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To the Graduate Council:

I am submitting herewith a dissertation written by Benjamin Joshua Shultz entitled "Handmade and DIY: The Cultural Economy in the Digital Age." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Geography.

Ronald V. Kalafsky, Major Professor

We have read this dissertation and recommend its acceptance:

Thomas L. Bell, Shih-Lung Shaw, Sujan M. Dan

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

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Handmade and DIY:
The Cultural Economy in the Digital Age

A Dissertation Presented for the
Doctor of Philosophy Degree
The University of Tennessee, Knoxville

Benjamin J. Shultz
May 2011

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ABSTRACT

In recent years there has been growing consensus among academics and policy makers that cultural industries are key drivers of contemporary economic growth. For geographers and economists, the roles of agglomeration and knowledge flows are important factors that sustain the cultural industries. However, existing research focuses overwhelmingly on elite cultural industries in global cities. In addition, there has been little effort to account for new technologies that create a more complex landscape for the cultural economy by allowing cultural producers to collaborate, communicate, and operate from remote locations. This dissertation uses the independent (indie) crafting phenomenon to examine a grassroots, technologically driven alternative to elite cultural industries. In particular, the research employs mixed methods to examine agglomeration tendencies and networking in the digital age. The results of quantitative inquiry demonstrate that clustering and agglomeration are still defining features of the cultural industries in the digital age, but not in ways that are previously acknowledged. Independent cultural production clusters in second- and third-tier cities, suggesting that those places can use online resources to overcome geographic constraints to some extent. Following up with qualitative methods, this research finds that local support mechanisms such as

business groups and small business resources reinforce clustering. Online communications tools also reinforce clustering. The Internet's most important function is to help cultural producers find and organize information relevant to a local community. Although it is possible to make contacts on the other side of the world or access non-local information, the utility of those contacts and information is limited. The prevailing notion in current cultural economic literature is that technology decentralizes cultural production and increases the physical distance of market and social interactions. The dissertation argues, however, that the Internet provides a quicker, more efficient way for individuals to make contacts virtually, which then leads local connections and collaborations in "the real world."

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CHAPTER 1

INTRODUCTION AND BACKGROUND INFORMATION

1.1 Themes and Relevance

In the past two decades there has been growing consensus among academics and policy makers that cultural industries are key drivers of contemporary economic growth (e.g. Florida 2002c; Drake 2003; Scott 2006b; Glaeser and Gottlieb 2006; Currid and Connolly 2008; Reimer, Pinch, and Sunley 2008; Currid 2009; Pratt and Jeffcutt 2009a). Cultural industries produce goods and services whose subjective and symbolic meanings outweigh their utilitarian purpose (Scott 2004). They specialize in goods and services that derive their value from human creativity (i.e. music, films, literature) or from aesthetic appeal (i.e. jewelry, fashion, art). In recent years, the cultural economy has gone from being a relatively obscure segment of the overall economy to being a major contributor to advanced economies (Pratt and Jeffcutt 2009a).

Scholars have explored the cultural industries from a number of empirical and theoretical perspectives. These perspectives include urban agglomeration (Scott 2001; Currid and Connolly 2008) and the roles of information and

knowledge transfers (Gertler 2008; Jones, Spigel, and Malecki 2010). Drawing from those broad perspectives, two themes in particular inform this dissertation.

First, the tendency for cultural industries to form spatial agglomerations is the most dominant theme to emerge in the literature (Coe 2001; Grabher 2001; Bell and Jayne 2004; Scott 2004). Firms engaging in cultural production transact with one another frequently. Proximity lowers the cost of frequent business transactions and promotes trust between economic actors (Scott 2001; Storper and Venables 2004). Work in the cultural industries is usually on a contract basis and can be part-time, temporary, or freelance. Physical proximity helps cultural workers maintain dense social networks that keep them informed of labor market trends and new opportunities (Scott 1998, 2004; Batt et al. 2001; Christopherson 2002). Locational agglomeration, therefore, is the most effective means of operating a cultural industry (Storper and Scott 1995; Scott 2000a).

