appropriating African-American blues music and modifying it to fit European-American tastes (Wicke 1987). Early rock music was tailored for teeny-boppers. However, in the 1960's rock music matured into its modern form, and became more politically oriented (although superficially) in the 1960's (Wicke 1987). This continued with the Punk rock aesthetic developed in working class areas of Britain (Hebdige 1979). Rock music tends to be anti-establishment, youth oriented, and hedonistic. There have

been many streams derived from this genre which to different degrees reflect the aesthetic of anti-establishment or hedonism. For example, "hair" bands of the 80's (Aerosmith, Skid Row) tended to favor the latter value, while grunge bands (Nirvana) of the 90's favored the former.

Music and Symbolic Distinction

Bourdieu argued in *Distinction* that "…nothing more infallibly classifies, than tastes in music" (1984: 18). In order to understand how music classifies, I discuss Bourdieu's homology thesis. This thesis asserts that the pattern of cultural consumption is a direct reflection of the social structure.

Bourdieu's homology thesis hinges on the idea that individuals who share the same conditions of existence share similar tastes and activities. Bourdieu argues that through early childhood socialization, members of the same position within the class structure internalize life chances, and develop similar aspirations, expectation, and attitudes. Bourdieu calls this internalization of objective structures "habitus". Habitus is:

"…necessity internalized and converted into a disposition…It is a virtue made of necessity which continuously transforms necessity into virtue by instituting "choices" which correspond to the condition of which it is the product" (Bourdieu 1984: 170).

This habitus, then, creates class-wide dispositions that predispose people of the same class to have similar views and to make similar cultural choices:

"…objective limits become a sense of limits, a practical anticipation of objective limits acquired by experience of objective limits, a "sense of one's place" which leads one to exclude oneself from the goods, persons, place and so forth from which one is excluded" (Bourdieu 1984: 471).

Bourdieu makes it clear that class is the cause and culture is the effect.

Bourdieu uses the concept of habitus to explain why upper classes consume highbrow culture. Higher classes possess a disposition that values those cultural goods that are removed from the direct representations of life. Abstraction and a decoupling of mind from bodily necessity are paramount. Bourdieu links this propensity to the upper classes' freedom from economic necessity in their own lives. Objective material conditions are consonant with subjective dispositions. The lower classes, in differing degrees faced with economic constraints, consume traditionally popular culture items and possess the opposite values of those in the higher classes. Cultural products are valued by lower class individuals when they are associated with the realities of daily life.

Differential cultural consumption in and of itself has more import when we recognize that these differences perpetuate the unequal distribution of resources in society. All classes value their own cultural products over the products of other classes. However, because of the disparity in capital—both educational and economic—the upper classes occupy a dominant position in social space, and are able to make their culture appear legitimate. Not being a consumer of legitimate culture can lead to an exclusion from resource laden social networks. Connecting this notion with this dissertation, we can say that social groups who consume music genres that are not of legitimate culture risk being excluded from various social networks.

This is a somewhat simplified version of Bourdieu's work for the sake of brevity —he does discuss intermediate classes and differences within classes. However, in sum, the social hierarchy (measured through class position) parallels or is homologous with the cultural

hierarchy (measured through high-brow, middle-brow, and low-brow positions). Although there have been several recent studies directly attacking Bourdieu's homology argument (Chan and Goldthorpe 2007a, 2007b, 2007c), the bulk of sociological studies of music does assert some correlation between class, culture, and musical taste. Even in cases where homology is questioned, as in the case of Chan and Goldthorpe's studies of UK cultural consumption, the argument is more about what best orders social structure vis-à-vis culture. Chan and Goldthorpe argue that the cultural hierarchy is best explained by looking at the stratification of education in society. Be that as it may, there is implicit agreement among most studies that some type of socioeconomic or demographic variables precede selection of cultural products (i.e. social condition, social position, or some mixture of both is the independent variable in any analysis). My analysis below will also assume, for purposes of testing, a homology between social structure and cultural structure.

Other Approaches to Understanding Music and Social Groups

Whatever assumptions one carries into an analysis, it is instructive to understand other perspectives. The knowledge of assumptions that deviate from one's own can bear fruit when attempting to explain findings or provide more nuanced explanations for observed phenomena. Simon Frith takes exception to the assumption that musical choice reflects social position. Instead, he argues for a reciprocal relationship between music and social groups. Frith (1996) begins by asserting that:

"The academic study of popular music has been limited by the assumption that the sounds somehow reflect or represent 'a people'. The analytic problem has been to trace the connections

back, from the work (the score, the song, the beat) to the social groups who make and use it" (269).

Frith advocates taking a different approach:

"…in examining the aesthetics of popular music we need to reverse the usual academic argument: the question is not how a piece of music, a text "reflects" popular values, but how – in performance – it produces them" (1996: 270).

Frith goes on to suggest that social identity is an idealization (i.e. the ideal typical homosexual, African-American, etc). These idealizations are articulated in different music genres, and people construct their identity in part through listening to the ideal types presented in music. People formulate social groups in part by identifying with other people who share the same musical taste. In this way the music helps creates the social group, and the social group helps define what values are associated with music.

David Halle's work, discussed earlier in Chapter 1, focuses on visual art. However, his critique can apply to music – especially high art music – as well. Halle argues that sociology often attributes the desire to consume culture to forces outside of the individual. As the logic goes, people consume art in order to gain some type of access to high classes or they are told what culture to consume by marketers on Madison Avenue. Halle suggests that other factors besides such macro-level, top-down influences are just as important in providing the meanings people attribute to culture. Halle advocates for a reconsideration of the agency of the audience, and a de-emphasis on the power of upper classes. Similar to Frith, the audience is seen as active in creating the observable group differences we observe statistically:

"tastes in art result from a complex and continual interaction between artists, critics, and purchasing…audience. The process is more complex, uncentered, and beyond the ability of any group to fully monitor, let alone control, than is often thought" (1993: 194).

Both Frith and Halle force the analyst of cultural patterns to reconsider the dominant approaches to consumption. This does not mean that symbolic exclusion does not take place. Groups based upon cultural choices are still forming, and there is no reason to believe that people will not be excluded because of their tastes. Frith and Halle argue that the *process* by which we come to see associations between social groups and musical genre is strongly influenced by the audience. In their view, the consumers of culture are active agents in creating the meanings attributed to culture. People can use popular music to help create their identity – as opposed to the dominant idea that music is simply a reflection of the values of a group. Further, the reasons that people consume high art music extend beyond the exhortations of the dominant groups in society. We simply cannot assume that people are consuming music for the purposes of entry into dominant groups or because dominant groups deem a certain type of music more valuable than the other.

As I explained at the beginning of this section, Frith and Halle's objections to the dominant model of cultural consumption become more germane when attempting to explain *why* we see the patterns that we do. Thus, in my conclusion I will return to the work of Frith and Halle, and suggest how these ideas contribute to an understanding of the findings.

Technology and Social Inclusion

On August 23rd, at about 3 A.M., 2.9 million people were told that presidential hopeful Barack Obama had selected Delaware senator Joseph Biden as his vice presidential running mate. This

message was sent via text message to mobile phones. Several months later, the Obama campaign, realizing that texting is "an obsession of the young and a necessity for lower-income voters", sent out text messages on Election Day in an electronic get-out-the-vote campaign. The Obama campaign's use of technology – in the form of text messaging as well as social networking sites such as Facebook-- was seen as a major reason why young voters turned out in such large numbers for the 2008 campaign (Ruggeri 2008).

The use of text messaging by select segments of society as a mechanism for political mobilization illustrates both the promise and peril of uneven consumption of technology. Increased political participation for disaffected groups such as the young and those with lower incomes is seen as a positive for society. The use of text messaging by the Obama campaign can be read as a sign of progress. However, our modern technological landscape is ever-changing and multi-faceted. Text messaging is relatively cheap and more importantly *requires little in the form of social or educational capital to fully utilize.* Thus low income voters were not excluded from its capabilities. But in other areas (e-commerce, deciphering quality information from junk on the web, knowledge of information-rich weblogs and e-journals), low income groups or other social groups who are not predisposed to take advantage of technology may be at a disadvantage. Systematic differences in the consumption of technology can have serious consequences, as social groups can become socially excluded from various aspects of modern society. As Servon and Nelson (2001) argue "access to information technology (IT) and the ability to use it [has] increasingly become part of the toolkit necessary to participate and prosper in an information-based society" (279).

Thus sociological research has focused on addressing the exclusionary effects of disproportionate technology usage. Research of this type has progressed from the initial Digital Divide debates (Attewell 2001, Norris 2001, Warschauer 2003, Kvavsny 2006) to the current argument about digital inequality. The former was concerned with raw hardware acquisition and the latter is concerned with the quality of usage (DiMaggio et al 2004, Benkler 2006). Digital inequality assumes that income provides privileged access and education provides privileged understanding. Inequality is reproduced when certain social groups gain disproportionate benefits from the use of technology than others. To be clear, my research is not looking at digital inequality *per se*. However, research focusing on the digital divide and digital inequality assumes differential usage patterns by social groups and research methods are structured accordingly. Thus, drawing on this research helps specify my design and my findings.

From Digital Divide to Digital Inequality

Arguably the most widely studied form of information technology is the Internet. Many studies have looked at the rates of access and usage of all forms of technology both within the United States (Fallows 2004, Hargittai 2005, Lorence & Park 2006, Xie & Jaeger 2008, Willoughby 2008), and internationally (Hargittai 1999, Castells 2000, Guillen and Suarez 2005). These studies have shown consistently that there are significant differences within and across countries with respect to access and usage of the internet, such that wealthier countries have higher rates of internet penetration than poorer countries, and the middle and upper classes within each country have more access than the working class. Still, despite these gaps, the differences in internet access are declining (National Telecommunication and Information Administration 2002, Martin

and Robinson 2007). Older discussions of the "Digital Divide" are being replaced by discussions focusing on quality of usage, or "Digital Inequality" (DiMaggio *et al.* 2004, Benkler 2006).

There is evidence that the rates of diffusion for other types of ICT – in particular mobile phones – are following the path set by internet diffusion. Especially within wealthier countries, differences in modes of usage are becoming more significant than differences in pure ownership. In an earlier study of mobile technology diffusion rates in the United States, Rice and Katz (2003) report differences in mobile phone access, and were able to clearly identify "haves" and "have nots". However, in a recent compilation of studies of diffusion rates for mobile technology both within the United States and internationally, Castells *et al*. (2006) present evidence showing that African-Americans and Hispanics—previously on the wrong end of the divide, have higher rates of adoption than European-Americans. This same phenomenon, they argue, is occurring on a global scale, where the rate of growth in mobile telephone use in developing countries outstrips the rate of growth in OECD countries.

These studies show that ICT is inexorably diffusing throughout the United States and globally. This phenomenon suggests that with access a reality for even the most disadvantaged groups, attention can be focused on the meanings groups attribute to this use – their perceptions, beliefs, and attitudes. Compared to research on access, research on the meanings social groups attribute to ICT is lacking (Crang *et al*. 2006). This research looks at these meanings by assessing group attitudes towards ICT.

I discuss several studies on ICT below. Their findings help frame the forthcoming analysis and discussion. These studies have been demarcated into two general themes through which ICT can be understood.

Maintaining Groups in the Absence of Propinquity

ICT can be understood as a mechanism for allowing groups to be maintained in the absence of propinquity. This conceptualization is most obvious when discussing the effects of the internet. Building upon Melvin Webber's (1963) essay "Order in Diversity: Community without Propinquity", Craig Calhoun addresses the notion that ICT acts as a bulwark against the loss of community in modern society. Calhoun argues that communication technology indeed creates a kind of community—but one built upon stereotypes and categories instead of a real connection with individuals (1998).

Despite Calhoun's misgivings, his essay gets at the heart of the concept of a virtual community. Virtual communities can be conceived of as a collection of loose social relationships built through a series of singular characteristics (Republican, Democrat, black, Yankees Fan, etc.). Indeed, the term virtual community itself was popularized through Rheingold's (1993) narrative about a collection of upper class computer users who form online groups, or blogs, based upon singular interests. Although most blogs do not gain a large readership (Maratea 2008), people can easily present their views to a segment of like-minded readers (Kumar et al., 2005). Many websites present a virtual space for ethnic minorities to chat,

date, and read the opinions of people within their ethnic group.[3] Building these virtual communities is not exclusive to online activities. Crang *et al.* (2006) present evidence showing that higher status professionals in the UK use their mobile devices almost continuously in order to maintain personal relationships while navigating their workdays. Similarly, Henderson et al's (2002) ethnographic study of UK youth suggests that "Not having a mobile phone could mean exclusion from new forms of sociality centered around mobile phones" (501). Further, Ling (2000) argues that Norwegian youth used mobile phones extensively to organize their daily activities amongst themselves.

The relationship between ICT and community is clearly not one way. ICT helps maintain relationships, and at the same time relationships help to structure the way in which forms of ICT are understood and used (Katz and Aakhus 2002). Campbell and Russo (2003) find that social networks played a role in the decision to use a mobile telephone and then how the phone was used once adopted. Ashton and Thorns (2007) present a case study from New Zealand, in which they argue that the proper way to use ICT to maintain community is by first beginning with an acknowledgement of community, or establishing " a sense of self as a social entity" (219). In this revealing study, the authors suggest that while many governments and organizations realize the potential of using ICTs for community organization they do not ground their concept of community in the actual history, traditions, and symbols that constitute the community. ICTs—

[3] To be sure, the most popular sites are designed with no particular racial or ethnic demographic (e.g. Facebook and Myspace). However several sites designed for specific ethnic groups also enjoy large memberships (e.g. Blackplanet, Migente, and HeyKorean).

in this case a community webpage—facilitate the maintaining of community most effectively by utilizing the histories and traditions already established by the group.

Communicating Identity

A second way that ICT can be understood is as a mechanism to communicate one's personal and group identity. Stated another way, ICTs can act as a tool for impression management (Goffman 1956). How one uses ICT in the presence of others, or what particular type of ICT one chooses to buy and display, is a form of social communication. Arguably one of the first sociologists to make this connection between new technology and its use as a mechanism for communicating identity was Bourdieu. In an early work, Bourdieu argued that middle class French citizens, in an effort to distinguish themselves, used cameras differently than French peasants (Bourdieu 1965). French peasants used cameras for functional purposes: to communicate moments of group cohesion. However the middle classes used cameras to communicate their artistic sensibility by taking abstract pictures and joining photography clubs.

In present times, it has been recognized that ICTs perform a function as fashion accessories (Castells 2001). For example, in Japan cell phone accessories are used by social groups as "status markers" (Hjorth 2005). This is especially true for the young. Castells *et al*. (2007) argue that youth develop a particular culture around their cell phones and use ICTs as a means of "expression and reinforcement" (127). They argue that youth personalize their mobile phones and use them as fashion items. Further, youth use their mobile phones as a continuation of face to face interaction, reinforcing peer groups.

The type of ICT one uses can also communicate class identity or socioeconomic status. In this way, the purchase and display of ICT is another form of conspicuous consumption (Veblen 1899). Since the early days of ICT, mobile devices were seen as accoutrements of a high class lifestyle (Marvin 1986). In the United States, level of income and work status is a strong predictor of ownership of mobile phones (Rice and Katz 2003). In line with this notion, Katz and Sugiyama (2006) argue that consumers explicitly purchase cell phones for the amount of social status and prestige these phones can produce.

In sum, I have delineated at least two possible themes through which ICT can be understood. First, ICT can be understood as a mechanism for allowing communities to form or networks to be maintained in the absence of propinquity. Second, ICT can be thought of as a tool for identity formation. Clearly these ways are not the only means by which ICT can be understood. However, they do provide a context upon which to frame my analysis.

Summary

In Chapter 1, I outlined three perspectives that are often used to explain cultural patterns. The purpose of this chapter was to discuss those indicators of culture—the dependent variables—used in this research. Music and technology were chosen as indicators of cultural patterns for two main reasons. First, these items are relatively ubiquitous. They are both relatively inexpensive and many people consume these items. Second, music and technology tap into different areas of consumption. Music is primarily an indicator of the symbolic dimension and technology is primarily an indicator of the material dimension. Because of these two reasons,

music and technology were selected in tandem as representatives of contemporary taste patterns in the United States.

Music has long been understood as a mechanism for the development of symbolic boundaries between social groups. Bourdieu's seminal work *Distinction* is used to describe the process by which social groups come to use music to define boundaries between themselves and other groups. Technology has also been characterized as a mechanism for social exclusion. This understanding undergirds research on digital inequality. As a material culture, the way in which technology is used may produce disproportionate rewards for some social groups.

Chapters 1 and 2 frame the questions that I wish to address in this work. The following chapter describes the statistical procedures I will use to understand the relationships between the concepts thus far presented.

Chapter 3

Methods

How will I assess the relationship(s) between the theoretical perspectives discussed in chapter 1 and the cultural indicators outlined in chapter 2? A standard approach is to predict the consumption of cultural indicators through several models that use independent variables derived from each theoretical perspective. Regression models could be run teasing out the effects of the indicators hypothesized by Marxian, Weberian, and Omnivorous perspectives. The theories that explain more of the variation in music and technology choice would be the strongest explanation for contemporary cultural patterns. I will employ regression models to understand the net effects of sociodemographic variables on music and technology.

However, I believe this standard approach, while necessary, is not sufficient. In addition to regression modeling, I will use several analytic strategies that are often used as data reduction techniques in preparation for future predictive models. Instead of using these strategies as a means to an end, these strategies form the core of my analysis. These strategies are factor analysis, classification and regression tree analysis (CART), and correspondence analysis. I argue that within the context of taste patterns, the results from these strategies take on special significance.

There are several reasons for my position. First, by reducing data and removing "noise", these strategies make it easier to observe general cultural patterns or orientations. Second, two of these strategies – CART analysis and correspondence analysis—focus on gross effects (as opposed to regression analysis which focuses on the effect of one variable *net* of other variables).

Focusing on gross effects lends itself to more qualitative understanding of social groups (this point will become clearer with my discussion of CART analysis). This point is important, as ultimately I would like to address the existence of discrete social groups ordered by taste. Third, these strategies allow the researcher to draw conclusions based upon how phenomena appear in relation to other phenomena. The taste of one social group has more meaning when compared to the tastes of other social groups. This relational approach is central to addressing questions about symbolic boundaries and social exclusion.

Below, I discuss these analytic strategies and describe how each strategy can contribute to an overall understanding of the structure of contemporary taste patterns. The order in which I discuss these strategies reflects the order in which they will be used in this dissertation. The discussion that follows is not meant to increase the mathematical understanding of the strategies used. Instead, I focus primarily on the conceptual logic that undergirds the use of these methods and how this logic is used within the context of this dissertation specifically and the study of macro taste patterns in general.[4] This discussion is meant to be mainly theoretical. In the empirical chapters to come I will introduce new components of these strategies as needed.

Factor Analysis

Factor analysis is a common data reduction technique for researchers of cultural patterns. Researchers tend to assume that cultural choices are related. Within a given array of cultural choices, several of these choices are related, such that a respondent who likes one type of cultural

[4] For more technical discussions see: factor analysis - Kim and Mueller 1978, CART analysis – Brieman et al 1984, correspondence analysis – Greenacre 2007.

item will probably like another. As mentioned in Chapter 1, Katz-Gerro (1999, 2002) used factor analysis to construct dependent variables composed of several types of cultural items that she called "lifestyle indicators". Barnett and Allen (2000) used factor analysis to condense a selection of movie choices into three themes: "art", "classic", and "blockbuster". Similarly, Van Eijck (2001) found three themes for music– folk, highbrow, and pop.

Factor analysis begins with a correlation matrix for a set of variables. It is assumed that the variables in this set are pertaining to a common theme such as attendance at cultural events or political opinions. In any given correlation matrix, some variables are correlated, and some correlations are higher than others. These correlations are assumed to be evidence of a common variable that is influencing the correlations that these variables share. In other words, a latent variable, or factor, is the source of the covariation between several observed variables. The overall amount of data to be analyzed is reduced when the underlying factor is used instead of the two or more observed variables.

There are two general approaches to factor analysis. On approach is confirmatory factor analysis. In confirmatory factor analysis the researcher wishes to test the hypothesis that there are underlying factors explaining the correlations in observed variables and that certain variables belong to one factor and not the other. This approach is not used in this research. The second type, exploratory factor analysis, is an inductive approach in which the factorial structure is not assumed to be known. Exploratory factor analysis is used in this research and the discussion that follows reflects this emphasis.

Below are proper (3.1 - 3.3) and improper (3.4) factor analytic models. Figures 3.1 – 3.3 assume that underlying factors (F) are having some effect (b) on more than one observed

variable (X). These "effects" are called factor loadings, and are squared correlations between the factor and the observed variables. In factor analysis, factor loadings are analogous to standardized regression coefficients. These models also assume that the error measurements (U) and their effects (d) are not correlated—cov (U_i, U_j) = 0, and that factors and error measurements are not correlated – cov(U,F) = 0. These error measurements are also considered factors and are used in the estimation of the observed variables. These error measurement factors are not correlated with each other. Further, they only affect one observed variable, and for this reason are called unique factors. Factors that affect more than one observed variable are called common factors. It is these common factors that are the factors of interest to the researcher. The effects that factors have on observed variables are essentially the correlations between the factors extracted by the statistical program and these observed variables.

Figures 3.1 – 3.3, shown below, illustrate progressively more complex factor analytic models. In figure 3.1, one factor accounts for the covariance of three observed variables in total. In figure 3.2, two factors account for the covariance of six observed variables, with the exception that for one variable, X4, two factors work together to explain the variance. The factors in figures 3.1 and 3.2 are called orthogonal factors because they are not correlated. In 3.3, the factors themselves are correlated, such that cov (F1,F2) $\neq$ 0. Because of this correlation these factors are called oblique. The difference between orthogonal and oblique is important theoretically, and will be addressed shortly.

Figure 3.1 – Orthogonal: One Factor

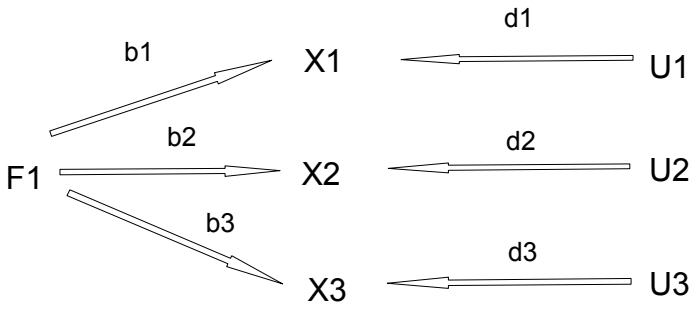


Figure 3.2 – Orthogonal: Two Factors

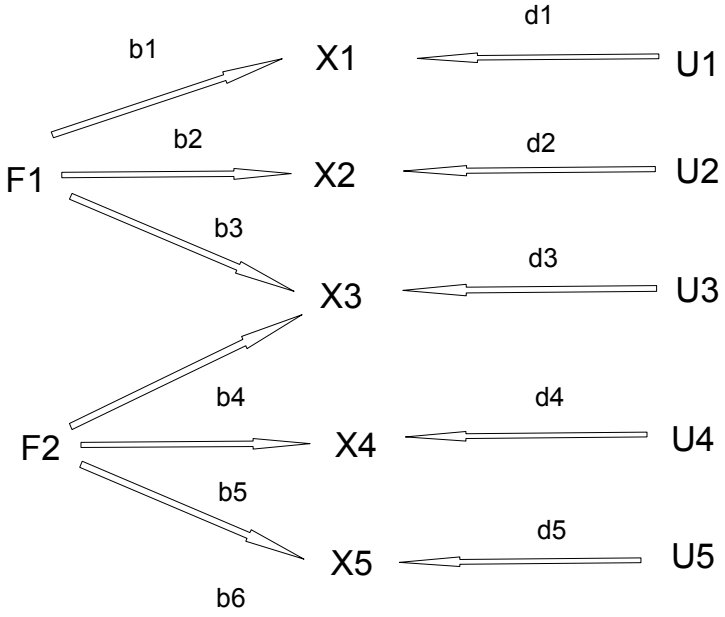


Figure 3.3 – Oblique Factors

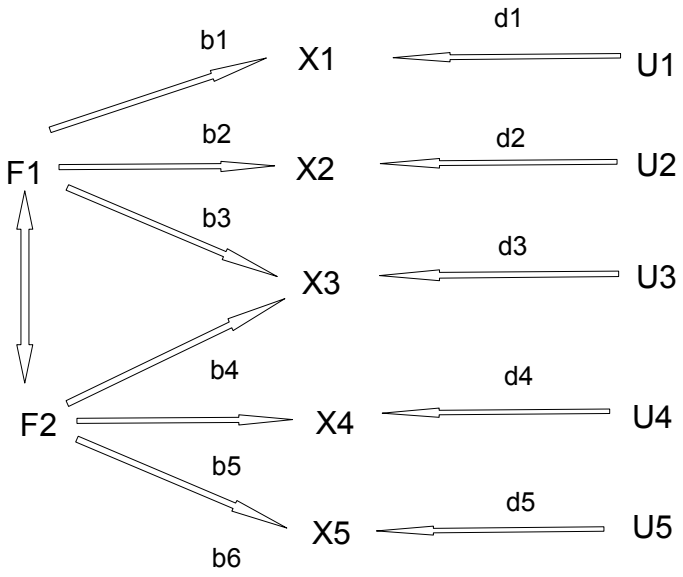
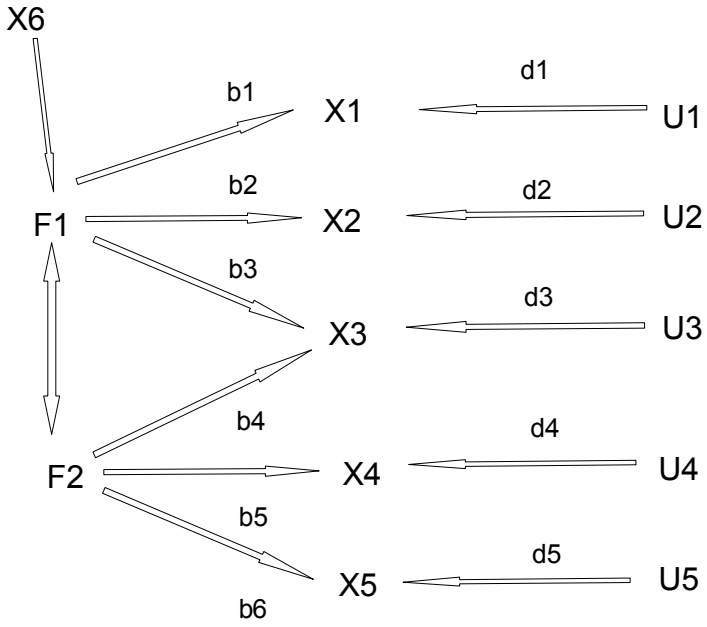


Figure 3.4 – Improper Factorial Model



What separates the proper factor analytic models of 3.1 – 3.3 from the improper model of 3.4 is that another variable, X6, outside of the structure, is accounting for some of the variation in the factor. This model is more appropriate for path analysis and will not be discussed further. Unfortunately, there is no definitive test that rules out the possibility of Figure 3.4 (Kim and Mueller 1978). We have to *assume* that the covariation in the observed variables terms is explained through linear combinations of the causal factors – the postulate of factorial causation (Kim and Mueller 1978).

Thus, taking model 3.1 as an example, X3 would be estimated such that the effects of a common factor (b) and the effects of the unique factor (unexplained variance) (d) predict the variation in the observed variable:

$$X3 = b_3F_1 + d_3U_3$$

For model 3.2, X3 is predicted as such with effects from both factors:

$$X3 = b_3F_1 + b_4F_2 + d_3U_3$$

And for model 3.3 the correlation between the two factors and their corresponding effects are added:

$$X3 = b_3F_1 + b_4F_2 + b_3F_1\ b_4F_2 \text{cov}\ F_1F_2 + d3U3$$

The same data can produce both orthogonal and oblique models, and choosing between them is based primarily on one's theoretical justifications.[5] However, considering that the research I draw on tends to use orthogonal models and because these models are relatively easier to

[5] This is a matter of rotation. Statistical packages allow for the researcher to select several means of extracting factors from observed variables. For orthogonal models (3.1 and 3.2) a popular method is Varimax rotation. For oblique models (3.3), factors can be extracted using direct oblimin and promax rotation.

interpret, I focus on models 3.1 and 3.2. To illustrate models 3.1 and 3.2, I present an orthogonal factor analysis of film preferences from a study done by Barnett and Allen (2000) in Table 1.

Three factors were extracted from Barnett and Allen's analysis. The columns in Table 3.1 list the correlations of each variable with each factor. Intuitively, film tastes should be highly correlated, such that a person who has viewed a classic film such as *High Noon* will also have viewed *Casablanca*. Because the researchers assumed an orthogonal model for their factor structure, films that are highly correlated with one factor are not highly correlated with other factors. For example Factor 2 explains almost 80% of the variance for the film *The Piano*, whereas Factors 1 and 3 explain less than 20%. An orthogonal model allows for easy interpretations of the factor structure. The labels Classic, Art, and Blockbuster are intuitive, and appear to describe film choices adequately. The authors explain the rationale behind the art label in this way:

> "Although these four films might not qualify as art films by the criteria employed by film scholars, they are clearly films that sacrificed a measure of commercial appeal in the pursuit of social, political, and artistic concerns" (Barnett and Allen 2000: 155).

Barnett and Allen then constructed scales – each scale composed of the four films that loaded highly onto one respective factor and loaded very low or negatively on the other factors. These scales were then used in regression analysis to test the effects of sociodemographic variables on liking "classic" films, "art" films, and "blockbuster" films. Barnett and Allen's approach, represented by Model 3.1 above, is a standard one, also seen in the work of Katz-Gerro (1999, 2002). I will take a similar approach.

However factor analysis is sometimes not so straightforward. There can be several latent factors that influence the same variable (model 3.2). Indeed, Barnett and Allen face this very problem with their analysis. The final four rows of Table 1 list films that the authors removed from consideration. In the author's words, "The remaining four films were excluded from further analysis because they were highly correlated with both the classic and blockbuster factors" (Barnett and Allen 2000: 155).[6] These final four films were used in the explanation of the classic and blockbuster factors, and subsequently used in the creation of scales for regression, the labels used to describe these factors would be somewhat less valid.

Here, I disagree with Barnett and Allen with respect to not using these variables. It is quite possible that there are elements of these films (i.e. plot, actors, directors, marketing campaigns etc.) that are not understood. It is possible that a more thorough understanding of the social construction of movie production may reveal the common thread running through these films. As it stands, these films were statistically correlated with both classical and blockbuster films, yet were deleted from the analysis because appropriate concepts could not be found to explain the correlations. It is possible that reliance upon already existing typologies limited the type of explanation possible – the paradigm of high, popular, and folk was transplanted into film in the form of classical, blockbuster, and art.

For this dissertation a decision such as the one made by Barnett and Allen would be detrimental to the overall explanation of the cultural structure. Even if the explanations given for

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[6] The first three films are indeed correlated with classic and blockbuster films (e.g. Psycho is correlated with classic films - .623 and moderately correlated with blockbuster films - .409). There appears to be some inconsistency in their analysis however, as Rebel Without a Cause is highly correlated with the classical factor and not highly correlated with other factors.

the factors are somewhat compromised, it is necessary to include all highly correlated variables. This is because for this dissertation factor analysis' purpose is ultimately heuristic, and not only a means to reduce data. While it may be difficult to give labels to collections of variables that on the surface appear contradictory, the high correlations of these variables are telling us *something* about contemporary cultural patterns. It may be that we can no longer rely on the high, popular, and folk paradigms, and new typologies should be considered.

Table 3.1*
Orthogonal Factor Analysis for Film Choices

	Factor 1	Factor 2	Factor 3
Classic Films			
High Noon (1950)	**0.761**	0.061	-0.176
Casablanca (1942)	**0.758**	0.120	-0.045
Citizen Kane (1941)	**0.682**	0.251	-0.086
Lawrence of Arabia (1962)	**0.680**	0.254	0.082
Art Films			
The Piano (1993)	0.108	**0.797**	0.167
A Room with a View (1985)	0.251	**0.641**	0.086
Schindler's List (1994)	0.073	**0.607**	0.263
The Last Emperor (1987)	0.319	**0.585**	0.073
Blockbuster Films			
Jurassic Park (1994)	0.117	0.042	**0.678**
Born on the Fourth of July (1986)	0.106	0.214	**0.659**
The Godfather (1972)	0.493	0.101	**0.605**
Pulp Fiction (1994)	0.040	0.385	**0.562**
Other Films			
Psycho (1960)	0.623	0.068	0.409
The Graduate (1967)	0.589	0.222	0.435
Chinatown (1974)	0.507	0.198	0.462
Rebel Without a Cause (1955)	0.605	0.119	0.239

*Modified table from Barnett and Allen 2000: 154

To summarize, factor analysis is a data reduction technique that assumes that linear combinations of underlying factors explain the variance of observed variables. While data reduction is often its express purpose, factor analysis can also be used as a heuristic device (Kim

and Mueller 1978) for explaining the underlying influences of a cultural structure. I will use factor analysis because I agree with scholars like Gans, Bourdieu, and Katz-Gerro who assume that there are underlying qualities, or values, that connect cultural choices.

CART Analysis

Classification and regression tree (CART) analysis, more than any other analytic strategy, addresses the questions of my dissertation most directly. CART analyzes independent variables provided by the researcher to produce sub groupings of individuals who are homogeneous with respect to a dependent variable of interest.

As an example, let us say that a researcher wishes to create homogenous subgroups based upon their level of omnivorousness. Now let's say that the omnivorous variable is scalar with a range from 0 to 21. Further, we have a series of independent variables (race, ethnicity, age) that we would like to use in our analysis. We want to answer the question, what groups of people are most omnivorous? We are not necessarily concerned with estimating the net effect of race, ethnicity, or age. Instead, we are concerned with the *gross* or additive effects of these variables—how they work together to influence the level of omnivorousness. A classification tree answers this question by categorizing cases into groups based upon a common value of omnivorousness. One can say that, with respect to this variable, CART *stratifies* the population with respect to omnivorousness. Combining the centrality of CART analysis to my research with the understanding that this procedure may be unfamiliar to researchers, I believe it is necessary to spend considerably more time on the mechanics of how to do a CART analysis.

CART analysis is a form of binary recursive partitioning.[7] The term "binary" implies that each group, or node can only be split into two sub-groups, called child nodes. Because the process is "recursive", the partitioning process is applied over and over again. Each parent node can produce two child nodes and, in turn, each of these child nodes may themselves be split. The term "partitioning" refers to the fact that the dataset is split into homogenous subgroups, or partitioned. Strictly speaking, a classification tree involves the prediction of a dichotomous variable, while a regression tree involves the prediction of an ordinal variable. However, I use the term "CART" throughout this chapter and dissertation as a stylistic choice.

There are several advantages to using CART which make it ideal for addressing the questions raised in this dissertation. First, because CART is a non-parametric procedure no assumptions need to be made about the distribution of the independent variables. The data can be highly skewed or multi-modal—common characteristics of the ordinal and nominal data used in this dissertation. Second, categorical variables are handled easily in CART analysis. Differences in categorical variables in linear regression can only be assessed by creating several dummy variables. However, this is most effective when one or a few dummy variables are part of the analysis, and becomes less effective and more cumbersome when numerous dummies need to be created and assessed.

The first step in CART analysis consists of partitioning the entire data set into binary subsets on the basis of a selected variable split. Initially, all cases are clustered into one "parent node" or group, with an overall mean for the dependent variable. This initial node has a certain

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[7] There are other classification tree techniques available. For example, Chi-square Automatic Interaction Detection, or CHAID, is a classification technique similar to CART. The primary difference is that this technique is not binary, and populations can be split into more than two sub-populations.

level of heterogeneity, or impurity with respect to the dependent variable. This impurity is a statistic that measures the degree to which cases in the group differ on amounts of omnivorousness. The calculation for impurity in any given population is:

$$D = \sum_{i=1}^{S} p_i^2.$$

In this equation, p_i is the proportion of cases in the population which have a certain value on the dependent variable. *S* represents the total number of cases, with $i = 1$ noting that the calculation begins with the first case. Each proportion is squared, and then all squared proportions are summed.[8] The maximum value of impurity for a group is .5 – which means that there is a 50-50 split on which value a case will fall. The minimum value is either 0 or 1—all cases fall at 0 or all cases fall at 1. The rationale behind splitting is to reduce the impurity of a parent node by selecting the one variable is most effective in dividing the original population into less heterogeneous subgroups.

The most common statistical technique used for determining a reduction of impurity is the Gini improvement measure. To calculate improvement, first the impurity of the original node is calculated. An independent variable is used to split this original parent node into child nodes. For example, if the independent variable is race, all people who are black are lumped together, and all non-blacks are lumped together. Next, the impurities for these new child nodes

[8] As an example, consider 10 cases for a variable that can have values of 0, 1, and 2. Of these 10 cases, 5 have a value of 0, 4 have a value of 1, and 1 has a value of 2. The corresponding calculations are: for the value 0, $.5^2$, for 1 $.4^2$, and for 2, $.1^2$. And, .25 + .16 + .01 = impurity = .42.

are calculated in the same manner. Then, a weighted average of the Gini diversity index is computed according to the proportion of the parent node included in each of the child nodes:

$$\text{Weighted Gini diversity index} = [(p_1)(\text{impurity}_1)] + [(p_2)(\text{impurity}_2)]$$

Finally, a Gini improvement measure is calculated:

$$\text{Improvement measure} = \text{diversity index of parent node} - \text{weighted Gini diversity index}$$

The independent variable which produces the largest improvement measure is chosen as the first splitting variable. This process then repeats itself for each of the two child nodes (which now have become parent nodes), and a set of potential splitting or independent variables. In this way, impurity is steadily reduced, leading to more homogeneous sub groupings.

Theoretically, a tree can grow both horizontally and vertically to large sizes. A large tree might have terminal nodes that are too numerous to be theoretically interesting, alternatively the N of these nodes might be so small that these nodes are not capturing reproducible phenomena. In other words, a tree is grown to its maximal size predicts the data perfectly, but it is likely capturing idiosyncrasies in the data instead of generalizable patterns. Thus, an important step in CART analysis is stopping the splitting process and producing a tree that balances accuracy with parsimony.

There are several ways to control the size of a tree. One way of controlling size is by assigning stopping rules. These rules define the minimum number of respondents per parent node, child node, and the maximum levels of the tree. The default option in SPSS is 100 for parent nodes, 50 for child nodes, and a maximum depth of 5 levels. Further, the minimum

amount of improvement in impurity needed for a predictor variable to split a population can be chosen. Higher minimum levels of improvement mean that fewer splits will occur. This creates a simpler tree, but will yield nodes are relatively more heterogeneous. Conversely, decreasing the minimum amount of improvement creates more homogeneous groupings, and a more accurate tree overall, but the tree could be too large or too complex to derive any general patterns.

Another way of controlling the size of the tree is by allowing SPSS to select the best fitting tree through a method called cross-validation. This method randomly splits the original dataset into N sets, and a tree is produced for each set. From these trees, which are not shown, an average tree is constructed. Cross-validation is an effective procedure because the average tree turns out to be the best model for any given dataset.

All of the above procedures can be used together. Balancing parsimony (creating a smaller tree) with accuracy (developing larger and more complex trees), is an art more than a science. Generally, I will err in favor of accuracy. Thus, my rules for stopping will be more lax. In the empirical chapters to come, the rules for splitting will be reported for each tree developed. All trees will be cross-validated with ten sample trees used to produce an average tree.

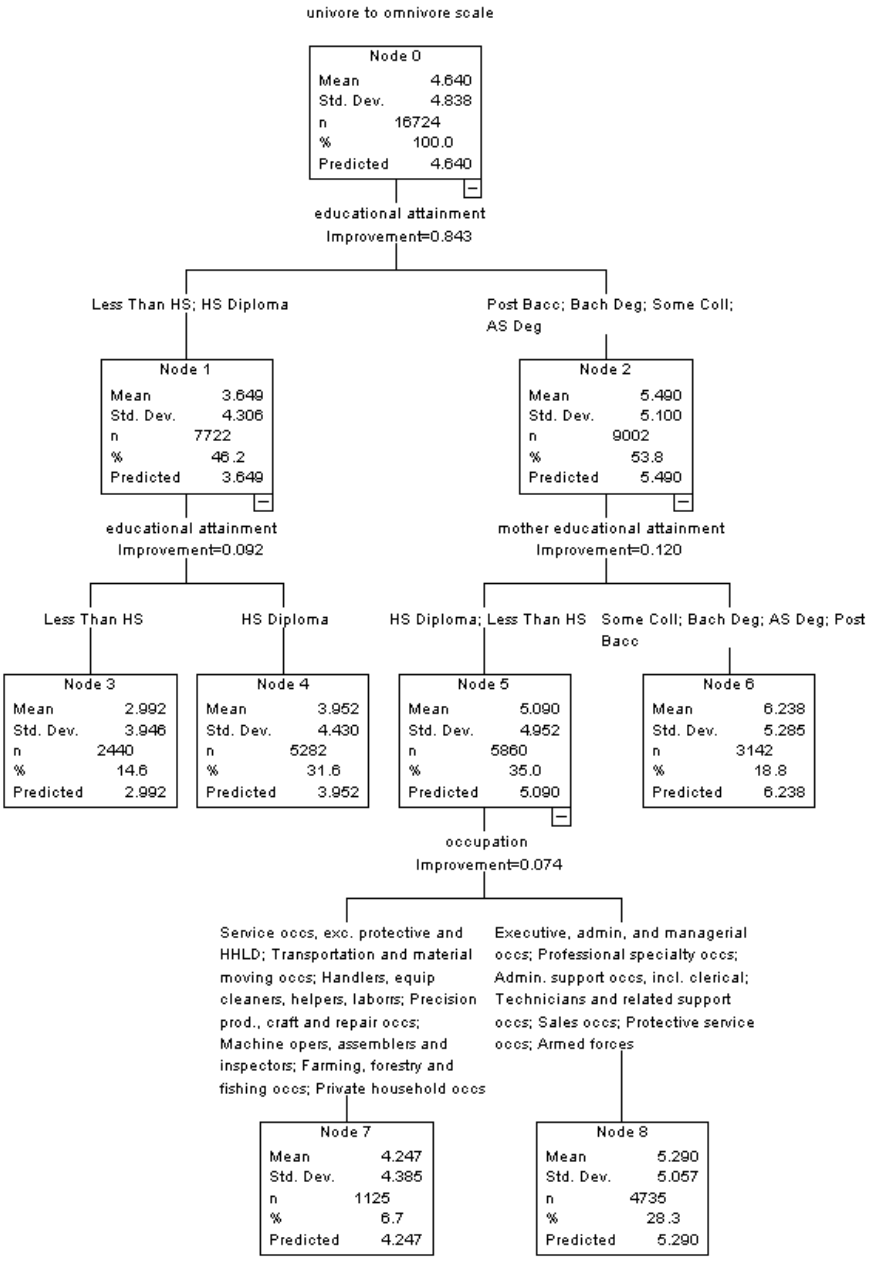
The next step involves judging overall quality through a risk estimate. The risk estimate produced by CART analysis for a scalar dependent variable is the within-node variance for the particular tree produced. This risk estimate is a statistic that can be used to compare across trees, with the higher the risk estimate, the lower the quality of the tree. However, this risk estimate can be used calculate the proportion of variance explained, a more interpretable understanding of CART quality. First, the total variance for the dependent variable is found by squaring the

standard deviation of this variable for the entire population (node 0 of a classification tree). Second, the proportion of variance unexplained is calculated by dividing the risk estimate given through the SPSS software (within-node variance) by the total variance of the population (squared standard deviation of the entire population). To find the variance explained by any given CART model we simply subtract one from this number.

Finally, results are interpreted substantively. As in other types of analyses, there are many ways of interpreting cart data. A logical first step is to focus on the terminal nodes, the nodes that are "childless". A tree is interpreted by assessing the means of the terminal nodes and the splitting logic that led to these terminal nodes. Means for each terminal node with respect to the dependent variable are presented in the output (e.g. if the dependent variable is whether or not a person voted, with 1 being "yes" and 0 being "no", a mean for a terminal node of .32 shows that 32% of this population voted yes). By assessing the splitting logic, profiles of the individuals that make up homogenous groups with respect to the dependent variable can be created.

An example of a classification tree predicting homogeneous subgroups based upon omnivorousness is presented in Figure 3.5. A discussion of how to interpret the tree follows.

Figure 3.5
CART Analysis of Omnivorousness



Following the path of the CART diagram, we see that the population is first split into two large groups based upon the respondent's education. As mentioned above, the variable used for splitting has the highest improvement score. This score is shown along the paths from parent to child node. The entire left branch is composed of people who have no post-secondary education and ends with two terminal nodes: people with less than high school diploma, and those who have attained a high school diploma. These two groups' score the lowest on the omnivorous scale, 2.99 and 3.95 respectively.

The right branch is composed of respondents who have greater than a high school diploma. The first split on the right branch occurs between individuals whose *mother* has a post-secondary education and those who do not. Respondents who have a postsecondary education and have a mother who has a postsecondary education form the terminal node with the highest level of omnivorousness, 6.24. Respondents whose mothers have less than a postsecondary education are then further split based upon occupation. Looking at nodes 7 and 8 we can say that respondents who are employed in physical or manual occupations form one group, while respondents employed in occupations that require symbolic manipulation or social skills form another group.

A list of the terminal nodes, the corresponding mean scores on the omnivorous scale and the splitting variables are presented below. These terminal nodes can be thought of as cultural groups. These groups can be stratified from least omnivorous to most omnivorousness.