Second, knowledge and networks in cultural industries are distinct from those in other economic sectors. Whereas knowledge in science- and engineering-based industries is analytical and synthetic (Hansen, Vang, and Asheim 2005), knowledge in the cultural industries is symbolic and deals with the creation of cultural meaning (Drake 2003). This type of knowledge is best transmitted via face-to-face social networks in a "buzz environment" (Storper

and Venables 2004). Buzz refers to the specialized knowledge flows and information updates that result from the co-location of people within the same industry (Bathelt, Malmberg, and Maskell 2004). Economic actors in a buzz environment continuously benefit from the news, gossip, and tacit information absorbed by just "being there" (Gertler 2003). Cultural industries are strongly place-based because clusters of creative people benefit from social networks that people outside the cluster cannot access (Schoales 2006).

These two themes underpinning current understanding of the cultural economy are highly influential in both academic and policy settings. The purpose of this dissertation is not disputing their validity, for the literature is grounded in strong empirical analysis and rigorous theoretical frameworks. Rather, this research explores emerging trends that shape the cultural economy but have yet to be fully investigated. The primary contribution and relevance of this research is to explore the ways in which information and communication technologies (ICT) alter our understanding of the cultural economy. I argue that ICT changes how scholars should understand the two research themes on the cultural economy in the following ways.

First, recent technological advances enable a radical transformation of how humans process information, exchange knowledge, and reproduce culture

(Leyshon 2001; Scott 2004; Benkler 2006; Markusen and Schrock 2006). For example, one reason why cultural industries cluster in elite urban centers is because they "require a local consumer concentration of individuals who attend art galleries, buy the art on the wall, go to opera and play openings, and generally support the arts in tangible, economically measurable ways" (Currid 2009, 379). In the digital age, however, cultural workers can use the Internet to access global markets regardless of their location (Markusen and Schrock 2006).

Readily available technologies also lower the barriers to entry in cultural production, making it possible for more people to get established as producers of cutlural products (von Hippel 2005). Cultural producers benefit from the increasing accessibility, affordability, and availability of digital cameras, computers, and editing software (Leadbeater and Miller 2004; Tapscott and Williams 2006; Howe 2008). They can easily digitize their work and show it to a globally distributed audience online via free, easy-to-use websites (Shirky 2008). Artists, for example, can take digital photographs of their paintings, host the images online, advertise through social media networks, and finally sell the paintings directly to consumers. These technologically mediated trends increase competition within some sectors of the cultural economy and challenge the dominance of existing agglomerations.

Second, although the relationship between knowledge, networks, and agglomeration is a dominant theme in the cultural economy literature, recent research also demonstrates the importance of remote working and electronic networking. Loose-knit communities bound by "weak ties" (Granovetter 1973) are integral to sustaining knowledge and networks in the cultural industries (Florida 2003). Weak ties refer to the web of loosely affiliated contacts that can provide information about jobs, introductions to well-placed individuals, and other cutting edge business-related knowledge. The Internet facilitates the creation and maintenance of weak ties because geographically distributed individuals can easily find one another and bond over specific interests. The failure to adequately address the Internet's role in knowledge flows and social networks creates a "lack of strategic knowledge about the relationships and networks that enable and sustain creativity and innovation in the cultural economy" (Pratt and Jeffcutt 2009b, 4-5).

Citing the importance of weak ties in cultural industries, Reimer et al. (2008) charge that the cultural economy literature places too much emphasis on clustering and downplays the significance of remote working and electronic networking. Sunley et al. (2008, 695) call for a reexamination of networking and knowledge flows in the cultural industries that places less importance on the

cluster model, which they argue was "developed largely from previous work on manufacturing sectors." They call for a more rigorous theoretical framework that reconciles the importance of clustering on the one hand while accounting for the necessity of remote networking, global pipelines, and weak ties on the other.

1.2 Operationalization of Research

In order to study the relationship between modern ICT and the cultural economy, I turn to the emerging field of independent cultural production. The term "independent cultural production" may refer to a variety of products including music (Leyshon 2009; Hauge and Hracs 2010), video games (Arakji and Lang 2007), and publishing (Triggs 2006). In this sense, the term suffers from definitional ambiguity. To add clarity, the reader should focus on the production *process* more so than the product itself. Independently produced cultural goods share a set of commonalities that distinguish them from mainstream products.