- Group 1 (Node 3) → 2.98 -- Respondents' Education < High School
- Group 2 (Node 4) → 3.93 -- Respondent's Education = High School
- Group 3 (Node 7) → 4.2 -- Respondent's Education > High School + Mother's Education =< High School + Physical/Manual Occupations

- Group 4 (Node 8) → 5.27 -- Respondent's Education > High School + Mother's Education =< High School + Symbolic Occupations
- Group 5 (Node 6) → 6.20 -- Respondent's Education > High School + Mother's Education > High School

Another way to interpret CART output is through the listing of variable importance (Figure 3.6). This figure shows all of the independent variables used in the analysis, along with their relative importance in splitting. Potentially, more variables could have been incorporated in splitting. Tree pruning reduces the size of the tree and many variables are not shown. This table of importance shows all of the independent variables that could have potentially influenced splitting. The values listed for each variable are the improvement measures discussed above (the measure used to determine whether or not to use a given variable to split a tree). However, the values have more meaning when they are normalized. In future chapters I will focus more on the normalized values.

While the tree itself is given the most emphasis, the importance table is a valuable summary of the variables that matter the most in the analysis. For example, from the table shown in 3.2 we see how little race and ethnicity matter in omnivorousness, while education, as we would expect, is the main determinant. Normalized importance is best understood within the context of a real analysis, and will be discussed more in-depth when appropriate.

Table 3.2
Importance Chart from CART Analysis of Omnivorousness

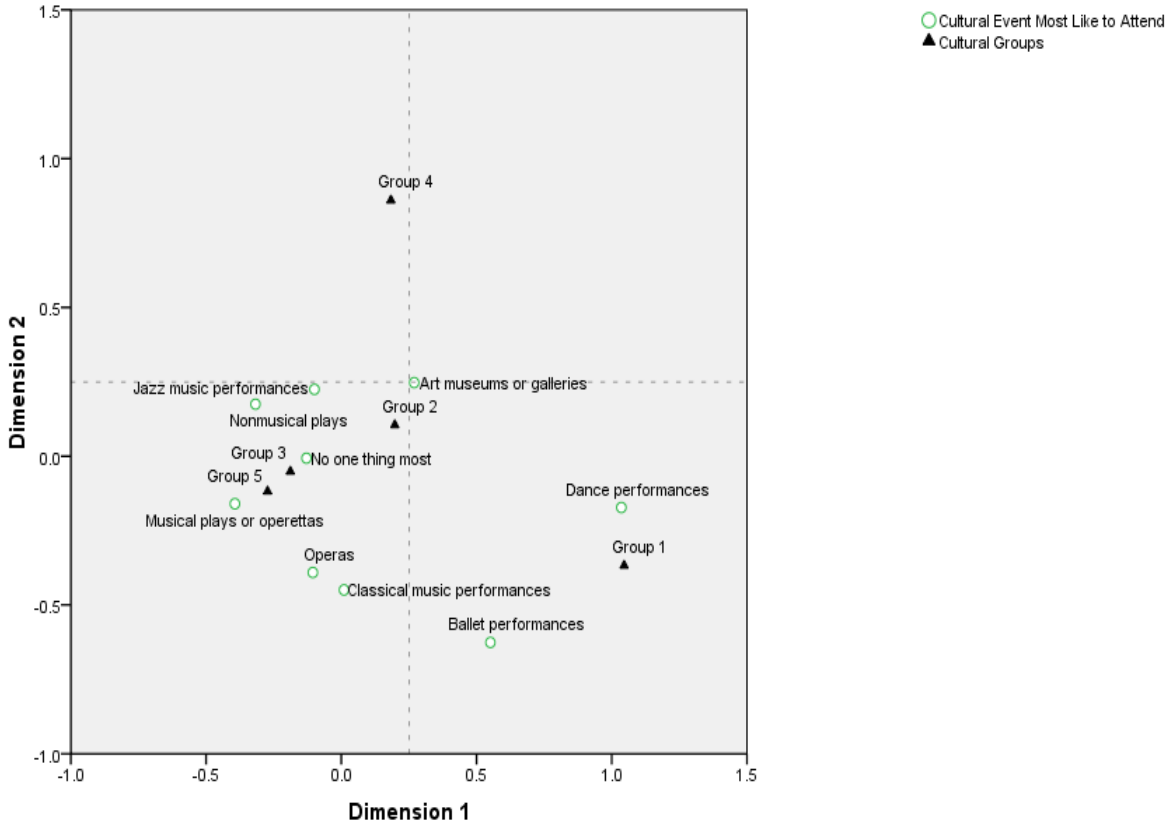
Independent Variable	Importance	Normalized Importance
Educational Attainment	.904	100.0%
Occupation	.384	42.5%
Father Educ.	.223	24.6%
Income	.219	24.2%
Mother Educ.	.213	23.6%
Hispanic Descent	.125	13.8%
Age	.117	13.0%
Marital status	.069	7.6%
Race	.024	2.6%
Region	.021	2.4%

In sum, CART analysis presents an efficient way of classifying a population based upon a series of categorical variables. Because this procedure creates relatively homogeneous subgroups in a population, CART presents an opportunity to address contemporary taste patterns by uncovering groups of people who share similar tastes.

Correspondence Analysis

Correspondence analysis is a technique used to represent categorical data graphically in low dimensional space. Like factor analysis and CART analysis, one of the aims of correspondence analysis is to reduce the amount of data. The former accomplishes this by producing latent factors that explain covariation within observed variables. Correspondence analysis accomplishes this by representing information from large contingency tables as points on a grid. Points positioned similarly on a grid can be assumed to speak to a single phenomenon. Figure 3.7 is an example of a visual display produced by correspondence analysis.

Figure 3.6
Correspondence Analysis of Cultural Groups and the Cultural Events They Would Most Like to Attend



Looking at the display above, we see that triangles represent groups and circles represent cultural activities. Without having any knowledge of how to interpret this grid, we can see that Groups 3 and 5 are strongly associated (i.e. they are near each other on the grid) and that these two groups appear to be associated with numerous types of cultural activities. Groups 1 and 4 are farther away in social space, with Group 1 having some association with dance and ballet, with Group 4 having no association with any cultural activity. It is these types of interpretations that make

correspondence analysis a good tool for research on taste patterns – especially when questions of symbolic and social exclusion need to be addressed.

While not used particularly often in cultural consumption studies, correspondence analysis is well known because of its use in Pierre Bourdieu's *Distinction.* Bourdieu used a number of correspondence analyses to describe the social space of French society (for examples, see pages 114, 129, and 266 in *Distinction*). In these analyses, economic and cultural capitals are always an inverse of each other, and are depicted as one horizontal dimension in his analysis. This dimension separates economic oriented occupations from culturally or educationally oriented occupations. Overlaying this dimension is a vertical dimension of social capital, or dimension of power. This vertical dimension separates the dominant classes from the dominated classes. Thus, the "social space" of French society is represented on a two-dimensional grid.

Sociological use of correspondence analysis has followed in the tradition of Bourdieu. Coulangeon and Lemel (2007) used correspondence analysis to reassess Bourdieu's work in the light of contemporary France, and argue that while social groups continue to look for distinction, these groups are not based upon discrete classes as Bourdieu assumed. As discussed in Chapter 1, our understanding of omnivorousness has grown from a linear phenomenon to one in which certain groups possess discrete levels of omnivorousness. Sonnet (2004) applied correspondence analysis to describe the relationship between these categories of omnivorousness and the liking of specific music genres. Similar to Bourdieu, Sintas and Alvarez constructed a Spanish "performing arts space" (2004: 474) composed of social class and types of arts attendance. Although sociologists of culture have used correspondence analysis, this technique is most

commonly used in marketing studies to draw relationships between sociodemographic variables and consumer preferences (for example, see: Torres and Bijmolt 2009).

In order to explain correspondence analysis' applicability to the current research, I discuss how the graphic display from Figure 3.7 is derived. The data for this graphical display comes from the 2002 Survey of Public Participation in the Arts and is presented in Table 3.2 below. Cultural groups derived from the preceding section on CART analysis are placed in a contingency table along with the cultural events those groups reported they would most like to attend.

Table 3.3
Contingency Table for
Cultural Events Most Like to Attend by Cultural Groupings

Cultural Event Most Like to Attend	Cultural Groups					
	Group 1	Group 2	Group 3	Group 4	Group 5	Active Margin
Jazz music performances	102	394	429	122	537	1584
Classical music performances	94	241	265	44	377	1021
Operas	21	51	72	12	88	244
Musical plays or operettas	77	494	482	78	717	1848
Nonmusical plays	50	228	289	73	356	996
Ballet performances	33	60	67	9	68	237
Dance performances	94	192	121	37	150	594
Art museums or galleries	204	685	540	180	729	2338
No one thing most	83	311	326	78	447	1245
Active Margin	758	2656	2591	633	3469	10107

Correspondence analysis is most effective when assessing large tables. Although the table I present here is not particularly large, the strengths of correspondence analysis can still be demonstrated.

Correspondence analysis is done in three steps. First, profiles are computed from the frequencies in each cell. These profiles are relative distributions of row frequencies and column frequencies. These profiles are then plotted in three-dimensional space. Finally, factors are extracted. The graphical display commonly seen is a plot of profiles on two or more factors (called dimensions).

Understanding how profiles are computed provides insight into the logic of correspondence analysis. I focus on only rows in this discussion. However both rows and columns are used in calculations and in the production of the graphical display. In Table 3.4 below are the row profiles for each cell. These row profiles are relative frequency distributions, such that in Table 3.4 the total cell count is divided by the total row count (e.g. Row 1, "Jazz Music Performances" is 102/1584 = .064).

Table 3.4

Row Profiles for

Cultural Events Most Like to Attend by Cultural Groupings

	Cultural Groups					
Cultural Event Most Like to Attend	Group 1	Group 2	Group 3	Group 4	Group 5	Total
Jazz music performances	.064	.249	.271	.077	.339	1.00
Classical music performances	.092	.236	.260	.043	.369	1.00
Operas	.086	.209	.295	.049	.361	1.00
Musical plays or operettas	.042	.267	.261	.042	.388	1.00
Nonmusical plays	.050	.229	.290	.073	.357	1.00
Ballet performances	.139	.253	.283	.038	.287	1.00
Dance performances	.158	.323	.204	.062	.253	1.00
Art museums or galleries	.087	.293	.231	.077	.312	1.00
No one thing most	.067	.250	.262	.063	.359	1.00
Average Row Profile	.087	.257	.262	.058	.336	1.00

Once profiles are computed for each cell, an average row profile is computed. Average row profiles are the average of all the profiles for each column (not row). This average row profile acts as a center point, and is the origin of the axes when profiles are plotted. Next, distances between row points (e.g. the distance between jazz music performance and classical music) are computed. This distance is computed using the formula:

$$d(i,i') = \sqrt{(\sum(a_{ij} - a_{i'j})^2/a_{.j}}$$

Where a_{ij} and $a_{i'j}$ are the row profiles under consideration and $a_{.j}$ is the average row profile. Thus calculating the distance between jazz music performance and classical music:

$$\sqrt{(.064 - .092)^2/(.087) + (.249 - .236)2/.257 + (.271 - .260)2/.262 + (.077 - .043)2/.058 + (.339 - .369)2/.336}$$

and:

$$= \sqrt{.0334} = .183$$

From this calculation, we can see that respondents from different cultural groups will be farther away in distance from other cultural groups based upon the frequency of responses to different cultural items. Also, we can see that this distance is a weighted distance, such that row elements with greater average profiles (e.g. the denominator) contribute less to the overall distance between points. This means that rows with relatively low frequencies can produce wide distances between points. Given one's theoretical underpinnings, this can be a positive or negative, and it is up to the researcher to recognize the effect of low frequencies. In our current

example, the lowest row profile is under the column heading of Group 4. Looking at the graphical display we see that Group 4 is not associated with any other groups or cultural items. This is logical, as the chi-square distances between this group and others would be relatively large due to its small average profile. Theoretically, this poses no problems, as a central concept in cultural studies would be that of symbolic or social exclusion. Thus, this distance from other points is revealing, and can be interpreted as a measure of social distance and social exclusion. One final note about these calculations: distances between row categories and column categories are calculated, but not distances between rows *and* columns. Thus, it is only justifiable to argue that cultural groups (columns) are farther or nearer in distance, and that cultural events (rows) are farther or nearer in distance. We can say that row elements and column elements are "associated", but social distance is only between rows or between columns.

Using derivations that are beyond the scope of this chapter, correspondence analysis takes the row profiles, distances between rows, column profiles, and distances between columns to derive several orthogonal factors, which form the axis on the graphical display seen in Figure 3.7). Row elements and column elements that are closer together in mathematical distance, using the formula above, ultimately are closer together visually.

Considering that the categories created by CART are derived from several independent variables and these categories are placed on a low dimensional map where numerous relationships can be assessed, the combination of CART and correspondence analysis presents a powerful technique for explaining large amounts of data parsimoniously. Further, phenomena can be placed within the context of the entire measured system – data can be explained relationally.

To make this clear, let's return to the graphical display, figure 3.7. Remember from the previous discussion and example from CART analysis that Group 5 is composed of respondents who have educational attainments greater than a high school diploma and who have mothers who also have educational attainments greater than a high school diploma. We can look at the graphical display and say that Group 5 (composed of the aforementioned respondents) is (1) closer in social distance to Group 3 than any other social groups, and (2) people who compose this group are associated with musical plays or operettas, "no one thing the most", and nonmusical plays. A case can be made that group 3 and 5, by nature of their close proximity on the grid, are in a position to form shared symbolic boundaries. Conversely, group 4, due to its distance from the other groups and from any cultural activity, is in a position of potential social exclusion.

In sum, correspondence analysis is a powerful descriptive tool for the analysis of cultural patterns. Like CART, its strength lies in the manipulation of categorical data. I have shown that correspondence analysis becomes even more useful when paired with CART. The former provides additional information about the homogenous groups uncovered by the latter. Further, as Bourdieu so famously showed, by placing cultural groups on a visual grid, conjectures can be made as to the social or symbolic exclusion of groups in society.

Summary

This chapter has described three analytic strategies that can address questions regarding macro-level taste patterns. These strategies are factor analysis, classification and regression tree analysis (CART), and correspondence analysis. These strategies reduce data to its most essential

elements and then by presenting these elements relationally, a taste structure can be developed. Used together, these strategies allow the researcher an opportunity to construct a taste structure, or describe a taste stratification system.

I employ these strategies whenever appropriate in the upcoming chapters. In the ideal case, they will work in this manner: (1) Factor analysis is used to reduce the number of dependent variables by finding underlying values in music and technology. These values are then turned into scales. (2) The independent variables as predicted by Marxian, Weberian, and omnivorous perspectives are used in CART analysis to identify homogeneous subgroups of musical choice and technology usage. This second step will answer the primary question ordering this research: What are the cultural patterns in the US? (3) Correspondence analysis is then used to provide descriptive information about these subgroups.

Chapter 4

Music Consumption

In chapter 1 I stated that, on the one hand, taste patterns in the United States appear extremely complex, while on the other hand, the fact that we can still associate certain tastes or cultural objects with specific groups speaks to some type of order. These two statements are not, necessarily, in contradiction. There can be order in things that are very complex. This chapter is aimed at detecting this order through an analysis of musical tastes.

Method

This analysis is conducted in several stages. First, a factor analysis is done to judge the degree to which musical preferences are similar. Musical preferences that covary are assumed to be influenced by a common underlying variable, or factor. Second, the factors extracted are predicted from sociodemographic variables using Classification and Regression Tree (CART) analysis.

Data

The data used in this research is taken from the 2002 Survey of Public Participation in the Arts (SPPA) sponsored by the National Endowment for the Arts (NEA) in Washington, DC. A total of 17,135 completed surveys were collected from a representative sample of U.S. households. The sample was selected using a stratified, multi-stage, clustered design and drawn from Census Bureau population counts. The survey had an overall response rate of 70 percent. The 2002 SPPA consisted of more than 90 percent telephone and less than 10 percent face-to-face

interviews conducted during the period of August 18-24, 2002. The survey was appended to the Current Population Survey (CPS), conducted by the Census Bureau of that year. The SPPA asks questions about leisure activities and arts participation, while the CPS asks demographic and economic questions.[9] The SPPA portion of the survey is used for purposes of measuring musical likes, while the CPS portion of the survey is used for measuring sociodemographics. All variables were weighted using the weight supplied by the SPPA.

Independent Variables

The variables are income, occupation, respondents' education, race, ethnicity (Hispanic/non-Hispanic), gender, metropolitan status, and age. Descriptive statistics for these categorical independent variables are provided in Table 4.1.[10]

[9] The questionnaire and data can be found at: http://www.cpanda.org/cpanda/getDDIsummary.xq?studyID=a00080

[10] Not shown in Table 4.1 are the descriptive statistics for income – the only continuous measure. Min = 0, Max = 14, mean = 8.8, SD = 4.7. Variable Labels = 0 - $0, 1 - Less than $5,000, 2 - 5,000 to 7,499, 3 - 7,500 to 9,999, 4 - 10,000 to 12,499, 5 - 12,500 to 14,999, 6 - 15,000 to 19,999, 7 - 20,000 to 24,999, 8 - 25,000 to 29,999, 9 - 30,000 to 34,999, 10 - 35,000 to 39,999, 11 - 40,000 to 49,999, 12 - 50,000 to 59,999, 13 - 50,000 to 59,999, 14 - 75,000 or more.

Table 4.1
Frequency Statistics for Music Consumption Independent Variables

Variable	Pct.
Race	
European-American	84.5
African-American	11
Asian-American	3.7
American-Indian	0.8
Total N	17135
Ethnicity	
Non-Hispanic	91.4
Hispanic	8.6
Total N	17135
Metropolitan Status	
Central-City	74.3
Balance	25.3
Non-Metropolitan	.4
Total N	17135
Gender	
Female	54.0
Male	46.0
Total N	17135
Age	
18 – 24	9.8
25 – 34	17.9
35 – 44	21.4
45 – 54	19.2
55 – 64	13.2
65 – 74	9.9
75 – 80	8.7
Total N	17135

Variable	Pct.
Occupation	
Professional Specialty	16.2
Executive, Admin, Managerial	15.0
Admin. Support, incl. clerical	13.6
Sales	11.9
Service (exc. protective and household)	11.2
Precision products, craft and repair	10.6
Machine operators, assemblers and inspectors	5.0
Transportation and material moving	4.1
Handlers, equipment cleaners, helpers, laborers	3.7
Technicians and related support	3.4
Farming, forestry and fishing	2.8
Protective service	2.1
Private household	.5
Total N	17135
Marital Status	
Married	56.4
Never Married	22.5
Divorced	10.8
Widowed	7.7
Separated	2.6
Total N	17135
Region	
South	37.2
Midwest	23.1
West	22.3
Northwest	17.4
Total	17135
Education	
Less than High School	15.6
High School Diploma	31.2
Some College	19.2
Associate's Degree	8.2
Bachelor's Degree	17.4
Post Bachelor's	8.4
Total	17135

Dependent Variables

The dependent variable used for this analysis is a respondent's musical preferences, as measured through the following:

"The following is a list of some types of music. Which of these types of music do/does [fill HESHE] like to listen to? Please select one or more of the following categories…"

Frequency statistics for these variables are in Table 4.2:

Table 4.2
Univariate Statistics for Music Genres
% of Respondents Who Reported Liking Genre

Music Genre	Pct.	Music Genre	Pct.
Rock	48.1	Operetta	16.8
Country and Western	41.6	Dance	16.8
Blues	29.5	Rap	16.2
Mood/Easy Listening	29.4	Reggae	15.3
Gospel/Hymns	28.1	Folk	14.9
Classical	27.5	New Age	12.2
Jazz	27.2	Parade	12.0
Big Band	23.8	Opera	10.3
Heavy Metal	22.8	Choral/Glee Club	9.6
Blue Grass	20.5		
Latin	19.7	Total N	17135
Ethnic	17.1		

Factor Analysis and the Delineation of Musical Identities

Initially, the factorability of the 21 music genres was assessed using several criteria. The Kaiser-Meyer-Olkin measure of sampling adequacy was .948, above the recommended value of .50. Also, Bartlett's test of sphericity was significant, ($X2$ (210) = 123561.85, $p < .05$). Given these two statistics, factor analysis is appropriate for this battery of questions. A principal components analysis with varimax rotation was run on the twenty-one music genres shown in Table 4.2.

Four factors were extracted. These four factors had eigenvalues over one. These four factors together explain 54% of the total variance in the all of the observed variables. Factor analysis statistics are shown in Table 4.3. Two variables loaded high on more than one factor. "Big Band" loaded high on factors 1 and 2. "Latin" and "New Age" loaded high on factors 1 and 3. As per discussions in Chapter 3, I will allow these variables to load on both factors.

Table 4.3
Factor Analysis Statistics

Factor	Eigenvalue	Corresponding Variables and Factor Loadings (in parentheses)	Cronbach's Alpha	Identity
Factor 1	7.587	Choral/Glee Club (.722) Opera (.693) Operetta (.675) Ethnic (.603) Classical (.585) Folk (.572) Gospel (.528) Big Band (.526) Latin (.491) New Age (.431)	.871	Cosmopolitan
Factor 2	1.460	Jazz (.655) Blues (.654) Rock (.643) Mood/Easy Listening (.496) Big Band (.475)	.738	Adult
Factor 3	1.195	Rap (.770) Heavy Metal (.695) Reggae (.591) New Age (.490) Dance (.473) Latin (.416)	.766	Youth
Factor 4	1.028	Country Western (.816) Bluegrass (.515)	Sig. at .000 level	Country

I will label the four factors extracted *identities*. I use the term identity in a particular manner, which I will discuss below. For now, an explanation of the label given to each factor/identity is in order.

Factor 1 explains the most variation in musical tastes with an eigenvalue over seven. Of all the factors extracted, this factor is most synonymous with traditional notions of highbrow or

elite culture because all of the music genres traditionally associated with high culture – opera, operetta, and classical – are located within this factor. This factor is clearly not an exclusive factor however, and is composed of many genres. Because of the large number of genres associated with this factor, I label this factor cosmopolitan. Factor 2, or "adult", appears to be composed of music most often consumed by older listeners while factor 3, or "youth" is composed of music consumed by relatively younger listeners.[11] Finally, the fourth factor, country, is named for its most noticeable component.

On the Use of Identity

The factor analysis above reduces the 21 genres into four factors. But these factors should not be understood as some type of meta-genre or as measuring some type of general musical form. Instead they are best understood as representing *underlying social tastes that lead a person to choose certain types of genres from a given musical array*.

There is theoretical utility in viewing the factors extracted as measuring social tastes. Understanding that the extracted factors correspond to underlying values makes it easier to comprehend changes in the demographics of who consumes what genre. The musical conventions in a genre may remain relatively constant, however the values associated with a particular genre may change and thus come to be associated with different identities. We see this with the adoption of ethnic or Latin music by elites who a generation ago would have at the very least ignored and possibly even shunned this genre. Surely the musical conventions that define

[11] This is confirmed quantitatively. The mean scores for the adult scale increase with age until ages 45 – 54, (mean of 1.87), at which time they decline. The mean scores for youth scale peak with the 18 – 24 age group (mean of 1.68), and decline with age.

Latin music as a specific genre have not changed drastically in the last thirty years. What is more likely is that changes in how this genre is marketed, combined with changes in the legitimate values in American society have made this music more palatable to elites.

Finally, viewing the extracted factors as tastes will allow me to import this explanatory model to other areas of cultural consumption. As Gans, Bourdieu, and Katz-Gerro have argued, the same tastes that order the selection of one cultural product can also order the selection of other cultural choices.

CART Analysis

A reliability analysis was done on each set of variables that loaded onto factors 1, 2, and 3. Because only two variables loaded highly onto Factor 4, the correlation between these two variables was assessed. The reliability analysis, measured through cronbach's alpha score, gives a quantitative assessment of whether or not the variables used in the analysis are sufficiently intercorrelated and thus can be combined together to form one scale. An alpha score of .7 or higher suggests that the variables used in the analysis can be combined into a reliable scale. The alpha scores for factors 1, 2, and 3 were high – all above .70. Further, the correlation between country western and bluegrass was significant, suggesting that these two variables can be combined into a reliable scale. Consequently, the variables that loaded onto each factor were turned into a scale. The cosmopolitan scale ranges from 0 – 11, with a mean of 1.92 and a standard deviation of 2.72. The adult scale ranges from 0 – 5, with a mean of 1.58 and a standard deviation of 1.6. The youth scale ranges from 0 – 6, with a mean of 1.03 and a standard

deviation of 7.44. The country scale ranges from 0 – 2, with a mean of 0.62 and a standard deviation of 0.74. Table 4.3 presents means for select groups on each identity scale.

Table 4.4
Means of Select Variables for Identity Scales

	Cosmopolitan	Adult	Youth	Country
Race				
European-American	1.96	1.60	1.03	.68
African-American	1.68	1.55	1.08	.26
American-Indian	2.07	1.44	1.19	.69
Asian-American	1.72	1.16	.81	.28
Ethnicity				
Hispanic	1.90	.97	1.35	.33
Non-Hispanic	1.92	1.66	.99	.66
Education				
Less than High School	1.30	.80	.78	.53
High School Diploma	1.50	1.36	.89	.65
Some College	2.14	1.82	1.21	.65
Associate's Degree	2.02	1.84	1.15	.68
Bachelor's Degree	2.39	2.0	1.18	.58
Post-Baccalaureate	3.04	2.14	1.16	.63
Gender				
Males	1.67	1.49	1.01	.62
Females	2.13	1.65	1.05	.62
Age				
18 – 24	1.33	1.16	1.68	.46
25 – 34	1.74	1.54	1.46	.58
35 – 44	1.82	1.71	1.10	.60
45 – 54	2.09	1.87	.92	.67
55 – 64	2.24	1.70	.67	.77
65 – 74	2.29	1.46	.48	.71
75 – 80	2.10	1.20	.42	.52

Next, each musical identity is predicted using CART analysis. The rules used for developing the tree were: (1) minimum improvement score required for a split is .001, (2) minimum N for a parent node is 1700, and (3) the minimum N for a child node is 850. Each CART analysis is discussed briefly below. Because of the size of some trees, they cannot be shown, and are placed in an Appendix. Instead, I present a table showing each group derived from the analysis and their associated mean on the dependent variable. CART analysis also produces a table of normalized variable importance for each tree. This table shows all of the independent variables that could have been shown on the tree, and their relative importance in splitting (i.e. reducing impurity and creating homogenous subgroups). Potentially, more variables could have been incorporated in splitting but are not shown either because the tree was pruned or because other independent variables were slightly more important. Normalized importance tables will be shown for each tree, and discussed when appropriate.

Cosmopolitan

The CART analysis for the cosmopolitan identity produced eight homogenous groupings (Table 4.4). Generally, we see that respondents with educations greater than HS, people over the age of 45, people working in symbolic, white-collar occupations, and people living in non-southern regions of the country tend to be more cosmopolitan. The more a grouping fits these characteristics, the more cosmopolitan that group tends to be. Consequently, node 16, which possesses all of the aforementioned characteristics, has the highest mean score of 3.1. Conversely, node 3, composed of the young and the less educated, scores the lowest at 1.2.

The table of splitting importance, 4.5, quantifies the differences between predictor variables. Two columns are shown. First, a column of absolute importance is presented – the total reduction of impurity for each variable. Second, a column of normalized importance is shown. This column places the variable with the highest total reduction of impurity at 100%. Less important variables are given percentages vis-à-vis this most important variable. Thus, in Table 4.5, occupation is given a normalized importance score of 56%, because occupation's total importance (.153) is 56% of the most important variable education (.273).

Potentially, more variables could have been incorporated in splitting. This table of normalized importance shows all of the independent variables that could have potentially influenced splitting. While the tree itself is most important, the normalized importance table is a valuable summary of the variables that matter the most in the analysis. Variables that score higher on normalized importance may not be present in the description of nodes. If two predictor variables are correlated – for example education and income – then the variable with the greatest ability to reduce impurity will be selected by cart. Thus, if education is the most effective at reducing impurity and income is correlated with education, then potential splits caused by income will not be shown in the CART analysis, as groups split by education are also split by income. Conversely, a variable that scores low on normalized importance may appear as a predictor of homogenous nodes. This is because this variable may produce splits (i.e. reduce impurity) among one specific set of respondents. Thus, region is not as important overall as income, yet it produces a split within the specific grouping of highly educated respondents over the age of 45, working in symbolic occupations.

The three most important variables are education, occupation, and age. Of these three, education is by far the most important. While income is slightly more important than region in importance, it is likely that income is absorbed by education and occupation – two variables that are correlated with income, but reduced impurity (creates more homogeneity in respondents) more.

Table 4.5
Classification Tree Summary for Cosmopolitan Identity
(mean = 1.93)

Node – Characteristics	N	Percent	Mean
16 – Education greater than HS, Age over 45, Occupations mainly symbolic, living in non-southern regions	1796	11.6%	3.10
15 – Education greater than HS, Age over 45,Occupations mainly symbolic, living in southern regions	1028	6.7%	2.51
14 – Education greater than HS, Age under 45, Occupations mainly symbolic, Mother's Education greater than HS	1540	10.0%	2.48
11 - Education greater than HS, Age over 45, Occupations mainly manual	961	6.2%	2.13
13 - Education greater than HS, Age under 45, Occupations mainly symbolic, Mother's Education HS	910	5.9%	2.02
7 – Education HS, Age over 45	2466	16.0%	1.83
10 - Education greater than HS, Age under 45, Occupations mainly manual	2025	13.1%	1.78
8 – Education HS or less, Age over 45	1320	8.6%	1.41
3 – Education HS or less, Age under 45	3391	22.0%	1.17

Table 4.6 Independent Variable Importance for Cosmopolitan Identity		
Independent Variable	Importance	Normalized Importance
Education	.273	100.0%
Occupation	.153	56.0%
Age	.095	34.7%
Income	.026	9.7%
Region	.023	8.4%
Mother Education	.023	8.4%
Marital Status	.019	7.1%
Father Education	.016	5.9%
Race	.009	3.4%
Hispanic Descent	.006	2.3%

Adult

The adult identity, like the cosmopolitan identity, is strongly influenced by the education of the respondent. Respondents who have an education greater than HS – nodes 1, 11, 12, and 5 – tend to score higher on the adult identity. Within the higher educated groups, age is important in splitting. The ends of the age distribution – the very young and the very old – are not as associated with the adult identity, even if they have a post-secondary education. The groups that have a HS education or less – 3, 7, and 8 – score lower on the adult identity. One of these groups, group 4, is the largest in terms of N. The final two group, 7 and 8, composed of respondents with less than HS educations, are further demarcated by region. Within these two groups, respondents who are living in the south and northwest score higher on the adult identity than respondents living in the Midwest and West.

The table of normalized importance for the adult identity, 4.7, is complex compared to the cosmopolitan identity. Like the cosmopolitan identity, education is the most important

variable. However, after education six variables show sizable levels of importance. Most likely, these variables effects on the population are masked by education and/or occupation.[12]

Table 4.7
Classification Tree Summary for Adult Identity
(mean = 1.58)

Node - Characteristics	N	Percent	Mean
10 – Education greater than HS, Age between 75 and 24, Mother's Education greater than HS (but not bachelor's degree)	1381	8.9%	2.40
11- Education greater than HS, Age between 75 and 24, Mother's Education mainly HS or less (and also bachelor's degree), mainly symbolic occupations	4516	29.3%	1.98
12 - Education greater than HS, Age between 75 and 24, Mother's Education mainly HS or less (and also bachelor's degree), mainly manual occupations	1118	7.2%	1.66
5 - Education greater than HS, Age over 75 and below 24	1245	8.1%	1.51
3 – Education HS	4799	31.1%	1.36
7 – Education less than HS, living in the South and Northeast regions	999	6.5%	.95
8 – Education less than HS, living in the Midwest and West	1379	8.9%	.68

[12] I ran another CART analysis sans education and occupation to observe the effects of ethnicity on splitting the population (not shown). A classification tree of adult identity without education or occupation produces a very similar tree with the population broadly separated into those with greater than $35,000 in income and those with less than $35,000. Presumably income fulfills the function of separating the population into those with higher education/symbolic occupations and those with lower education/manual occupations. Further, variables not present in the original tree, ethnicity and father's educational attainment, now appear as splitters.

Table 4.8 Independent Variable Importance for Adult Identity		
Independent Variable	Importance	Normalized Importance
Education	.176	100.0%
Occupation	.072	40.9%
Hispanic Descent	.064	36.3%
Income	.060	34.1%
Age	.055	31.0%
Mother Education	.048	27.0%
Father Education	.037	20.8%
Marital Status	.006	3.5%
Region	.003	1.6%
Race	.001	.4%

Youth

The youth tree summary is presented in table 4.8. In the same manner in which education is the master category that demarcates respondents for cosmopolitan and adult, age separates the population with respect to youth into those below 35 and over 35. Respondents under the age of 54 – especially those under the age of 35, tend to score higher on the youth scale. While age is clearly the most important predictor of the youth identity, marital status and mother's education also matters. If a respondent has no significant other[13], and has a mother with postsecondary education, they tend to be more associated with the youth identity.

[13] One can speculate as to why marital status splits the population in the way that it does. The difference between never married and married can be assumed to be a difference between lifestyle, with the former choosing music associated with dating and clubbing. It is not clear, however, why divorced is lumped with never married, and widowed and separated are lumped with married. It could be that because of the particular circumstances leading to their being single, the values associated with youth music do not resonate with people who are widowed and separated. Thus their level of youth music listening is depressed compared to that of a married respondent.

The table of normalized importance, table 4.9, shows the strong influence that age and marital status has on respondents. Surprisingly, father's and mother's education are the second and third most important splitting variables, more than the education of the respondent.

Table 4.9
Classification Tree Summary for Youth Identity
(mean = 1.03)

Node- Description	N	Percent	Mean
3 – Age less than 35, Marital Status divorced or never married	2672	17.3%	1.71
8 – Age 35 to 54, Mother's education greater than HS	1357	8.8%	1.35
4 – Age less than 35, Marital Status married, widowed, or separated	1956	12.7%	1.32
7 – Age 35 – 54, Mother's education HS or less	4735	30.7%	.91
10 – Age greater than 55, Education mainly greater than HS	1740	11.3%	.70
9 – Age greater than 55, Education mainly HS or less	2977	19.3%	.46

Table 4.10
Independent Variable Importance for
Youth Identity

Independent Variable	Importance	Normalized Importance
Age	.153	100.0%
Marital Status	.088	57.5%
Father Education	.020	13.2%
Mother Education	.017	11.3%
Education	.013	8.5%
Income	.011	7.1%
Occupation	.001	.5%
Hispanic Descent	.000	.3%
Race	.000	.1%

Country

The country identity, table 4.10 is strongly structured by race and ethnicity. European-American and Native-Americans who do not identify as Hispanic are more associated with this identity. This is the only identity with racial and ethnic factors dominating the splitting process. The very young and the very old (under 24 and over 75) are not as associated with this identity. Region is also a factor, with respondents from the Northeast generally scoring lower on this identity than other respondents.

The table of normalized importance, 4.11, reiterates the importance of race and ethnicity (Hispanic descent). Age and region are also important splitting variables.

Table 4.11
Classification Tree Summary for Country Identity
(mean = 0.62)

Node	N	Percent	Mean
9 - Race is European-American or Native American, Ethnicity non-Hispanic, Ages between 24 and 75, Region non-Northeast, Education equal to or lesser than HS	3026	19.6%	.89
10 – Race is European-American or Native American, Ethnicity non-Hispanic, Ages between 24 and 75, Region non-Northeast, Education greater than HS	4693	30.4%	.75
8 - Race is European-American or Native American, Ethnicity non-Hispanic, Ages between 24 and 75, Region Northeast	1530	9.9%	.61
5 - Race is European-American or Native American, Ethnicity non-Hispanic, Ages between under 24 and over 75	2240	14.5%	.57
4 - Race is European-American or Native American, Ethnicity Hispanic	1699	11.0%	.34
2 - Race is Asian-American or African-American	2249	14.6%	.26

Table 4.12 Independent Variable Importance for Country Identity		
Independent Variable	Importance	Normalized Importance
Race	.022	100.0%
Hispanic Descent	.015	65.5%
Age	.005	21.4%
Region	.003	14.5%
Education	.002	10.6%
Father Education	.002	8.9%
Mother Education	.002	7.9%
Occupation	.001	5.6%
Income	.001	2.4%
Marital Status	.000	2.1%

Summarizing the CART Analyses

The beauty of using CART is that by focusing on the trees we can easily survey the forest. The breakdown of musical identities by social groups through classification tree analysis is thus: The young, not surprisingly, are more likely to be associated with the youth identity. The youth identity is also affected by marital status, such that respondents who are single or divorced tend to be associated with this identity. The country identity is associated with non-Hispanic European-Americans living in the Midwest, West, and South. The country and youth identity are not structured by education or occupation. However, both the adult and cosmopolitan identities are strongly affected by education and occupation. Having attended college and being employed in a symbolic occupation is associated with both of these identities These two identities are similar, however education is more important for splitting cosmopolitan than for splitting adult, and age is an important factor for cosmopolitan but not for adult.

There are a few other items of note. These items are of note because they have not appeared in other analyses of taste and music consumption, and reveal the particular capabilities of using CART to classify people based upon musical identities as opposed to genre. First, we see that race matters almost not at all, except for the country identity. This finding at once contradicts and reaffirms stereotypes of musical choice in America. The stereotype of African-Americans possessing musical taste patterns distinct from the rest of the population is brought into question by this finding. At the same time, the domination of the country music identity by racial and ethnic factors reaffirms colloquial understandings of who consumes country. I assert that race becomes less of a factor in explaining taste patterns with respect to music when the focus is less on a genre that is situated within a narrow social context and a general value orientation that is more likely influenced by broader sociodemographic factors. This notion will be explored more below.

A second item of note is the importance of parent's education on taste. Generally, respondents with higher educated parents score higher on *all* identities. This is similar to the overall effect of a respondent's education, and in the case of the youth identity the education of the parent is more of a factor than the education of the actual respondent.

Risk estimates for each respective tree are Cosmopolitan – 7.15, Adult - 2.37, Youth - 2.18, and Country - .510. Calculating the corresponding variance explained, we see that the cosmopolitan tree explains .04% of the variance, adult .07%, youth .07%, and country .08%. This suggests that, while the CART analyses produces homogenous groupings, more variables are needed in future analyses to further understand these phenomena.

The Social Structure of American Musical Taste

In chapter 2, I discussed four musical genres and the values associated with these genres. I asserted that these genres are of such prevalence in the United States that they of all genres should be particularly instructive in explaining contemporary musical taste patterns in the United States. This strategy has been used in prior research to understand the historical progression of musical genres (Lena and Peterson 2008). After factor analysis we see that each genre fits within a distinct identity: classical and opera associated with cosmopolitan, rock with adult, rap with youth, and country with country. After CART analysis, it appears as if the main audiences and social positions of the audiences for each genre fit within a distinct identity. To summarize, I present the original table along with the identity most closely associated with the genre.

Table 4.13
Relationships Between Genre and Identities

Genre	Genre Values	Main Audience	Position	Identity
Classical	Nonreferential and ahistorical music focused on composition.	European-American, Older People.	Upper Class and middle class.	Cosmopolitan
Country and Western	Authenticity, Everyday experiences of Southern and Western rural life.	Rural, European-American.	Middle Class/Working Class.	Country
Rap/Hip-Hop	Youth oriented, sexual bravado, physicality.	Urban, African-American and Hispanic, Inner City, Younger People.	Middle Class/Working Class/Lower Class.	Youth
Rock	Anti-establishment, youth-oriented, hedonistic.	European-American, Suburbia, Younger People.	Middle Class/Working Class.	Adult

The importance of establishing values consonant with each genre can now be explicated. Factor analysis and CART analysis do not reveal anything about the meanings people attribute to the music they consume. However, if the four music genres presented above are exemplars of the abstract identities they correspond to, *we can assume that the values prevalent in these specific genres are synonymous with the values prevalent in the abstract identities.*

The sheer breadth of musical genres associated with the cosmopolitan identity supports the notion that higher educated people tend to be more omnivorous in their tastes. However, despite the number of genres, two major characteristics stand out about this identity. One characteristic is that this identity values music that focuses on the composers and the composition. This stance is in antonymous to the values in popular music, where a singer's personality is valued just as much, if not more, than the music itself. Both Gans (1999) and Frith (1996) have posited this dichotomy between popular music and various types of highbrow music. More importantly, both scholars have posited that this dichotomy runs along similar sociodemographic lines as shown by the present CART analysis. A second characteristic is that possessors of the cosmopolitan identity prefer music that is not connected with their everyday experiences. Bourdieu's notion that a distance from necessity in one's life corresponds to a taste for culture that is removed from everyday life is instructive here:

> "The pure gaze implies a break with the ordinary attitude towards the world…a systematic refusal of all that is 'human'…the passions, emotions and feelings with *ordinary*[emphasis in original] people put into their *ordinary*[emphasis in original] existence" (Bourdieu 1984: 31 – 32).

Classical music is the exemplary genre for this identity, and as such embodies some of the values consonant with this identity. One of the aims of classical music's is "its provision of a transcendent experience" (Frith 1996: 39). Its focus on composition means that "the musical mind is thus elevated over the musical body" (Frith 1996: 227). The prevalence of Latin and ethnic music also fits this characteristic, as these genres refer to contexts and cultures that are not a part of this group's everyday experiences.

The identity of country music is for all intents and purposes synonymous with the specific genre of country music. Initially, I associated country music with the working class (see Table 4.9 above). However, CART analysis does not support this assertion. It appears as if this association to working class values is mostly a symbolic one. Country music is not differentiated by class (or more accurately, class is not a more effective classifier than race, region, and ethnicity).

The current research supports prior literature that suggests that country music is characterized by its ability to *appear authentic* (Peterson 1997, Pecknold 2007). In this context, authentic means the ability to believably ground one's performance in the southern and western agrarian traditions from which this genre originated. There is some validity to the stereotype of the country music song being about trucks and beer and hard times. These tropes allow the artist – who may have no relation to the lifestyle herself - to tether herself to the rural, lower and working class traditions that helped establish this music. These tropes, combined with the singers' ability to believably take on recognizable affectations such as a country drawl and small town ease, allow for authenticity to be knowingly "fabricated" (Peterson 1997).

These themes – especially those of class and region – have become so synonymous with country music that the music itself has become a (the) symbol for a relatively circumscribed segment of the US population. Country music listeners are, at least symbolically, from the "red states". In her history of the country music industry Diane Pecknold (2007) in *The Selling Sound* discusses how Richard Nixon focused his campaign efforts on blue-collar workers and Southern whites: "He [Nixon] invited Johnny Cash and Merle Haggard to the White House to perform and…issued a national proclamation designating October as Country Music Month." The

themes in country music work well for political campaigns, because they relate so closely to the real or imagined beliefs in individualism, hard work, and the American dream. Both John Edwards, the democratic presidential candidate from North Carolina, and Republican presidential nominee John McCain used John Mellencamps's song "Our Country" as their official campaign song[14]:

The dream is still alive
Some day it will come true
And this country it belongs
To *folks* like me and you
So let the voice of freedom
Sing out through this land
This is our country

From the east coast
To the west coast
Down the *Dixie Highway*
Back home
This is our country

The use of the words "folks", "Dixie Highway" and "back home" speak for the values inherent in country music, and to the values that represent the country identity.

The identity of youth is, as per its namesake, characterized by interests and desires of the young. Initially, I asserted that rap is the exemplary genre for this identity, and the themes that undergird most of rap music – sexual bravado, violence, and descriptions of party scenes – can be used to describe the youth identity. Heavy metal is also a popular genre associated with this identity, and shares many of the common themes of sexual bravado and physicality "These

[14] With the geographic references "from the east coast to the west coast" and the use of the inclusive "our country" combined with the theme of patriotism the song is tailor made for political rallies. After John Edwards dropped his campaign, John McCain immediately adopted the song.

[heavy metal] acts usually align themselves with their audience on the levels of sexuality, power, and aggression, manifesting a brute force…" (Gehr in Cateforis 2007: 214 – 215). Heavy metal and rap also share the trait of being openly disliked by many high status people (Bryson 1996).

While these genres converge upon the interests and desires of the young, they deviate most notably with respect to the specific contexts upon which these themes are played out. In particular, rap music is generated by and reproduces a specific territory, the urban inner city:

> "Although the production of North America's major rap recordings is conducted exclusively in its larger urban centers and the city remains the dominant conceptual space in the music's thematic content, a complex special reciprocity is involved; rather than rap's being influenced by the city in a one-way flow of influence…it has actually had a profound sensual impact on the urban environment. Hip-hop has evolved into an unavoidable fact of the contemporary city, and rap's pervasiveness has radically altered the character of urban soundscapes…" (Forman 2002: 71).

Other genres associated with this identity also help explain this identity. Latin music, a genre that is as much about a culture as it is about lyrics and instruments, is also associated with the cosmopolitan identity. Although it cannot be determined from the survey data used, it may be that Hispanic youths are interpreting the broad genre Latin to include music by Hispanic artists that incorporate the same themes as rap or heavy metal.[15] Finally, dance music, played in clubs, is clearly a music associated with youth.

The adult identity is the most complex identity due to the disparate genres associated with is. While more genres are associated with the cosmopolitan identity, it appears as if the adult identity is associated with genres that are more difficult to relate to each other. Rock, blues, jazz,

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[15] One type of Latin music that has grown exponentially over the last five years is reggaetón. This music is a hybrid of latino, carribean, and rap music (http://www.usatoday.com/life/music/news/2005-08-04-reggaeton_x.htm) (Accessed January 2, 2009).

and easy listening genres are all associated with the adult identity. There are general themes, however, that separate the adult identity from other identities. Adult music is distinct from cosmopolitan because most of the genres make reference to everyday instances of life. Love – as opposed to sex in youth music – is probably the most prevalent theme. However, songs about work problems and family issues are also important aspects of these genres. In contradistinction to country, a distinct regional or cultural bias is non-existent. British, African-American, and Hispanic artists who conform to the underlying values of the identity are welcome. Indeed, one of the more popular acts in recent years is British singer James Blunt. The willowy singer with his quixotic, romantic as opposed to sexual, lyrics fit snugly within the adult identity. The singer achieved a number one hit in 2006 with "Your Beautiful":

My life is brilliant.
My love is pure.
I saw an angel.
Of that I'm sure.
She smiled at me on the subway.
She was with another man.
But I won't lose no sleep on that,
'Cause I've got a plan.

You're beautiful. You're beautiful.
You're beautiful, it's true.
I saw your face in a crowded place,
And I don't know what to do,
'Cause I'll never be with you.