First, independent producers actively challenge the business practices and norms of mainstream cultural industries (Oakes 2009). Large firms in the cultural economy, such as Hollywood studios and major record labels, possess

the economic and legal influence to dictate the terms of contracts, stifle non-institutional ideals, and control the distribution rights of creative content (Perelman 2002; Lessig 2004; Boyle 2008; Heller 2008). Independent cultural production positions itself in direct opposition to the influence of major firms. Self-sufficiency, risk-taking, resistance to convention, and the freedom to express one's creativity on one's own terms are the principles underpinning independent cultural production (Oakes 2009). Adhering to these principles often entails accepting less money in return for greater control of the content and distribution rights of cultural products. But as Rob Walker (2008) notes, independent cultural production is not independence *from* capitalism, but rather independence *within* capitalism.

Second, independent cultural production embodies a particular ethos. Many independent producers encourage consumers to get to know the makers of the products they buy. When consumers have personal relationships with makers, they feel a greater sense of appreciation for the products they consume. Closer relationships also encourage consumers to support local cultural producers. Buying local supports independent cultural production within one's own community and also decreases the environmental impacts of shipping items from remote locations.

In this dissertation, I operationalize independent cultural production by choosing one unique manifestation of the phenomenon: independent arts and crafts. Independent arts and crafts (indie crafts) are a concerted effort to "reinvent traditional craft skills for a younger, hipper, alternative mindset" (Walker 2008, 234). These traditional craft skills include sewing, knitting, pottery, and jewelry or apparel design.

Indie crafts incorporate the principles of independent cultural production discussed previously. First, indie crafters have a long history of challenging mainstream practices of production, beginning with William Morris and John Ruskin in the 19th century. These early proponents of independent cultural production warned that the transition to large-scale, mechanized production during the Industrial Revolution would replace the skill and care that the human hand could bring to manufacturing (Boris 1986). They advocated for small-scale, artisanal manufacturing that placed humans at the center of the production process. The current indie crafts movement incorporates this nostalgic view of art and labor as an alternative to mass-produced crafts commonly sold at big-box retail stores.

Second, indie crafters reject mainstream consumerism because it depends upon unsustainable environmental practices and unjust labor arrangements. As

an alternative to mainstream consumerism, they encourage others to learn how to "make things" for themselves and to get to know the makers of their products so they can have a greater appreciation for the skill of the craftsperson or artist. This view of consumerism also owes much to the arts and crafts movement of the late 19th century.

The modern movement departs from its predecessor, however, by taking a different stance on technology. While the arts and crafts movement of the late 19th century viewed technology as alienating and detrimental to craftsmanship, the Internet is an essential component of the 21st century indie crafts movement. Prior to the Internet, many crafters were isolated from one another. Those living in places without like-minded others had difficulty making connections with the wider movement (Johnson 2008). The size of the local market also tends to be rather small outside major cities and limits economic returns to artistic production.

In the digital age, however, crafters with an Internet connection can build diffuse networks and learn from one another remotely. The Internet is also a virtual marketplace that enables crafters to reach consumers all over the world. Etsy (www.etsy.com), for example, is the most highly trafficked online marketplace and discussion forum for indie crafts. Crafters may set up a virtual

"shop" on Etsy where she or he may display photos and descriptions of items for sale. Customers purchase online and the crafter sends the items through the mail. The website charges 20 cents for each item listed and takes 3.5 percent of the transaction cost. There are also active discussion forums where crafters ask for market advice, learn new techniques, advertise their online stores, or simply discuss their art with a supportive community.

In sum, indie crafters actively bypass the cultural gatekeepers that mediate access to the traditional cultural economy. They have made extensive use of the Internet to create a grassroots alternative to the predominant elite-driven model of cultural production. For these reasons, indie crafters are an ideal artisanal group through which to operationalize this dissertation.