Class differences also matter with the adult identity, as higher education and white collar, symbolic occupations predict having this identity.

Rock is the exemplary genre associated with this identity. It is possible that the listeners of this adult music have simply graduated from their "youth" identities to an "adult" identity and

a milder form of rock (notice in the factor analyses that the more musically aggressive variant of rock, or heavy metal, is in the youth category). Given the average ages of these adult listeners, one can imagine that in their teens, in the 80's, an artist such as Bruce Springsteen would have exhibited the values and aesthetics that would appeal to this group:

> "Worn jeans, singlets, a head band to keep hair from his eyes – these are working clothes and it is an important part of Springsteen's appeal that we do see him, as an entertainer, working for his living. His popularity is based on his live shows and, more particularly, on their spectacular energy: Springsteen works *hard* [emphasis in the original], and his exhaustion – on our behalf – is visible. He makes music physically, as a *manual* [emphasis in the original] worker. His clothes are straightforwardly practical, sensible (like sports people's clothes)—comfortable jeans (worn in) for easy movement, a singlet to let the sweat flow free, the mechanic's cloth to wipe his brow." (Frith in Cateforis, 2007: 249).

Summary

This chapter was dedicated to understanding the underlying order of American musical taste patterns. Through factor analysis, four musical identities were identified. The next chapter will be devoted to understanding American technology taste patterns.

Chapter 5

Technology Consumption

There are at least two ways to understand technology as a dimension of contemporary cultural patterns. One way is through the physical acquisition of technology – what social groups are buying what items. Another way is through the subjective perceptions and attitudes that groups have towards types of technology. In this chapter I focus on the attitudes that groups have towards technology. Just as I argue there are discernable identities in music, it is possible that there are discernable groups with respect to attitudes to technology.

Method

I will use CART analysis to delineate homogenous sub groupings as I did in the previous chapter. However, unlike the previous chapter on musical tastes, using technology as an indicator of tastes requires more support. The majority of research on technology has been devoted to understanding the differences and implications of differential hardware acquisition. Because of this, the literature on technology as a dimension of taste and consumption is not as well-developed as the literature on musical taste. Thus, while I am ultimately interested in how sociodemographic variables work together (gross effects) to create homogeneous sub groupings, I am also interested in what variables have the greatest influence on attitudes controlling for other variables (net effects). To this end, both CART analysis and standard regression analysis will be used.

Data and Variables

The analyses presented here are based on data from the Pew Research Center's Internet and American Life Project. The project's general mission is to explore the effects of the internet on various aspects of social life. This particular survey, the Annual Gadgets Survey, was conducted from February 15, 2006 – April 10, 2006. This survey asks respondents questions about the type of technology they own, and their attitudes towards these technologies. The total N for the sample was 4100. Weights were used for all analyses.[16]

Independent Variables

Income, measured as an ordinal variable, is on a scale from 1 to 8, with a mean of 4.88 and a standard deviation of 2.21. The Weberian variables are gender with female as the reference group, race/ethnicity (African-American, European-Americans, Hispanic-Americans and Other Americans)[17] with European-American as the reference group, community type (urban, suburban, and rural) with urban as the reference group[18], age (18 – 29, 30 – 49, 50 – 64, 65+) with 30 – 49 as a reference group, marital status (married, live with partner, divorced, separated,

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[16] This weight was supplied in the dataset by the Pew Research center, and is used to compensate for patterns of non-response that could potentially bias results. The weight corrects for this pattern so that the survey sample matches the US population.

[17] The "other" category is composed of Asian-Americans, Native Americans, and individuals who selected "other" on the survey.

[18] Although this variable was not included in the literature review, there is reason to believe that because of the different communication practices of city and rural residents (Simmel 1950) these differences may migrate into ICT.

widowed, never married, and single) with married as the reference group, and education (less than high school, high school diploma, vocational school, some college, college degree, and postgraduate studies), with high school diploma as a reference group. See Table 5.1 for univariate statistics for independent variables.

Table 5.1
Independent Variables for Technology Consumption

Variable	Pct.	Variable	Pct.
Education		**Race/Ethnicity**	
Less than HS	13	White	73
High School Diploma	34	Black	11
Vocational School	3	Hispanic	10
Some College	23	Other	6
College Degree	17	Total N	3932
Post Graduate Degree	10		
Total N	4001	**Community Type**	
		Urban	28
Age		Suburban	53
18-29	20	Rural	19
30-49	39	Total N	4001
50-64	24		
65+	17	**Relationship Status**	
Total N	4001	Married	53
		Living with a partner	6
Gender		Divorced	10
Female	52	Separated	2
Male	48	Widowed	9
Total N	4001	Never Been married	18
		Single	3
Income*		Total N	3954
less than 10,000	9		
10,000 - 20,000	10		
20,000 - 30,000	11		
30,000 - 40,000	13		
40,000 - 50,000	12		
50,000 - 75,000	17		
75,000 - 100,000	13		
100,000 and over	15		
Total N	3192		

*1 - < 10000, 2 – 10000 to under 20000, 3 – 20000 to under 30000, 4 – 30000 to under 40000, 5 – 40000 to under 50000, 6 – 50000 to under 75000, 7 – 75000 to under 10000, 8 – 100000 or more

Dependent Variables

This question was posed to the respondent: "How much, if at all, have communication and information devices improved…" (a) the way you pursue your hobbies or interests, (b) your ability to do your job, (c) your ability to learn new things, (d) your ability to keep in touch with friends and family, (e) your ability to share your ideas and creations with others, (f) your ability to work with others in your community or in groups you belong to." Thus, six questions in total were asked. Respondents could answer "a lot", "some", "only a little" or "not at all" for each question. This question is essentially a battery of questions that tap into several domains of life, from work to entertainment to social networking.

While it is instructive to understand responses to specific variables within all of these domains of life, it may be that these variables are all tapping into the same underlying phenomenon. If this is the case, we could see this statistically by looking at the inter-item correlations between the six variables. If some or all of the variables are correlated they can be collapsed into fewer variables, thus streamlining the analysis without appreciably reducing the amount of explanation. Because the questions posed to the respondent revolved around attitudes about how ICT's improved various aspects of their lives, the best case scenario (i.e. most parsimonious) would be if all six items were correlated enough to justify using one scale.

One way to check for this possibility is by running a reliability analysis on all six items. A reliability analysis produces an alpha (α) score used to assess the degree of inter-item correlation. The reliability analysis for the items above shows that all six items are indeed highly correlated with $\alpha = .812$. An α greater than .80 is considered valid for exploratory research of

this type (Nunnally 1978, Murphy & Davidshofer, 1988). Further, removing any of the variables does not increase the total alpha score, suggesting that using all six variables in one scale produces the best possible measure. Responses were recoded "not at all" = 0, "only a little" = 1, some = "2", "a lot" = 3. These values were then summed. The scale ranges from 0 to 18, with a mean of 11.28.[19]

In chapter 2, I suggested that there are at least two ways in which to frame an understanding of ICT: allowing people to maintain relationships in the absence of propinquity, and allowing people to manage their impressions. I will make an assumption that to the extent that respondents are able to use ICTs to improve their social life by maintaining or growing their social networks or by managing the impressions others have of them, the higher they should score on this scale. This scale is labeled "social improvement".

Analysis

The analysis that follows is done in three steps. First, an overview of the data is given through bivariate statistics. Second, regression models are presented. The regression analysis allows for an understanding of the effects of a variable net of other effects. Finally, the social improvement scale is predicted using CART analysis.

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[19] In the previous chapter I used factor analysis to reduce data. For consistency, a factor analysis with varimax rotation was run on the six items. If more than one factor could be extracted from the analysis, then it is possible that the single scale should be broken down into two or more scales that correspond to the factors extracted. However, a factor analysis of the ICT questions produced only one factor. Thus, the original scale containing all six variables was retained.

Bivariate Statistics of Individual Dependent Variables

A preliminary bivariate analysis, Table 5.2, gives a breakdown of groups by specific dimensions of social improvement. By looking at the sample means in the final row, we can see that overall respondents reported that information and communication devices most improved their ability to keep in touch with friends and family (mean = 2.33) followed by the ability to learn new things (mean = 2.22). These means can be interpreted as being slightly greater than "some improvement". Respondents reported that information and communication devices least improved the way they pursued their hobbies or interests, their ability to share their ideas and creations with others, and their ability to work with others in your community or in groups you belong to. These three had means around 1.58, or "only a little improvement".

Table 5.2
Bivariate Statistics for Categorical Independent Variables and Social Improvement Variables

	Hobbies?	Jobs?	Learning?	Friends /Family?	Ideas?	Groups/ Community
Education						
Less Than HS	1.48	1.34	1.94	2.28	1.57	1.43
High School	1.41	1.55	2.08	2.23	1.42	1.28
Vocational School	1.44	1.52	2.26	2.06	1.24	1.27
Some College	1.76	1.99	2.33	2.40	1.63	1.62
College Degree	1.70	2.21	2.35	2.41	1.70	1.83
Post Graduate	1.71	2.40	2.42	2.46	1.88	2.04
Age						
18 – 29	1.88	1.78	2.36	2.56	1.87	1.74
30 – 49	1.60	2.04	2.29	2.36	1.57	1.62
50 – 64	1.49	1.85	2.19	2.21	1.51	1.48
Over 65	1.25	1.17	1.79	2.10	1.27	1.24
Gender						
Female	1.48	1.87	2.19	2.37	1.55	1.53
Male	1.71	1.87	2.25	2.29	1.62	1.61
Race/Ethnicity						
European-Amer.	1.53	1.84	2.18	2.31	1.51	1.53
African-Amer.	1.79	1.97	2.26	2.37	1.86	1.70
Hispanic-Amer.	1.73	1.93	2.33	2.35	1.74	1.62
Other Amer.	1.85	1.90	2.56	2.52	1.98	1.84
Community Status						
Urban	1.63	1.93	2.23	2.31	1.63	1.65
Suburban	1.61	1.89	2.24	2.36	1.60	1.57
Rural	1.48	1.68	2.14	2.29	1.46	1.44
Relationship Status						
Married	1.56	1.92	2.24	2.32	1.54	1.58
Live with Partner	1.54	1.88	2.20	2.32	1.60	1.43
Divorced	1.45	1.90	2.25	2.29	1.47	1.49
Separated	1.59	1.86	2.01	2.32	1.59	1.53
Widowed	1.31	1.40	1.85	2.07	1.30	1.31
Never Been Married	1.87	1.83	2.34	2.49	1.86	1.74
Single	1.75	1.67	1.93	2.19	1.80	1.59
Total Mean All Grps.	1.59	1.87	2.22	2.33	1.58	1.57

Regression Analysis for Social Improvement Scale

Focusing on the regression analysis presented in Table 5.3, we see that income, education, and age all influence the way in which individuals feel technology has improved their life. These influences run in the same direction, with higher incomes, higher education, and lower ages being associated with higher scores of social improvement. The betas in parenthesis can give an indication of the relative strengths of these predictors within the model. Of these three predictors, education is the strongest, followed by income, and age. African-Americans and Other Americans (those who did not select European-American, Hispanic, or African-American) report significantly higher scores than the reference group of European-Americans. Gender differences, community differences, and differences in relationship status are not significant.

Table 5.3
OLS Regression for Social Improvement Scale
(betas in parentheses)

Variables	Social Improvement Scale
Income	8.935E-6(.106)***
Educational Groups[a]	
Less than HS	.366(.022)
Vocational School	-.318(-.011)
Some College	1.70(.155)***
College Degree	2.0(.168)***
Post Grad	2.93(.200)***
Age Groups[b]	
18 – 29	.820(.073)**
50 – 64	-.663(-.058)**
Over 65	-2.32(-.116)***
Gender[c]	
Male	.211(.022)
Race/Ethnicity[d]	
African-American	1.18(.077)***
Hispanic-American	.407(.027)
Other Americans	1.56(.078)***
Community Status[e]	
Suburban	.114(.012)
Rural	-.070(-.006)
Relationship Status[f]	
Live with Partner	-.293(-.017)
Divorced	.348(.021)
Separated	.068(.002)
Widowed	-.275(-.011)
Never Married	.295(.025)
Single	-.613(-.019)
Constant	9.248***
R-squared	.106
N	2441

Note: *p<=.05, **p<=.01, ***p<=.001

Reference Groups
a. High school, b. 30 – 49, c. Female, d. European-American , e. Urban, f. Married

CART Analysis for Social Improvement

The CART analysis' stopping rules were: (1) minimum tree depth is five layers, (2) minimum parent node N is 200, and (3) minimum child node is 100. The tree produced was crossvalidated. The CART diagram produced (Figure 5.1) is initially split along educational lines. Those with some college and above form one homogenous group on the left side. This is Node 1, and the mean for this group is 12.23, the highest of any terminal node.[20] Those below this level of college attainment are further differentiated on the right side. The rest of the discussion focuses on this right side of the tree.

The first split is with age. This is a major split, separating the population into those above 30 and below 30. The below 30 group, Node 4, has a relatively high mean of 11.56. Moving to the over 30 population, we find a split along racial lines with less than college educated African-Americans forming another homogenous group at Node 6. Moving further down the classification tree, the population continues to be split, first by income (Node 8), and then finally by relationship status (Nodes 9 and 10).

Table 5.4 shows that the most important variable in splitting the population is education. After a drop-off in importance, income, age, and relationship status follow in importance. Table 5.5 shows the homogeneous groupings and their mean scores on the social improvement scale.

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[20] The output also shows a "predicted" number. When variables are continuous, as in the current case, the predicted number is the same as the mean number. In cases where variables are dichotomous, this "predicted" number has more meaning, as this number would be a predicted likelihood of this group falling in a particular category (e.g. "ICT user" or "Not an ICT user").

This table makes clear the social improvement hierarchy as derived through CART analysis. The value of CART analysis is in the construction of these groups. We can assume for analytic purposes that, with respect to attitudes about how ICT has improved everyday life, Nodes 1, 4, and 6 (the first three rows) are the "haves", while Nodes 8, 9, and 10 (the final three rows) are the "have nots". Applying this schema, we see that the "haves" are either educated, young, African-American, or a combination of the three. This collection of groups amounts to the majority of the sample population (73%). While the "have-nots" are those that do not fall into one of these three categories, and account for a smaller proportion of the sample population. One group however, node 8, is the second largest single grouping in the CART analysis. The fact that this group is composed largely of higher income European-Americans, factors usually positively associated with the usage of technology, makes this a finding of note.

Figure 5.1 - CART Analysis for Social Improvement Scale

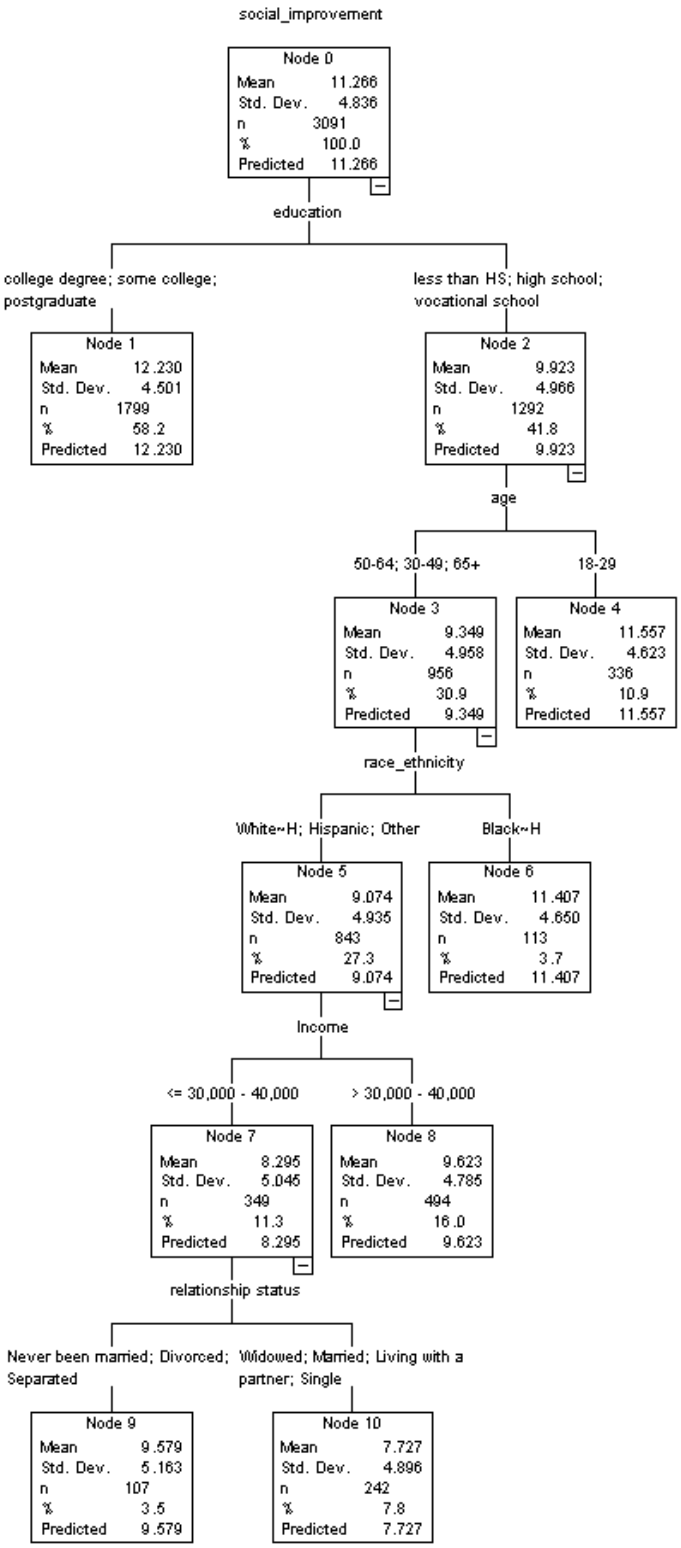

Table 5.4
Independent Variable Importance for Social Improvement

Independent Variable	Importance	Normalized Importance
Education	1.314	100.0%
Income	.789	60.0%
Age	.534	40.7%
Relationship Status	.458	34.9%
Race/ethnicity	.223	17.0%
Community Type	.171	13.0%

Table 5.5
CART Terminal Nodes and Mean Score on Social Improvement Scale

CART Node Number	% of Sample Population	Cum. % of Sample Population	Node Description (characteristics describing members of each group)	Mean Score
1	58	58	Individuals with Greater Than Some College and Above	12.23
4	11	69	Less than Some College + Below 30	11.56
6	4	73	Less than Some College + African Americans+ Over 30	11.41
8	16	89	Less than Some College + Not African-American + Income Greater than $30,000 + Over 30	9.623
9	4	93	Less than Some college + Not African-American + Less Than or Equal to $30,000 + Never Been Married, Divorced, Separated + Over 30	9.58
10	8	100*	Less than Some College + Not African-American + Less Than or Equal to $30,000 + Widowed, Married, Living with a Partner, Single + Over 30	7.73

*% tally over 100 due to rounding

Other Attitudes towards ICT

While CART analysis has derived a stratification system based upon this particular measure, it may be that these groups are not so stratified with respect to other attitudes or perception of ICT. Several variables were selected to address the question of whether or not the groups stratified through social improvement reproduce themselves in other measures of perceptions of ICT. The questions asked were:

"Please tell me if each of the following statements describes you very well, somewhat well, not too well or not at all":

A. I like that cell phones and other mobile devices allow me to be more available to others
B. I often feel like my electronic devices can do more than what I actually use them for
C. It is stressful to own and manage all of the different electronic devices I have
D. I believe I am more productive because of all of my electronic devices

Depending upon the question, these responses were coded so that higher scores are associated with positive perceptions or attitudes. Thus, question B is coded such that a respondent who selects "not at all" is given a score of 4, as this response is more positive than saying "somewhat well". Similarly, a person who reports a "not at all" for question D is given a score of 1 because in this case a response of "not at all" is a negative response towards technology.

Table 5.6 below shows regressions for several variables measuring different attitudes towards ICT. [21] These regressions include the groups (terminal nodes) from the cart analyses. Respondents from node 1 (Individuals with Greater Than Some College and Above) are the reference group, thus all other nodes are compared to the respondents for node 1. Income is also included as a predictor because the previous CART analyses suggest that it is a strong predictor of social improvement. The regressions are interpreted by focusing on each node's parameter estimate. If a node's parameter estimate is negative, that group scores lower on the respective scale than the reference group and thus has less positive (more negative) attitudes on that particular scale.

[21] Like the improvement scale above, a factor analysis and reliability analysis was run on these variables. Although two separate factors could be extracted, the reliability analysis for the variables that loaded on each factor produced low alpha scores, suggesting that the variables for each factor could not be combined into a scale. Thus these variables were measured individually.

Table 5.6
Regression Coefficients for Various Attitudes towards Technology
(standardized regressions in parenthesis)

	I like that cell phones and other mobile devices allow me to be more available to others	**I often feel like my electronic devices can do more than what I actually use them for**	**It is stressful to own and manage all of the different electronic devices I have**	**I believe I am more productive because of all of my electronic devices**
Income	2.751E-6 (.143)***	1.206E-6 (.065)**	-7.060E-7 (-.035)	2.897E-6 (.140)***
Less than Some College + Below 30 (node 4)	.254 (.072)***	-.286 (-.085)***	.116 (.032)	-.024 (-.006)
Less than Some College + African Americans+ Over 30 (node 6)	.332 (.060)***	-.273 (-.050)**	-.493 (-.085)***	-.331 (-.055)**
Less than Some College + Not African-American + Income Greater than $30,000 + Over 30 (node 8)	-.029 (-.010)	-.041 (-.014)	-.144 (-.046)*	-.363 (-.113)***
Less than Some college + Not African-American + Less Than or Equal to $30,000 + Never Been Married, Divorced, Separated + Over 30 (node 9)	-.151 (-.027)	-.390 (-.072)**	-.104 (-.018)	-.493 (-.081)***
Less than Some College + Not African-American + Less Than or Equal to $30,000 + Widowed, Married, Living with a Partner, Single + Over 30 (node 10)	-.324 (-.084)***	-.578 (-.156)***	-.292 (-.073)**	-.818 (-.198)***
r-squared	.039	.042	.012	.083
N	2766	2759	2769	2763

Most groups below the most educated group (Node 1 from the CART analysis) tend to have more negative views of technology (as evidenced by the negative parameter estimates). This is always the case with groups 8, 9, and 10 – the groups I have previously labeled as "have nots". Nodes 4 and 6, composed of younger Americans and less educated African-Americans, often have more positive views of technology than the control group of educated Americans. This is especially true for younger respondents (node 4). This suggests that while there is a clean break between the "haves" and "have nots" the distinctions within the "haves" are not as rigid. Thus, while it would not be accurate to say that there is a steady increase in negativity as one moves down the hierarchy, one can say that the bottom three groups tend to have the most negative views of technology (i.e. they tend to have the largest negative parameter estimates).

In sum, the regressions presented in table 5.6 support the original CART findings. The same hierarchy derived from the social improvement scale can also be found with respect to other attitudinal variables.

The Technology Taste Structure in American Society

The data analysis produces several general findings. First, while income and age are clearly significant factors, both the regression analysis and CART analysis suggest that the most salient divider in the American population with respect to attitudes towards ICT is education. Having taken some higher education classes (not necessarily graduating or taking a postgraduate degree) is associated with attitudes towards social improvement that are distinct from the rest of the population. Thus, this research supports Kvasny's (2006) argument that ICT "becomes a new

site for social suffering and inequality" (176). Below this education threshold, one's social situation—age, race, relationship status, appears to be of more importance.

Second, age is a factor in determining attitudes towards ICT, specifically for people under the age 30. Third, African-Americans report high levels of social improvement. Both of these findings, I believe, may have a similar explanation. I suggested earlier that a component of social improvement is the ability of someone to use technology to manage impressions. Both of these groups fall in the lower educated branch of the CART analysis. I suggest that these groups may be conspicuously consuming technology to present depictions of themselves that conform to dominant notions of success (Veblen 1899 [1994]). The use of ICT as a way to manage status is not wholly new, as several qualitative studies have looked at youth mobile phone culture and make similar conclusions (Green 2001, Henderson *et al*. 2002 Katz & Satomi, 2006). Technology can be for these groups of lower status what new styles of clothing were for poorer immigrants in the United States at the beginning of the 20th century: a purposely ostentatious sign of aspiring social mobility (Ewen 1988).

Finally, higher income, but lower educated respondents who are over 30 and are not African-Americans score relatively low on the social improvement scale. This group possesses education below college level, suggesting low status jobs, and consequently a less favorable impression of ICT.

Summary

This chapter was dedicated to understanding the underlying order of American technological attitudes. Through factor analysis, one scale is adequate for measuring general attitudes towards

technology. The data analysis suggests that the taste structure for technology is quite different than the structures proposed for digital divide and digital inequality arguments. The next chapter is devoted to assessing the effectiveness of Marxian, Weberian, and Omnivorous perspectives.

Chapter 6

Tying it All Together: Using Lifestyle Clusters to Explain Consumption Patterns

This dissertation started with the question: What is the best way to explain contemporary cultural preferences in the United States? Three theoretical perspectives are brought to bear on this question. A Marxian perspective takes the view that people who occupy the same class position within the social structure share similar perspectives and outlooks (Wright 1997). A Weberian perspective emphasizes the association of cultural tastes with status groups (Weber 1946). The omnivorous perspective asserts that as education increases, individuals are more likely to consume a broad range of cultural products (Peterson 1996). Music and technology are two forms of culture that are ideal for addressing this question because these items are relatively inexpensive and are widespread throughout the population. Further, they tap into different dimension of taste patterns. Music is primarily an indicator of the symbolic dimension of taste and technology is primarily an indicator of the material dimension of taste. A statistical procedure uniquely suited for demarcating homogenous subgroupings of a population, Classification and Regression Tree Analysis (CART), was applied.

One of the major difficulties of answering this question is sorting out what indicators belong to Marxian, Weberian, or Omnivorous perspectives. I my view, education presents the most problems as all three perspectives can be linked to the educational attainment of a respondent. Below, I discuss how I overcome this impasse.

In a recent article, Chan and Goldthorpe assessed the distinction between class and status:

"We seek to show…how, in different areas of social life, the stratification of outcomes, whether seen as life-chances [Marxian emphasis] or as life-choices [Weberian emphasis], may predominantly occur on basis of *either* class *or* status [emphasis in original]. In this way, we then hope to clarify and reinforce the case for treating class and status as different forms of stratification that exert their effects through quite distinct social processes, or mechanisms" (Chan and Goldthorpe 2007b: 513).

Class was measured through occupation. Status was measured as "the degree of 'social honor' attached to certain…positional or perhaps purely ascribed attributes (e.g., birth or ethnicity)" (Chan and Goldthorpe 2007: 514). One of the measures of social honor used by the researchers was education. Through regression analyses the authors show that class affects economic life chances, while status affects cultural choices. These findings are used to support their position that class and status are separate phenomena and research should not combine the two or simply use one or the other approach. Chan and Golthorpe's research suggests that education is best understood as an indicator of Weberian status groups.

One of the data sets used allows me to measure the educations of the respondents' parents. In this case, I will use the education of the parents as a measure of class. This conclusion is drawn from the common understanding that education is linked to class position, and that parent's socialize their children based upon their class values (Kohn 1969, Bourdieu 1984).[22] Thus, parent's education will be used an indicator of the Marxian perspective, while respondent's education is an indicator of Weberian perspective.

The above eliminates the use of respondent's education as an indicator of the Marxian perspective, but what about the omnivorous perspective? Surely education matters for predicting

[22] To be sure, children often end up in different class positions than their parents. However, to my knowledge, the use of parent's education as a class marker is fairly common in regression models.

the level of omnivorousness. I separate the omnivorous and Weberian perspectives not through the use of the indicator of education, *but how education works to form homogeneous groups*. Education's effect on omnivorousness was originally conceptualized as a linear phenomenon, such that higher educational levels correspond to greater levels of omnivorousness (Peterson 1996). We would expect to see several homogenous subgroupings forming predicted by education, with the highest educated groups consuming more culture than the lower educated groups. A Weberian status group perspective would not make this requirement. Instead, distinct educational groups are associated with distinct types of consumption—quantity is not important. Thus, if the CART analysis predicted several educational groups with differing amounts of cultural diversity (in this case more musical genres or more technological gadgets), *and* there is a positive relationship between the amount of education and the amount of diversity, then I would assume that education's primary effect is in cultivating the values of diversity that undergird an omnivorous disposition. Otherwise, a Weberian status groups understanding, that groups with certain levels of education feel that certain musical styles are more appropriate for their group, is more appropriate.

To summarize, for the purposes of taste, education is not an indicator of the Marxian perspective. Education is an indicator of the omnivorousness perspective when there is a positive monotonic relationship between educational level and diversity in taste. In any other case, education is an indicator of the Weberian perspective. With a clearer understanding of education now in place we can clearly denote which variables align with each perspective. Marxian variables are occupation, income, mother's education, and father's education.

Weberian variables are educational groups, age, race, ethnicity (Hispanic/non-Hispanic), region, and marital status. The omnivorous variable is education as a scalar variable.

We can also show graphically the cultural structure as posited by these perspectives (for an explanation of how these tables were constructed, see Chapter 1). Tables 6.1, 6.2, and 6.3 present the Marxian, Weberian, and Omnivorous perspectives, respectively.

Table 6.1
The Marxian (Class) Perspective

	Culture A	Culture B	Culture C	Culture D
Upper	+			+
Middle		+		+
Working			+	+

Table 6.2
The Weberian (Status Group) Perspective

	Culture A	Culture B	Culture C	Culture D
White	+			+
Black		+	+	+
Hispanic		+		+
Asian	+			+

Table 6.3
Cultures Ordered by the Omnivorous Perspective

	Culture A	Culture B	Culture C	Culture D
Omnivores	+	+	+	+
Semi-Omnivore		+	+	+
Semi-Univore			+	+
Univore				+

The above discussion produces at least two means for assessing the adequacy of each perspective. First, because we have clearly demarcated a series of distinct variables associated with each perspective we can judge the degree to which collections of variables associated with

each perspective predict the consumption of a given product. Second, each perspective posits a particular taste structure for any given product (as shown from tables 6.1 – 6.3). We can use data to construct a stratification system for a product and compare the proposed theoretical structure with the structure produced from the data.

CART analysis speaks to both means of assessment. First, CART can help understand what perspective best predicts the consumption of a product. CART produces a table of variable importance, sometimes called normalized importance for each classification tree. These tables quantify any given independent variable's ability to predict a dependent variable (see Chapter 3). With such a table, we can compare individual variables from each perspective (e.g. occupation vs. education) or sets of variables from each perspective (e.g. the Marxian variables vs. Weberian variables). These comparisons will allow for judgments as to which variable or series of variables are more important. Second, CART produces a taste structure from data by separating the survey population into homogenous groups. We can then use this data derived taste structure to test the theoretical structures posited by each perspective. Each of the tables presented below are modified versions of tables from Chapters 4 and 5.

Assessing the Perspectives through Music

Which of the three above perspectives best describe current musical consumption patterns? In my data analyses I found that the general cultural product of music is best understood as four separate identities. These identities were cosmopolitan, adult, youth, and country. After identifying these identities, the question then becomes: What theoretical perspective best explains the possession of cosmopolitan, adult, youth, and country identities in the United

States? We answer this general question through the two means described above. First we decided what variables, or collections of variables best predict the possession of each identity. Then we decide what perspective best explains the overall taste structure of these four identities.

In Table 6.4 I present a listing of the normalized importance for each identity. I focus on the normalized importance shown as a percentage, but I also include the absolute importance in parenthesis.[23] For each identity, there are several variables that account for the bulk of importance, after which there is a precipitous decline in importance for other variables. I consider these variables before the decline as those that indicate which perspective - Marxian, Weberian, or Omnivorous - as the best explanations for each identity.

The Cosmopolitan identity is associated with three variables – respondent's education, occupation, and age. Education is the most important variable. Depending upon how education splits the population (recall the discussion above concerning the difference between education as Weberian and education as omnivorous), we can consider education as a Weberian lifestyle indicator or as an indicator of omnivorousness. We cannot draw a conclusion either way from this table, and judgment is suspended for the moment. Marxian class is important for this identity, as occupation is the second most important splitter. Potentially, the Cosmopolitan identity can be associated with all three perspectives.

The Adult identity is complex and relatively difficult to interpret. Seven variables play large parts in splitting this population. As with the Cosmopolitan identity, education is the most important variable. Also like Cosmopolitan, our judgment of whether or not education is an

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[23] The absolute importance is a variable's improvement score, discussed in Chapter 3. This improvement score is a measure of how well a variable increases homogeneity in the population.

indicator of Weberian or Omnivorous perspectives is suspended. Two Weberian status group variables – age and ethnicity – also are important splitters. On the whole, however, class variables dominate the adult identity. Four variables: occupation, income, and both parents' education are all important in splitting.

For the Youth and Country identities, we can see that the most dominant variables are Weberian status group variables. For Youth, age and marital status are most important. Marxian variables of parent education (both mother and father) do matter somewhat, but are of much lesser importance than the Weberian indicators. The Country identity is even more a Weberian-influenced identity, with race, ethnicity, age, and region being the most important splitting variables. Of these four, race and ethnicity are the most important by a wide margin.

The normalized importance table suggests that no perspective exclusively describes all of the identities, but it can be said with some confidence that Youth and Country are best understood through a Weberian status group perspective. Both the Cosmopolitan and Adult identities are more complex, with Marxian, Weberian, and possibly Omnivorous perspectives working together to explain this identity. I now turn to looking at the overall social structure of these identities by focusing on homogeneous groups produced for each identity.

Table 6.4
Comparison of Normalized Importance (absolute importance in parenthesis) for Each Musical Identity

Cosmopolitan		Adult		Youth		Country	
Variable	Importance	Variable	Importance	Variable	Importance	Variable	Importance
Resp. Educ.	100% (.273)	Resp. Educ.	100% (.176)	Age	100% (.153)	Race	100% (.022)
Occupation	56% (.153)	Occupation	40.9% (.072)	Marital Status	57.5% (.088)	Ethnicity	65.5% (.015)
Age	34.7% (.095)	Ethnicity	36.3% (.064)	Father Educ.	13.2% (.020)	Age	21.4% (.005)
Income	9.7% (.026)	Income	34.1% (.060)	Mother Educ.	11.3% (.017)	Region	14.5% (.003)
Region	8.4% (.023)	Age	31.0% (.055)	Resp. Educ.	8.5% (.013)	Resp. Educ.	10.6% (.002)
Mother Educ.	8.4% (.023)	Mother Educ.	27.0% (.048)	Income	7.1% (.011)	Father Educ.	8.9% (.002)
Marital Status	7.1% (.019)	Father Educ.	20.8% (.037)	Occupation	0.5% (.001)	Mother Educ.	7.9% (.002)
Father Educ.	5.9% (.016)	Marital Status	3.5% (.006)	Ethnicity	0.3% (.000)	Occupation	5.6% (.001)
Race	3.4% (.009)	Region	1.6% (.003)	Race	0.1% (.000)	Income	2.4% (.001)
Ethnicity	2.3% (.006)	Race	0.4% (.001)	Region	0.0% (.000)	Marital Status	2.1% (.000)

The tables presented here are modified versions of tables 4.4, 4.6, 4.8, and 4.10 from Chapter 4. In effect, these tables show stratification systems based on each identity. In order to condense information, I present just the groups and their mean score. The arithmetic mean for the entire population will act as a rough estimate of groups who are most likely to exhibit tastes associated with this identity (above the mean) and those least likely (below the mean).

The Cosmopolitan identity is presented in Table 6.5. This table reveals how post-secondary education structures the population. Because education seems to break people not along a continuum (e.g. high school, some college, bachelor's, master's), but instead into broad

groups where educational levels are clumped together, *education appears to be an indicator of Weberian status groups and not an indicator of the omnivorous perspective*. Attending some form of post-secondary institution appears to be enough to place respondents into the top strata of the Cosmopolitan identity. Other variables also help create the homogeneous groups observed. A respondents' occupation, age, region, and mother's education is important for this identity. In particular, people in symbolic occupations tend to be more cosmopolitan than those in manual occupations. However individuals who differ on these variables still generally wind up in the top half of the taste structure due to their higher education, and conversely end up in the lower half due to their lack of education. These variables generally work by further specifying groups within the two major divisions.

Table 6.5 **Stratification of Cosmopolitan Identity** **(mean = 1.93)**	
Characteristics	Mean
Education greater than HS, Age over 45, Occupations mainly symbolic, living in non-Southern regions	3.10
Education greater than HS, Age over 45,Occupations mainly symbolic, living in Southern regions	2.51
Education greater than HS, Age under 45, Occupations mainly symbolic, Mother's Education greater than HS	2.48
Education greater than HS, Age over 45, Occupations mainly manual	2.13
Education greater than HS, Age under 45, Occupations mainly symbolic, Mother's Education HS	2.02
[Population Mean]	
Education HS, Age over 45	1.83
Education greater than HS, Age under 45, Occupations mainly manual	1.78
Education HS or less, Age over 45	1.41
Education HS or less, Age under 45	1.17

The results from the normalized importance table and stratification system for the Cosmopolitan identity suggest that this identity is explained through a *combination* of Marxian and Weberian perspectives. More specifically, it appears as if two large Weberian status groups based upon attending post-secondary education or not demarcates two large groups of haves and have-nots. Within these two groups Marxian and Weberian variables further specify taste groups.

The stratification of the Adult identity in Table 6.6 is similar to the Cosmopolitan identity. Education appears to be a Weberian status group indicator, broadly separating the population into those who have attended a post-secondary education institution and those who have not. And, just like with the Cosmopolitan taste structure, occupation acts as a secondary influence, further demarcating groups already separated by education. Respondents in symbolic, white collar occupations form one homogenous group within the top strata and respondents in

manual blue collar occupation form another homogeneous group. Differences in mother's education also matter, but again this is within an already determined top half based upon education.

Table 6.6 Stratification of Adult Identity (mean = 1.58)	
Characteristics	Mean
Education greater than HS, Age between 75 and 24, Mother's Education greater than HS (but not bachelor's degree)	2.40
Education greater than HS, Age between 75 and 24, Mother's Education mainly HS or less (and also bachelor's degree), mainly symbolic occupations	1.98
Education greater than HS, Age between 75 and 24, Mother's Education mainly HS or less (and also bachelor's degree), mainly manual occupations	1.66
[Population Mean]	
Education greater than HS, Age over 75 and below 24	1.51
Education HS	1.36
Education less than HS, living in the South and Northeast regions	.95
Education less than HS, living in the Midwest and West	.68

The results from the normalized importance table and stratification system for the Adult identity suggest that this identity is explained again through a *combination* of Marxian and Weberian perspectives. Education splits the structure in half. Within these two halves, Marxian and Weberian variables further specify taste groups.

The stratification of the Youth identity, presented in Table 6.7, is simpler than the Adult and Cosmopolitan structures. As expected, age is the primary determinant of strata. All respondents under the age of 35 are in the top half of the taste structure. The table of normalized importance above showed that marital status and the aforementioned age are by far the two most

important variables in splitting the population and we see this played out in the structure itself. Marital status matters for groups within the top half of the structure, with divorced and never married younger respondents sitting atop the hierarchy, and married, widowed, or separated younger respondents farther down in the structure. Surprisingly, the second highest stratum is an older grouping – respondents aged between 35 and 54. Educated mothers apparently have a "youthful" effect on respondents. In the lower half of the structure are respondents who are older than 55. Education separates these groups, however both highly educated and lower educated respondents are in lower strata if they are older.

Table 6.7
Stratification of Youth Identity
(mean = 1.03)

Description	Mean
Age less than 35, Marital Status divorced or never married	1.71
Age 35 to 54, Mother's education greater than HS	1.35
Age less than 35, Marital Status married, widowed, or separated	1.32
[Population Mean]	
Age 35 – 54, Mother's education HS or less	.91
Age greater than 55, Education mainly greater than HS	.70
Age greater than 55, Education mainly HS or less	.46

Considering that age and marital status are most important for splitting as seen in the table of normalized importance, and that the taste structure is for the most part an age structure, The Youth identity is best understood through the Weberian perspective.

The Country identity is structured by race and ethnicity. We see this in the table of normalized importance, and we see this in the actual stratification system in Table 6.8. The population mean does not perform the same heuristic function as it did with the other three

identities. It is possible that a more appropriate dividing line would be a non-statistical one. There is a racial line between European-Americans (and Native-Americans) and those who are not. The stratum that scores lowest on this identity is composed solely of Asian-Americans and African-Americans, regardless of education or class. Another anomaly with the Country identity is that higher educated respondents score lower than lower educated respondents. This is the only instance in which increased education decreases a score on an identity. Ethnicity also matters greatly, in that respondents who report a Hispanic identity score lower than respondents who report a non-Hispanic identity. Region also matters, with people living in the Northeast scoring lower than people in other regions of the country. Considering the taste structure and the table of normalized importance, the Country identity is best understood through the Weberian perspective.

Table 6.8 **Stratification of Country Identity** **(mean = 0.62)**	
Description	Mean
Race is European-American or Native American, Ethnicity non-Hispanic, Ages between 24 and 75, Region non-Northeast, Education equal to or lesser than HS	.89
Race is European-American or Native American, Ethnicity non-Hispanic, Ages between 24 and 75, Region non-Northeast, Education greater than HS	.75
[Population Mean]	
Race is European-American or Native American, Ethnicity non-Hispanic, Ages between 24 and 75, Region Northeast	.61
Race is European-American or Native American, Ethnicity non-Hispanic, Ages between under 24 and over 75	.57
Race is European-American or Native American, Ethnicity Hispanic	.34
Race is Asian-American or African-American	.26

Summing Up Music

What perspectives best explain contemporary music patterns in the United States? The answer is not a simple one. First, no single perspective explains all identities. Second, one perspective, omnivorousness, explains nothing! If one were forced to choose a perspective, it would appear as if musical selection in the United States is most structured by status groups. But only in the case of the Youth and Country identities can we say that a purely Weberian perspective can be used. For Adult and Cosmopolitan, it appears as if Marxian class variables play an important role in structuring these identities,

Assessing the Perspectives through Technology

Which of the three above perspectives best describe current technology consumption patterns? Technology, as I have defined and measured it here, is simpler than music above. Music presented a complex picture with four relatively distinct identities. However, factor analysis for technology did not produce different dimensions on the same product. Instead, we have one dimension to assess. This dimension was named social improvement.

A different data set was used to understand technology patterns, thus different variables will be used to indicate each perspective. The Marxian perspective is indicated by income. The Weberian perspective is indicated by gender, marital status, race/ethnicity, community type, and (categorical) education. The omnivorous perspective is indicated through education.

Like music, the three theoretical perspectives' ability to explain social improvement will be assessed in two ways. First, through looking at the importance of each variable we can judge the degree to which collections variables associated with each perspective predict the consumption of a given product. Second, we can compare the taste structure derived from data with the theoretical structures associated with each perspective.

Table 6.9 shows that the most important variable in splitting the population is education. There is a considerable drop in importance between education and the next three most important variables, income, age and relationship status. Gender is the only variable that does not contribute to splitting the population. The table of importance for technology mirrors the Cosmopolitan and Adult identities in that education and class (this time in the form of income) are the major splitting variables.

Table 6.9
Independent Variable Importance for Technology Scale

Independent Variable	Importance	Normalized Importance
Education	1.314	100.0%
Income	.789	60.0%
Age	.534	40.7%
Relationship Status	.458	34.9%
Race/ethnicity	.223	17.0%
Community Type	.171	13.0%
Gender	.000	0.0%

The stratification of technology is shown in Table 6.10. The population can be divided into a top half of educated or young people, and a bottom half composed of various groups divided by race, income, age, and marital status. It appears as if education has a homogenizing affect on

technology attitudes. Simply attending college is enough to place individuals in the top stratum. *Because of this categorical effect of education, education is best viewed as a Weberian indicator.* Youth has a similar effect. Being under the age of 30 is enough to place a respondent in the top half of the stratification system. The groups who score below the mean have a mixture of Weberian and Marxian influences. African-Americans tend to score higher than other racial groups, and income is positively associated with scores on the attitudinal scale.

Table 6.10 **Stratification for Technology Attitudes (Social Improvement)** **(mean = 11.27)**	
Node Description	Mean Score
Individuals with Greater Than Some College and Above	12.23
Less than Some College + Below 30	11.56
[Population Mean]	
Less than Some College + African Americans+ Over 30	11.41
Less than Some College + Not African-American + Income Greater than $30,000 + Over 30	9.623
Less than Some college + Not African-American + Less Than or Equal to $30,000 + Never Been Married, Divorced, Separated + Over 30	9.58
Less than Some College + Not African-American + Less Than or Equal to $30,000 + Widowed, Married, Living with a Partner, Single + Over 30	7.73

The stratification for Social Improvement is best explained, again, through a combination of Marxian and Weberian perspectives. The table of normalized importance showed that the two most important variables for splitting were education and income. Education is best understood as a Weberian influence because of its categorical (as opposed to gradated) nature.

The Omnivorous Perspective

So what happened to omnivorousness? Of the three perspectives, it is arguably Peterson's theory of omnivorousness that has garnered the most recent attention – and theoretical support. Yet, in my analysis, omnivorousness is less important than either Weberian or Marxian perspectives. It may be that I am applying a theory to a question that it does not purport to answer. It may be that omnivorousness says nothing about *distinct* musical choices, only the quantity of choices. Another reason may be if the theory does not purport to explain attitudes towards material culture like technology, only symbolic culture like music and cinema. If either of the above is true, then the lack of support for omnivorousness is a testament to a misuse of the theory and not the theory itself. However, recent research has shown that on any given scale of omnivorousness (quantity of choices), groups cluster around certain types of music (Bryson 1996, Han 2003). Thus, there is precedent for applying omnivorousness to distinct musical choices. Groups consume more culture in total and the choice of cultures is distinct from lesser educated groups.

Judging the usefulness of omnivorousness to a material culture such as technology is harder to defend. It may simply be that cultural openness does not translate into openness for new technology. In order to examine this further, I ran a series of CART analyses that have only education as a predictor variable. If omnivorousness is an applicable theory, then we should see homogenous groups form based upon each level of education and not into large categories of below high school/above high school. Further, there should be a positive relationship between these groups and the mean score for each identity. I also ran analyses on the four music identities for good measure. Thus, five analyses were run in total.

Table 6.11
CART Analyses of Educational Groups by Music Identity

Education	Cosmopolitan (1.93)	Adult (1.58)	Youth (1.03)	Country (0.62)
Post-Bacc	3.03	2.13		0.66
Bachelor's	2.40	2.0	1.18	0.56
Associate	2.13	1.84		0.66
Some College				0.66
HS	1.51	1.36	0.85	0.66
Less than HS	1.31	0.80		0.56

Table 6.12
CART Analysis of Educational Groups for Social Improvement

Education	Soc Improvement (mean = 11.28)
Post-Bacc	13.06
Bachelor's	12.30
Some College	11.79
Vocational School	9.93
HS	9.93
Less than HS	9.93

Tables 6.11 and 6.12 show with consistency that the theory of omnivorousness can be applied to the musical identities used in this dissertation (not just overall quantity of selection) as suspected. More importantly, the theory can be applied to the social improvement scale as well. As education increases, the mean scores on each dependent variable increases. Further, albeit with some exceptions, CART produced distinct groups based upon distinct levels of education. Thus. the inability of the omnivorous perspective to explain musical identity and attitudes towards technology is not due to a poor application of the theory. Clearly when we look at the net effects of education, we see differences. However the questions powering this dissertation are best answered through an examination of gross effects. Thus, when other factors are included in the analysis, we find that better explanations simply break the US population into the educated and

uneducated, and then break these groups down further based upon class and status group predictors.

A Marxian and Weberian Mix

The Omnivorous perspective had the misfortune of being pegged to one variable and this variable had to split the population in a certain manner. That this perspective was found wanting speaks to both the complexity of cultural patterns in the United States and the stipulations imposed by the theory. The Marxian and Weberian perspectives have an advantage over the Omnivorous perspective in that several variables are indicators of these perspectives. Further, these perspectives do not assert that these variables work in any particular manner – only that they split the population in some way. Even under these more relaxed conditions, neither the Marxian or Weberian perspectives alone can solely explain either music or technology. To be sure, Weberian indicators provide the bulk of the explanation. This is especially true for the Youth and Country identities. But even in this case, we must remember that this one identity is a selection among four. Explaining the complete structure of musical identities or attitudes towards technology requires a mixture of Weberian and Marxian perspectives.

Musical Identities Leading to Consumption Practices

Now that I have argued that Marxian, Weberian, and Omnivorous perspectives are inadequate, what alternative do I propose? In order to answer this question, I must first assess the degree to which the musical identities or technological groupings derived from CART lead to differences in consumption (recall that the identities and attitudes are theorized to be abstract value

preferences that lead to the consumption of specific symbolic and material products). The reasons for this detour will become clearer as this chapter progresses.

The dataset used for music is most appropriate for this task because this dataset also includes respondent's consumption of cultural events. If the musical identities are indeed representative of abstract value preferences, then we should see differences in cultural events ordered by musical identity. This section also performs another function: introducing the utility of correspondence analysis for understanding cultural consumption patterns (see Chapter 3 for discussion on correspondence analysis).

The musical identities derived earlier were Cosmopolitan (CS), Adult (AD), Youth (YO), and Country (CN). These identities are ideal-typical. In reality we can expect that these identities are not mutually exclusive. A respondent can be any combination of these identities. This correspondence analysis will allow respondents to be categorized into combinations of identities.

I collapsed the nodes derived from each CART analysis into dichotomous variables using the arithmetic means as a break point. For example, there are six groups within the stratification system for the Country identity (Table 6.8). The two nodes that are above the mean are given a "1" and are considered most likely to express the country identity and this group is included in the analysis. The four nodes below the mean are given a "0". Next, these four dichotomous variables, one for each identity, were combined. There are 16 possible ways in which they can be combined: the 4 main identities, 10 sub-identities, and two variables representing respondents who cannot be associated with any value (they did not have a value of 1 for any identity) or can

be association with all of the identities.[24] These categories were labeled "all" and "none", respectively. By combining variables in this way nuance is created, and in all likelihood is a more realistic representation of the dispersion of values. Note that a respondent can only be one identity or sub-identity.

Table 6.13 lists the 16 combinations along with their frequency statistics. Of note are the high percentages of respondents who fit into the Country (CN) and Youth (YO) identities and the CS/AD/CN sub-identity compared to the low percentages of respondents who fit into the Cosmopolitan (CS) and Adult (AD) identities.

The second variable measures the types of events a respondent would most like to attend: "Of the events listed here…which cultural event would you most like to attend"? Frequency statistics for this variable are presented in Table 6.13 as well.

[24] The two variables that measure the respondents with none or all of the identities are plotted on the graphical display, but are not used to derive the dimensions upon which they were plotted. The "none" and "all" variables are supplementary points used to add richness to the explanation.

Table 6.13*
Frequency Statistics for Cultural Event Most Liked and Music Identity for Correspondence Analysis

Cultural Event	Freq (%)	Musical Identity	Freq (%)
Art museums or galleries	23.1	None	17.1
Musical plays or operettas	18.3	CN	15.2
Jazz music performances	15.7	YO	13.9
No one thing most	12.3	CS/AD/CN	13.4
Classical music performances	10.1	All	6.8
Nonmusical plays	9.9	CS/AD	6.6
Dance performances	5.9	AD/YO/CN	5.4
Operas	2.4	YO/CN	4.3
Ballet performances	2.3	AD/CN	4.2
Total	10107	CS/AD/YO	3.3
		AD/YO	3.1
		CS	2.6
		AD	2.5
		CS/YO	1.6
		Total	17135

*No respondents could be classified as CS/CN or CS/YO/CN

Analysis of Correspondence Table

First, and foremost, the correspondence analysis is statistically significant, meaning that there is significant variation between identity and cultural event. This was somewhat of an expected, but necessary finding. Now the focus moves to understanding the distribution of cultural events and identities through the graphical display.

Correspondence analysis produces separate summary statistics for both rows (musical identities) and columns (cultural events). Depending upon the particular questions asked, both columns, rows, or both can be used in the explanation. Because I am most interested in musical identities, I focus on row summaries. The summary for the row points is presented in Table 6.14.

Table 6.14
Row Summaries for Correspondence Analysis

Music Identities	Mass	Score in Dimension				Contribution								
						Of Point to Inertia of Dimension				Of Dimension to Inertia of Point				
		1	2	3	4	1	2	3	4	1	2	3	4	Total
CS	.029	-.784	.133	-1.038	.248	.109	.004	.301	.032	.458	.010	.507	.015	.990
AD	.028	-.262	-.294	.386	.372	.012	.021	.041	.072	.196	.180	.270	.132	.778
YO	.113	.870	.009	-.280	-.091	.528	.000	.087	.017	.909	.000	.059	.003	.972
CN	.117	.010	.491	-.099	.349	.000	.239	.011	.262	.000	.767	.027	.178	.973
CS/AD	.082	-.208	-.534	.163	-.080	.022	.200	.021	.010	.158	.757	.061	.008	.984
CS/YO	.018	-.197	.166	-.346	-.071	.004	.004	.021	.002	.229	.117	.445	.010	.801
AD/YO	.038	.451	-.430	.234	.051	.048	.060	.020	.002	.456	.300	.077	.002	.835
AD/CN	.048	.001	.070	.303	.024	.000	.002	.043	.001	.000	.034	.568	.002	.604
YO/CN	.034	.658	.516	.225	-.404	.091	.077	.017	.102	.452	.201	.033	.057	.743
CS/AD/YO	.046	-.009	-.415	.324	.036	.000	.067	.047	.001	.000	.474	.251	.002	.727
CS/AD/CN	.164	-.403	.295	.032	-.326	.164	.121	.002	.320	.614	.239	.002	.134	.988
AD/YO/CN	.063	.068	.113	.352	.393	.002	.007	.076	.179	.031	.063	.527	.349	.970
All	.100	-.144	-.004	.328	-.016	.013	.000	.105	.000	.179	.000	.583	.001	.762
None	.122	-.101	-.438	-.419	-.007	.008	.199	.209	.000	.038	.520	.413	.000	.971
Active Total	1.000					1.000	1.000	1.000	1.000					

The mass is the first column in Table 6.14. The mass is used as a weight when computing points and compensates for unequal numbers of cases. Identities with higher masses contribute more to

the dimensions produced. Four dimensions– which amount to factors – were extracted for this analysis. The best case scenario would have been the use of just two dimensions, such that one two-dimensional display would have sufficed for a full explanation (as in the archetypical Bourdieuan display from *Distinction*). However, four dimensions explain the variance in musical identities more fully, and the analysis is presented in three graphs. The next few columns are the scores that each variable has for the three dimensions, and are the points used for plotting.

The next several columns, labeled "contribution" are essential to grasping the meaning of the graphical display. The columns labeled "contribution of point to inertia of dimension" can be interpreted as the amount of the variance in a dimension explained by a point. Points that contribute the most to explaining the inertia in a dimension should be given more weight in establishing the meaning of that dimension. Thus, we see that dimension 1 is most influenced by YO, or youth identity. On the graphical display, I will label this dimension simply the "Youth" dimension. Dimension 2 is most explained first by CN and then the CS/AD sub-identity. For lack of a better word, I will label this dimension the "Mainstream/Country" dimension. Dimension 3 is most explained by the CS identity. Because dimension 2 connotes some type of mass culture, I will label dimension 3 "High". Finally, dimension 4 has much in common with dimension 2, in that CN is influences this dimension. However, the identity CS/AD/CN explains the most of this identity. I have labeled this dimension Mainstream/Middle.

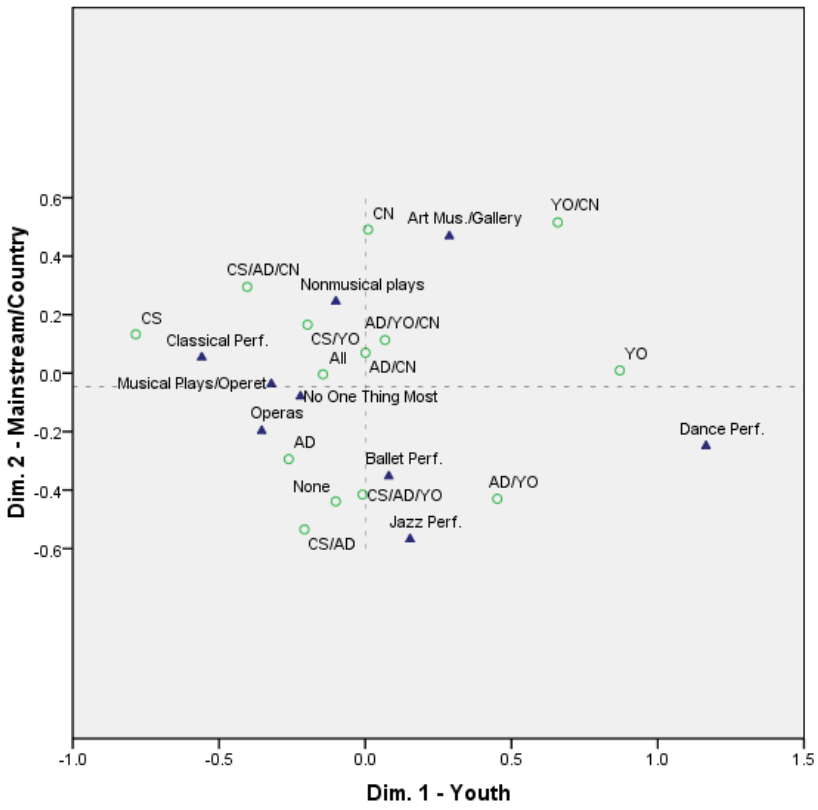
The next several columns are the "contribution of dimension to inertia of point". These columns describe the percent inertia, or variance, explained by a dimension for each point. Analytical focus can be placed on those points which are described most by the dimensions. For

example, discussions about the YO/CN should focus on dimension 1 – Youth, because this dimension explains more of the variance for youth than dimensions 2 and 3. The final column, labeled Total, shows the percent inertia (variance) explained by the analysis in overall. Combining the information from the summary of row points with the graphical display allows for a full interpretation of the correspondence analysis.

Taken as a whole, the three figures (6.1 – 6.3) show the association between identities and cultural events. It should be remembered, that these identities are derived from CART analyses, and therefore they represent sociodemographic groups. *Thus, when we see a particular identity, say CN, associated with a particular cultural event, say attending an Art event, we are also saying that the sociodemographic group that composes this identity is consuming this particular cultural product.*

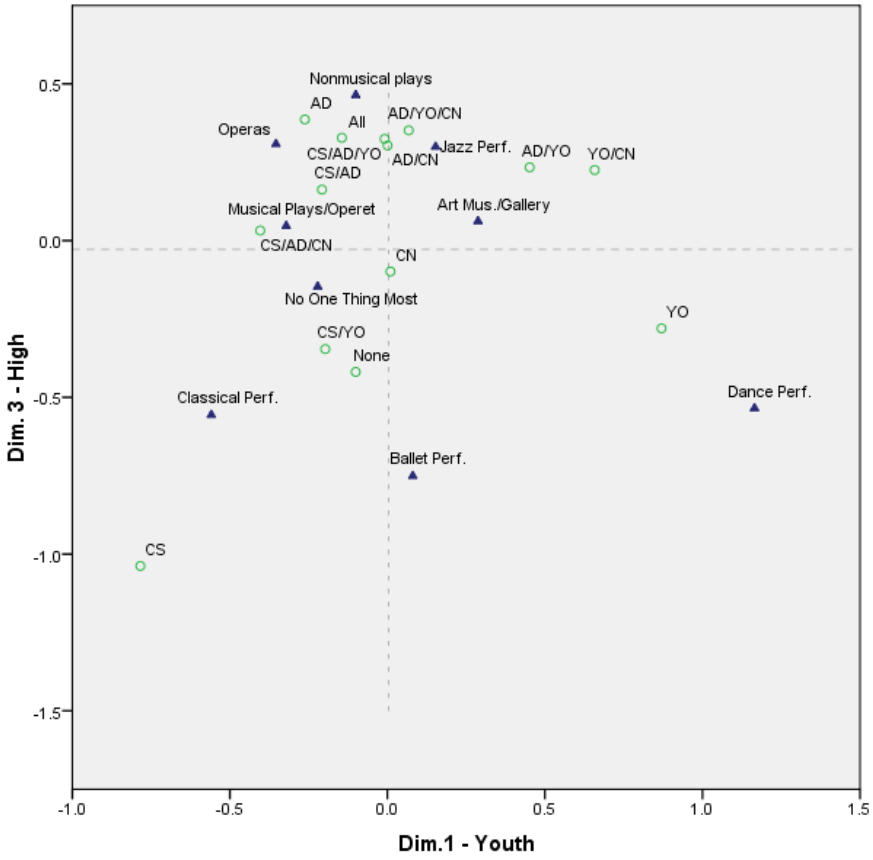
Figure 6.1, a plotting of the Youth and Mainstream/Country dimensions, shows that youth are relatively removed from other identities. We can also see that the youth identity is associated with dance preferences and no other cultural event. The country (CN) identity is also distinct, and is associated with attending art Museums/galleries (and to some extent nonmusical plays). Figure 6.2 plots the High dimension with the Youth dimension. Now we can see the distance between the Cosmopolitan (CS) identity and other identities. The Cosmopolitan identity is most associated with classical performances and ballet performances. The fourth dimension, Mainstream/Middle presented in Figure 6.3 is truly a middling dimension. Identities are not as dispersed along this dimension as others. The AD/YO/CN, CN, and AD are all positioned close together, and are associated with musical plays/operetta and ballet performances.

Figure 6.1*
Correspondence Analysis of Musical Identities by Cultural Event Most Liked
Dimensions 1 = Youth
Dimension 2 = Mainstream/Country



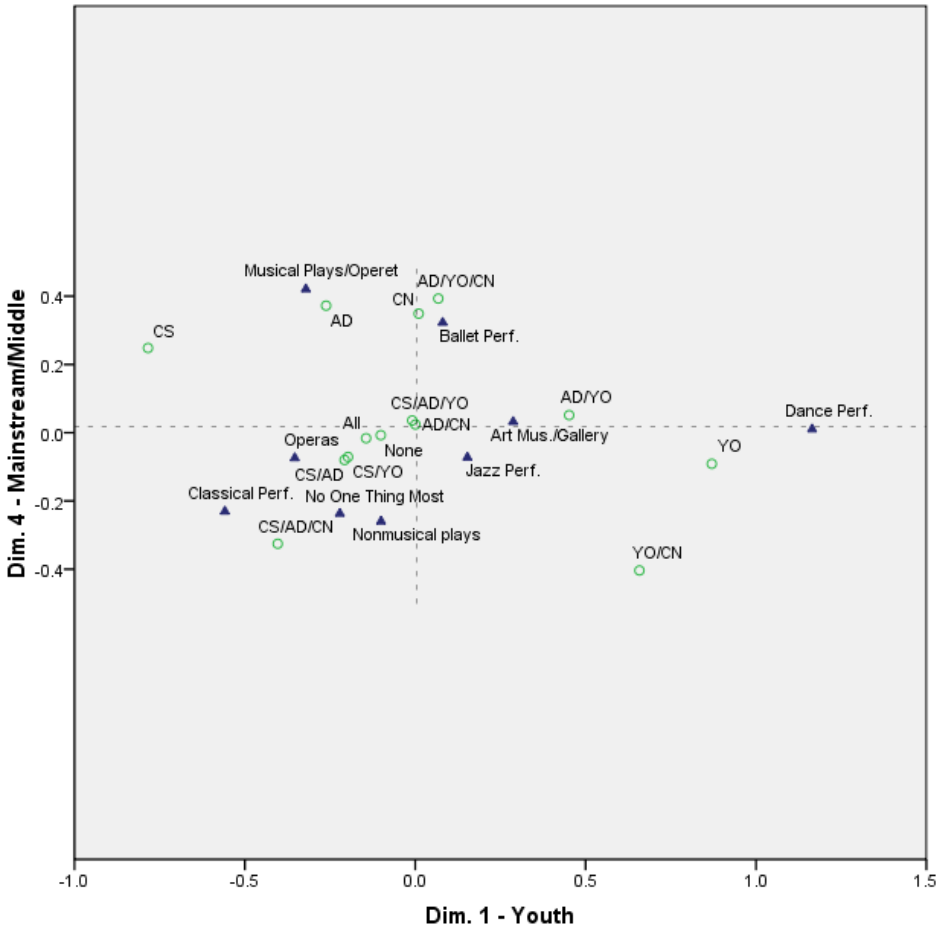
***Triangles are Cultural Events, Circles are Music Identities**

Figure 6.2*
Correspondence Analysis of Musical Identities by Cultural Event Most Liked
Dimensions 1 = Youth
Dimension 3 = High



***Triangles are Cultural Events, Circles are Music Identities**

Figure 6.3*
Correspondence Analysis of Musical Identities by Cultural Event Most Liked
Dimensions 1 = Youth
Dimension 4 = Mainstream/Middle



***Triangles are Cultural Events, Circles are Music Identities**

In sum, this correspondence analysis shows that there is an association between musical identities and cultural events a respondent reports he would like to attend. This finding is very important for the logical progression of this chapter. I needed to show that the values derived from music were not idiosyncratic and could be applied to other cultural products.

There is more that can be done with this correspondence analysis. For example, the various sub-identities could be explored. Or, we could interpret the distance between identities as speaking to the salience of symbolic boundaries between groups. However, there were two reasons for applying this analysis. First and foremost, I wanted to assess the degree to which the identities previously derived translated to consumption in other cultural areas. Second, I wanted to apply correspondence analysis to this particular question to show its utility in addressing consumption patterns. I believe that while the above analysis was brief, it accomplished both purposes. Now, I can propose an alternative to Marxian, Weberian, and Omnivorous perspectives with confidence.

Lifestyle Clusters

The ways in which sociologists have approached cultural patterns in the past may not be the most effective in contemporary America. There appears to be a better way of explaining cultural patterns. From the previous analyses we have seen that class and culture determinants work in combination to create new cultural structures. I will call these groups that cross-cut class and status groupings *Lifestyle Clusters*. I believe that through the analysis of these clusters, we can more effectively interpret contemporary consumption patterns in the United States.

The Logic of Lifestyle Clusters

It might be instructive to revisit the assumptions (both implied and formally stated) that have led to this point:

1) *Socio-demographic Differences*. People are born into different social conditions. These social conditions fall under the heading of Marxian, Weberian, and Omnivorous Perspectives, and were discussed in Chapter 1. Different social conditions lead to differences in socialization. Thus:

   "groups of people who have been socialized in similar conditions (e.g., similarities in parents, peer groups, education, jobs, exposure to mass media), are embedded in similar social relations (e.g., how they are treated by other societal groups and social institutions), and so tend to have similar cultural understandings." (Holt 1997: 326).

2) *Value Differences*. Differences in socialization lead to differences in societal values. With respect to symbolic goods, these value differences have been spelled out quite clearly in prior research. As education increases, people tend to prefer cultural products that focus on form (as opposed to function), composition (as opposed to performance), and substance (as opposed to style). The value differences with respect to material goods appear to be similar (see Bourdieu on photography, 1965; food, 1984; see Ewen on immigrant clothing, 1988).

3) *Consumption Differences*. Differences in values lead to differences in consumption. In Chapters 4 and 5, I focused not on concrete objects (musical genre or technology), but instead on abstract values (musical identity and attitudes towards social improvement). This is due to an assumption that values precede the consumption of any particular item. This assumption is seen is past research. Bourdieu (1984) argues not that the dominated

> classes like pop music per se, but instead that the dominated classes value functionality in their music. Similarly, Peterson and DiMaggio (1975) assume that a convergence of values between northeasterners and southern migrants paved the way for the diffusion of country music.

This logical progression is also a theoretical progression. I assume that socio-demographics predict value differences which in turn predict consumption patterns.[25] However, at any given time, sociodemographics, values, and consumption patterns are associated. *It is this association between these three components at any given time that constitute lifestyle clusters.* I now devote some time to explicating the contours of these clusters.

The Contours of Clusters

First, lifestyle clusters are objective measurements. It is not necessary that individuals be aware that they belong to a particular cluster. For example, the cluster of people "Less than Some College + Not African-American + Less Than or Equal to $30,000 + Widowed, Married, Living with a Partner, Single + Over 30" are not that interested in technology (see table 6.10). There is

[25] This somewhat strong stance is not taken because I believe that in every instance at T1 social groups develop, then at T2 values are articulated through interaction, followed at T3 by the consumption of culture. I am well aware of the maxim "correlation does not mean causation", and that this dissertation cannot speak to the causation of values or consumption. But this is a convention through which I can assess the validity of my overall framework and integrate current and future findings with other bodies of research that take different perspectives (Weberian, Marxian) and research coming from different disciplines (Marketing, Psychology). By stating clearly, and a priori, the relationships between collectivities, values, and cultures, I am making testable assumptions about cultural consumption. Insofar as other research takes similar measures, I can compare my findings and advance general understandings of the phenomenon. Indeed, the validity of this dissertation is based upon the idea that Marxian, Weberian, and Omnivorous perspectives were making relatively clear assertions about consumption patterns.

no reason why this group should identify with each other. This group is important sociologically not because they can potentially identify with each other and act collectivity (shall I risk the statement…a cluster in itself need not be a cluster for itself?). The significance of this group is that its members will face common consequences for possessing these attitudes. This does not mean, however, that lifestyle clusters cannot identify and interact in true social group fashion. Indeed, as I will discuss in Chapter 7, when people within the same lifestyle cluster do indentify and interact, the stage is set for the building of symbolic boundaries or other forms of social exclusion.

Second, lifestyle clusters are socially constructed. While these clusters have their genesis in common sociodemographic origins, it is the interplay between the values associated with these origins and the types of cultural products available in the marketplace. For example, being young and being educated is associated with the valuing new technology. In turn, the availability of novel ICT's allow this value to be expressed in particular ways. In my prior research I have shown that the young and the educated had favorable attitudes towards technology (Graham 2009). In this particular study, I was able to correlate these choices among several types of technological devices, or gadgets. Controlling of income, this group disproportionately bought Ipods and other Mp3 players at disproportionately higher rates than other groups. In this study, the value of technology was expressed through specific types of technology that had become available only recently on the market. Indeed, one of the main reasons why the cultural patterns are so diverse in contemporary society is because there are so many products available at such low prices, people are able to make finer choices between goods.

Put another way, consumers can more precisely pick the cultural good that fits their values. For example, recently Macintosh introduced its new line of "green notebooks" (http://www.apple.com/mac/green-notebooks/). One can easily make a prediction as to what groups in society are more likely to consume this product first: highly educated, European-American, upper class, young adults. I suspect that were someone to ascertain the values this group associated with the purchase of this laptop, the value of "progress" may be prominent. Moving to a more ecologically friendly piece of technology is a step in the right direction, and a sign that you are aware of the major issues of the day.[26] Contemporary society has made it possible to distinguish between the tech savvy person and the tech savvy/environmentally conscious person.

Third, lifestyle clusters are composed of several cultural products within a given domain. This is necessarily so following the assumption that values order the selection of goods. Given suitable variation in choice, groups will select goods that are most in line with their values. Thus, Gans showed that working class Americans eschewed products that presented ambiguity in life and instead favored products that reinforce traditional notions of good and evil. With this value, working class Americans will choose television sitcoms, movies, and even newspapers that reinforce the idea of good guys and bad guys (see Gans 1999 pp. 115 – 118). I did not have the data to do an extensive analysis across cultural products. However, I showed for both technology and music that distinct differences in one domain appear in other domains. Thus, for technology in Chapter 5, I showed that groups who have distinct attitudes for technology on one

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[26] Ironically, it is this same group's belief in progress, and their desire to discard the old and purchase the new, that contributed to our current environmental crisis.

scale, have distinct attitudes for technology on other scales as well. In this chapter above, I have shown using correspondence analysis that people who choose different musical genres also choose distinct cultural events.

Fourth, individuals can belong to different lifestyle clusters. This is because, while values work across cultural products, some products are qualitatively different than others and value preferences don't transfer. In other words, there are several domains of consumption, and individuals can belong to clusters in different domains. In this research, I have broadly separated consumption into two domains – symbolic and material. And, I constructed clusters using indicators from each domain. Thus, an individual can belong to the adult cluster in music and the "haves" cluster in technology. This also means that in one domain people may be in different clusters, but the same cluster in other domains. Take, for example, a young, educated Asian male and a middle aged, educated European male. The former will belong to the youth cluster symbolically, and the latter will belong to the cosmopolitan cluster. However both belong to the large "haves" group with respect to technology. It is conceivable that more parceling of the symbolic and material domains will reveal more nuanced clusters. For example, within the broad symbolic domain, we may be able to create sub-domains of elite culture and mass culture. It is highly likely that within the broad array of cultural products associated with mass culture, distinct lifestyle clusters can be identified. Similarly, it would be interesting to see what lifestyle clusters are forming within the internet culture.

It must be pointed out that three of the four points presented above are borne out in this research. Point two is based upon my own prior research, as well observations from contemporary society. When we combine these points we get the necessary flexibility to handle

the cultural complexity of contemporary America, while at the same time retaining a coherent theoretical structure. While lifestyle clusters spring from Marxian classes and Weberian status groups, ultimately these clusters are new phenomena unto themselves and cannot be explained totally by their sociodemographic precedents. I now move to placing this new phenomenon within the context of other research on cultural consumption.

Lifestyle Clusters in Sociological Context

How do lifestyle clusters speak to the very large body of work on cultural consumption? Clearly, the argument for the use of lifestyle clusters is based upon the assertion that Marxian, Weberian, and Omnivorous perspectives are not adequate. Lifestyle clusters build on and extend these earlier models. But in this regard, lifestyle clusters are not unique and even the term itself is not new in sociological research (and actually quite common in the marketing field). I turn my attention to positioning my current view within the corpus of like research. I will mention theorists first introduced in earlier chapters, including David Halle, Simon Frith, Michele Lamont, Tally Katz-Gerro, Dick Hebdige, Pierre Bourdieu, and Douglas Holt.

To my knowledge, the particular methodology and manner in which lifestyle clusters are conceived in this dissertation is new in sociological research. However, similar ideas appear in the work of theorists who approach cultural consumption using a post-structuralist approach.[27] The research of these theorists' has been used liberally to develop ideas within this dissertation (Hebdige 1979, Bourdieu 1984, Lamont 1992). These theorists share an understanding that our

[27] For a theoretical discussion on the approach of post-structuralism to lifestyle analysis, see Holt, Douglas B. 1997. "Post-Structuralist Lifestyle Analysis: Conceptualizing the Social Patterning of Consumption in Postmodernity", The Journal of Consumer Research, 23: 326 – 350.

cultural structure is not static. The meanings assigned to cultural products are constantly being contested, affirmed, and reassigned. Cultural products can take on new meanings and become associated with new groups. These products are used by groups to confirm group affiliation and also to erect symbolic boundaries between themselves and others.

Hebdige's (1979) disenchanted youth who consumed a unique style of fashion and music in 1970's Britain is an example of a class (working) cross-cut with a status group (white urban youth). The upper middle class French and American males that Lamont (1992) interviewed are examples of small, but powerful lifestyle clusters who erect boundaries between themselves and other groups who do not consume the same culture. We are all accustomed to Bourdieu's (1984) meta-categories of the upper class dominant group and the working class dominated in *Distinction*. However, in other works Bourdieu discusses his concept of field. He argues that within each field, say higher education, different forms and types of capital are used to increase one's prestige.[28] Thus, different cultural products are consumed within the field of higher education than within the field of business.

Two sociologists use lifestyle in a way that speaks directly to its current application. First, Katz-Gerro (1999) used the term to refer to the cultural products themselves as lifestyle clusters. This approach is different from the current one, in which I refer to the collectivities (respondents) as the clusters. In her research, Katz-Gerro refers to the items (cultural products) as the clusters. In her research, music and leisure activities were combined to form a series of clusters. Katz-Gerro and I also differ in the approach used. Her research focused on the teasing

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[28] For a discussion of field and examples of how Bourdieu uses this concept, see Swartz, David. 1997. *Culture and Power: The Sociology of Pierre Bourdieu.* The University of Chicago Press. Chicago. Illinois.

out of influences of single variables using regression analyses (see Chapter 1 for a more in-depth discussion).

The second sociologist I discuss who uses lifestyle clusters is Douglas B. Holt (1997). Of all the theorists who have informed the final articulation of lifestyle clusters, the research of Holt has been the most influential. Holt uses the term collectivity as a way of measuring his lifestyle clusters. Specifically, collectives refer to:

"groups of people who have been socialized in similar conditions (e.g., similarities in parents, peer groups, education, jobs, exposure to mass media), are embedded in similar social relations (e.g., how they are treated by other societal groups and social institutions), and so tend to have similar cultural understandings. Collectivities, then, are a particular type of group that is more macroscopic (i.e., exists at a higher level of aggregation) than groups such as families, organizations, or peer groups that are based on sustained interaction" (Holt 1997: 326).

These collectivities cross-cut class and status groups and most often are constituted at a level beneath larger class categories and status group categories. There are similarities between Holt's work and mine. Holt and I both assert that these collectivities (and for me, lifestyle clusters) are fluid and change constantly. Further, Holt and I, and Bourdieu for that matter, take a relational approach, and understand that the meaning of any given collectivity is contingent upon its relationship within an overall structure to other collectivities. Here is Holt discussing the meaning of ethnicity through a relational approach:

"…conceiving of ethnicity as a cluster of primordial traits in which members participate to greater or lesser extent obscures the fact that ethnic identities are constructed in particular sociohistorical contexts in relation to other ethnic collectivities relevant to the group's life. Rather than an invariant trait, the definitional content of the ethnicity construct changes as these social relations shift" (Holt 1997: 346).

In other words, ethnicity, and any collectivity for that matter, is socially constructed through constant interaction with others. Holt possesses a view of the genesis of collectives similar to David Halle and Simon Frith.

Halle's (1984) argues that the meanings attributed to visual art within homes cannot be reduced solely to class based differences. In his research, Halle discusses the importance of groups creating meaning within specific social and historical contexts. Halle argued that the prevalence of depopulated landscapes within urban homes is due to a historical change in people's views of the countryside, and homeowners desire to be in an environment devoid of the human element.

Frith (1996) argues that music consumption is not a homology between the values of a group and the values embedded in a musical genre – a viewpoint I take. Instead, Frith argues for a reciprocal relationship between collectivity and music genre. Social identity is an idealization (i.e. the ideal typical homosexual, African-American, etc). These idealizations are articulated in different music genres, and people construct their identity in part through listening to the ideal types presented in music. People formulate social groups in part by identifying with other people who share the same musical taste. In this way the music helps creates the social group, and the social group helps define what values are associated with music.

Summary

This chapter brings us full circle. I began this dissertation by laying out three perspectives that could possibly explain the current consumption patterns in the United States. I then proceeded to assess these perspectives through CART analyses of music and technology. The CART analyses

showed that the best way to explain the consumption of music and technology was through a combination of Marxian and Weberian perspectives. Using past research I suggest that the best way to describe current consumption patterns is through the concept of lifestyle clusters.

Conclusion

It now behooves us to take a look back at what has been done so far. The major points of this dissertation were as follows:

- The applicability of classification and regression tree analysis (CART) and correspondence analysis is described and demonstrated. These methods uncover gross effects of independent variables as opposed to the standard net effects. These methods lend themselves to analyses where groupings of individuals are sought based on categorical independent variables.
- Music genres can be condensed into four value preferences that I call identities. These identities are cosmopolitan, adult, youth, and country. Using the above methods to predict these identities, we see that overall, music is best predicted through a mixture of class and status.
- The use of technology can be understood in at least two ways: allowing individuals to maintain relationships in the absence of propinquity and allowing people to manage impressions. These two ways are together labeled social improvement. Using the above methods to predict these identities, we see that overall, technology is best predicted also through a mixture of class and status.
- The research in this dissertation suggests that class based, status based, or omnivorous models of cultural consumption cannot adequately explain the consumption patterns observed in contemporary American society. I suggest a new concept, called lifestyle clusters. While the term is not new, this particular conceptualization is. Lifestyle clusters are the association at any given moment in time between sociodemographic conditions, the values that are associated with those conditions, and the cultural choices associated with

these values. Further, I have outlined several characteristics of lifestyle clusters. These characteristics of lifestyle clusters are: (1) they are objective measurements, (2) they are socially constructed, (3) they are composed of several cultural products within a given domain, and (4) individuals can belong to different lifestyle clusters.

With this concluding chapter, I seek to accomplish three things. First, I discuss some of the limitations of my research. Asserting a new cultural structure is ambitious and risky. Second, I would like to move my decidedly sociological conceptualization of lifestyle clusters from under the auspices of sociological theory, and place it alongside two other works that have also addressed the new cultural structure of the United States. These works come from different disciplines and use different approaches, yet they come to similar conclusions. This convergence upon a similar conclusion from a variety of paths illustrates the salience of lifestyle clusters and for me, reinforced my own conclusions despite the shortcomings noted. Finally, I posit some future directions for research on lifestyle clusters.

Limitations of Research

There are two readily identifiable limitations to this research. First, the methods used are somewhat new in sociological research. Classification and regression tree analysis is common in marketing (and surprising to me, medicine). But as I went about writing the literature review for this technique, I realized that none of my sources were coming from sociology. Because of this, the empirical findings (not the theoretical conclusions) are hard to compare to past work. Most

sociological research of cultural consumption emphasizes net effects of variables. This dissertation and the method of CART analysis used, emphasizes gross effects.

Also, because of the newness of the method, I could not rely on "industry standards" as a reference point. For example, there is no commonly used method in social science research for pruning a tree or deciding what is the minimum level of importance required before a variable can be used to split the population. The rules I used to develop the tree were based upon default rules in SPSS and the rules used by researchers in marketing and medicine. This is a limitation in that I could not rely upon prior tried and true methods of developing trees. Of even more concern, is not having a definitive test that is known and accepted by everyone. Were I working with a regression analysis, I could have pointed to one number – the parameter estimates – to judge what variables are better than others. More importantly, others would understand this number and readily compare it to prior research. These concerns are a bit esoteric, but they are important when attempting to place your work within a sociological discourse. This limitation may make acceptance of findings difficult. Further, because people do not use this procedure others may not follow and expand on the general findings presented.

Second, the CART analyses used to support my arguments explained relatively small amounts of the variance in consumption patterns. This is common in research on consumption patterns. Research with similarly low levels of variance explained has been accepted into some of the more prestigious journals in sociology.[29] Holt has argued that these low variances are due to the unit of analysis:

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[29] In one case, Bryson's (1996) research reported R^2s of between .10 and .17 in the *American Journal of Sociology*.

"…these marginal results are not due to methodological inadequacies but, rather, follow from the principle that lifestyles are collective rather than individual phenomena. In this view, even though any given lifestyle will necessarily explain a relatively small percentage of an individual's consumption patterns, such collective analysis is necessary to plumb successfully nuanced differences in consumption patterns" (Holt 1997: 345).

I see a different reason for the low variances. In my view, it is the type of questions asked on a survey that lead to small amounts of variance explained. We are simply given the wrong questions upon which to assess consumption patterns. As sociologists, we use standard sociodemographic variables such as race and occupation (class) as default predictors in any study of consumption. I imagine that in a less variegated society where consumer choice was limited, say of the 1950's, these variables would have sufficed to explain a large portion of the variance. But nowadays, collectivities that cross-cut class and status have the option of selecting goods that fit their unique set of values: as I have argued and shown, consumer choices have their genesis in value orientations, which in turn are based upon very complex class and status groupings. The datasets that I have seen do not directly measure values. I attempted to overcome this limitation by inferring values from cultural products through factor analysis. However, the best way to overcome this limitation in the future datasets should be used that have standard sociodemographic variables, some sort of value survey (such as the aforementioned VALS survey), and a set of cultural products from the same genre.

A Common Convergence

Several years ago I watched two authors being interviewed by the late Tim Russert. The authors, as far as I could tell, were political scientists or consultants of some kind. Russert cited a survey in the author's book, which purported to predict what "tribe" one belonged to based upon the

types of goods one consumed. The book was entitled *Applebee's America: How Successful Political, Business, and Religious Leaders Connect with the New American Community.* I bought the book on the basis of the interview. I did not realize at the time that it would become a part of my dissertation.

The authors asserted that in recent years Americans had been segmenting themselves into tribes who share similar values. The authors use the word tribe to connote a collection of people who generally associate together. They use the term "red tribes" and "blue tribes" instead of red states and blue states. People and businesses that were able to connect with the values of these tribes had been wildly successful. They cited the success of George W. Bush in the 2004 election, the rise of the Applebee's restaurant chain, and several protestant megachurches as examples of a connection between a particular product, a particular value, and a particular group.

For example, through sophisticated marketing techniques, the Bush campaign in 2004 separated the American population not into Democrat or Republican, but instead into mini tribes (lifestyle clusters) that were more or less likely to vote for Bush. These clusters were more accurate than the traditional party rolls, and the Bush campaign could more efficiently focus its resources:

> "…there were 20,000 *Tax Cut Conservative Republicans* in Ohio who had spotty voting histories. He had their names and addresses, and he knew what they liked and didn't like about politics…Nelson's [Terry Nelson Bush Campaign Political Director] team would have volunteers whose views fit with Tax Cut Conservative Republicans call or visit the unreliable voters in that group" (Sosnick et. al, 2006: 42 – 43).

Because the Bush campaign understood that America was more fragmented than the Kerry campaign, Bush was able to overcome low poll numbers and win re-election. *Applebee's America* was my initial introduction into a new way of thinking about American society.

In No-Brow: The Culture of Marketing – The Marketing of Culture, journalist John Seabrook writes about the disintegration of the class based hierarchy of highbrow culture and lowbrow culture. His argument is not an empirical study, and his argument focuses on the confluence of highbrow (art) and lowbrow (commercial) aesthetics into what he calls a nobrow aesthetic.

Seabrook discusses the changes in *The New Yorker* magazine under the stewardship of then editor Tina Brown. Seabrook argues that for many years the New Yorker was able to remain profitable because advertisers of high end goods, mainly based in New York, knew that the best way to get to their clientele was through elite, high-end magazines like *The New Yorker*. But, he argues: "…in the mid '80s and '90s, many of those formerly exclusive New York brands became nationwide – now one could go to a Saks in the local mall – and as that happened, *The New Yorker's* regional appeal to those old advertisers diminished" (2000: 24). Tina Brown was brought in to reinvigorate the magazine. Although she eventually left, the magazine became successful by combining high end literary fiction and political commentary with pieces on rock stars and current television shows.

Like sociologists, the journalist Seabrook notes that this change occurred sometime in the second half of the twentieth century. Paraphrasing Seabrook's words would be an injustice. Thus, I quote at length:

"During the second half of the twentieth century the town house of culture collapsed. It happened all at once, like an earthquake, when Andy Warhol showed his soup can and coke

bottle paintings at the Stable Gallery in 1962, and it happened very slowly, as over the course of the twentieth century the deep structural flaws in the town house were stressed by the sheer variety and ingeniousness of the commercial culture itself. Editors, curators, and critics fought courageously to preserve the separation of the high from the pop, the hand-made from the machine-made, the unique from the reproduced. These cultural arbiters battled the pro wrestlers and soap-opera divas and the talk-show hosts, struggling to keep some sense of the original distinction between the old elite culture and the new commercial culture intact. As a last resort, intellectuals in New York sought to preserve the town house through camp. But camp was only a temporary measure. The camp arbiters were soon overrun and slaughtered by the pop-cult hordes as well." (Seabrook 2000: 69).

Nobrow and *Applebee's America* chronicle a society that is fundamentally changed. Further, both works start with the idea that there are sociodemographic changes at work that lead to observable differences in consumption. This is the same conclusion that I came to in this dissertation.

Future Directions

In my discussion of Douglas Holt's work on lifestyle clusters I made several comments that point to potential future directions for lifestyle cluster research. I asserted that lifestyle clusters are durable enough that their overall makeup does not change drastically over a period of a few years. With this in mind, I believe that a logical next step in lifestyle cluster research is to go about delineating a series of durable, *sociologically significant clusters*. By this I mean collectivities that are numerically large enough that their consumption practices have some effect on the life chances of others. There are two areas of focus, methodological and theoretical, that must work together to identify these clusters.

First, a lifestyle clusters analysis that applies statistical methods that focus on the gross effects of variables in producing homogenous groups, will allow sociologists to identify these sociologically significant groups *with more accuracy*. CART analysis is one such method, but

other methods such as hierarchical cluster analysis can also be used. In my opinion, the two main variables used in cultural studies are class (usually ensconced within a elite/mass culture dialogue) or race (usually measured through black and white). The omnipresence of these two variables speaks to their salience. However, these two variables are blunt instruments. My research has shown that sociologically significant mixtures of class and race exist in the currently in the United States—combinations that predict with greater accuracy consumption patterns.

Second, research on lifestyle clusters can focus on the implications of these sociologically significant homogeneous groups. In Chapter 6 my main goal was to assert the theoretical legitimacy of lifestyle clusters through empirical means. I made no claims about the implications of the clusters produced. But it stands to reason that, with respect to musical identity, symbolic boundaries can develop between groups who exhibit different identities. Quickly, symbolic boundaries are defined as "conceptual distinctions made by social actors to categorize objects, people, practices, and even time and space" (Lamont and Molnar 2002: 168). Further, "symbolic boundaries also separate people into groups and generate feelings of similarity and group membership" (from Epstein 1992: 232 quoted in Lamont and Molnar 2002: 168). Given these definitions, the link between lifestyle and symbolic boundaries is a clear one. People use knowledge about one's lifestyle as a means to categorize them. It goes without saying that some clusters will have more economic or political clout than others. Being excluded from some groups has more of an impact than being excluded from others. This is more readily apparent with respect to technology. In an earlier chapter, I cited the Obama campaign's use of text messaging to reach voters. As I write this paragraph even, a radio program on National Public Radio is now incorporating "twittering" into their many options for

interacting on their shows.[30] If a given lifestyle cluster does not incorporate these new forms of social communication, while those that do adopt these new forms hold disproportionate power and prestige in society, this cluster faces the possibility of being excluded from resource rich social networks.

Third, qualitative research can be used to further our understanding of lifestyle clusters. Specifically, through ethnographic research we can more clearly understand the meanings that groups attribute to certain cultural products. While one can take the macro-level quantitative approach and administer a value survey to a group of people, by design this method pre-empts respondents from expressing themselves in their own words. This is clearly a negative side-effect of quantitative research.

In sum, lifestyle cluster analyses can apply methods that assess the gross effects of variables in order to demarcate homogeneous groupings of people that are more accurate representations of social groupings in reality. Then, the sociological significance of these groups to boundary formation and social exclusion can be assessed.

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[30] Twittering is a social networking service (http://twitter.com/). Twittering online is analogous to sending a text message via phone. Users can send messages of up to 140 characters, called tweets, in real time to others in their network. NPR, it appears, has taken an unusually high interest in the service, and has done several stories on twittering.

Appendix A	
Nodes and Means from Music Identity Classification Trees used for Correspondence Analysis	
Node (Mean)	
Cosmopolitan (Pop Mean = 2.02)	
Node 16 (3.10)	1
Node 15 (2.51)	
Node 14 (2.48)	
Node 11 (2.13)	
Node 13 (2.02)	0
Node 7 (1.83)	
Node 10 (1.78)	
Node 8 (1.41)	
Node 3 (1.17)	
Adult (Pop Mean = 1.58)	
Node 10 (2.40)	1
Node 11 (1.98)	
Node 12 (1.66)	
Node 5 (1.51)	0
Node 3 (1.36)	
Node 7 (0.95)	
Node 8 (0.68)	
Youth (Pop Mean = 1.03)	
Node 3 (1.71)	1
Node 8 (1.35)	
Node 4 (1.32)	
Node 7 (0.91)	0
Node 10 (0.70)	
Node 9 (0.46)	
Country (Pop Mean = 0.62)	
Node 9 (0.89)	1
Node 10 (0.75)	
Node 8 (0.61)	0
Node 5 (0.57)	
Node 4 (0.34)	
Node 2 (0.26)	

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