1.3 Research Objectives and Questions

Building upon the themes of agglomeration and knowledge, this dissertation examines the ways in which ICT influences patterns of cultural production and knowledge exchange for independent, small-scale, and amateur cultural producers. In order to approach this topic, I organize the research objectives and questions around the two themes of the cultural economy literature.

1.3.1 Traditional Agglomeration

The first objective of this research is to quantitatively examine the patterns of agglomeration in independent cultural production. Advanced ICTs, namely the Internet, disrupt the cultural economy (Christensen 1997) and produce socio-technical changes that fundamentally alter the bases of competition within cultural industries (Leyshon 2003). While agglomerations remain important, the Internet allows cultural producers in small- and medium-size cities to overcome some of the geographic constraints that shape the economic geography of cultural industries.

To accomplish this first objective, I pose the following research questions:

- What are the patterns of agglomeration in independent cultural production?
- How, for example, do patterns of agglomeration in independent cultural production differ from those of mainstream cultural industries?
- What are the place-based characteristics that explain the geography of independent cultural production?

1.3.2 Agglomeration in the Digital Age

The second objective of this research is to explain how the use of online resources influences patterns of clustering and agglomeration using qualitative methods. While quantitative analysis is an effective way to examine patterns of agglomeration, it offers little to no insight into how individuals use digital technologies to actually influence these patterns. As Reimer et al. (2008, 160) argue, qualitative research is needed to examine clustering and agglomeration in the cultural economy beyond "cartographic accounts."

To accomplish the second research objective, I pose the following questions:

- What technologies are important to independent cultural producers?
- What advantages do independent cultural producers gain by using new technologies?
- Does the use of technology help independent cultural producers overcome the need to cluster?
- What are the new challenges that technology creates for independent cultural producers?

1.3.3 Social Networks in the Digital Age

The third objective of this research is to analyze the role of ICT in social networks. Traditionally, social networks in the cultural economy are geographically constrained (Gertler 2003; Storper and Venables 2004). In the digital age, however, independent cultural producers actively use the Internet to stay abreast of rapidly changing trends and to forge valuable contacts in the art world (Johnson 2008). The decentralized communication and information infrastructure of the Internet helps social networks become less constrained to particular places than in the past.

To accomplish the third objective, I pose the following research questions:

- How do independent cultural producers use the Internet to create and manage social networks with both customers and other cultural producers?
- Are there advantages to living near a sizable community of independent cultural producers that the Internet cannot confer?
- What are the limits to relying upon electronic means for social networks?

1.4 Chapter Organization

In Chapter 2, I provide an in depth overview of scholarship and theories pertaining to independent arts and crafts. This discussion provides the reader with a solid understanding how arts and crafts have evolved in the United States since the mid-19th century. I conclude the discussion by detailing the evolving relationship between traditional arts and crafts and technology.

Following the review of arts and crafts, I move into a discussion of the two themes that inform this dissertation: agglomeration and knowledge. With respect to agglomeration, my focus is upon how geographers, sociologists, and economists have incorporated various permutations of agglomeration theory to understand the cultural economy. I then argue that traditional applications of agglomeration are still relevant to the cultural economy but need to be updated to account for changes that have occurred in the digital age. I then review the unique processes of knowledge production and acquisition and their relationship to social networks in the cultural industries. I explain how these knowledge-based processes are changing in the digital age and relate those changes to indie crafts.

Chapter 3 presents the methods and methodology used in this research. This chapter includes the research design, data collection procedures, and data

analysis procedures used in the dissertation. Chapter 4 and Chapter 5 present the results. To maintain consistency with the literature review and the order of the research questions, Chapter 4 presents findings concerning patterns of agglomeration in digital age cultural industries. The results from the quantitative analysis in Chapter 4 demonstrate that indie craft production has a unique geography. Whereas mainstream cultural industries cluster in large metropolitan areas such as New York, Los Angeles, and San Francisco, indie craft producers cluster in second-tier metropolitan areas.

Chapter 5 builds upon the quantitative results from Chapter 4 by examining how clusters function in the digital age using qualitative methods. To address the second research objective, Section 5.1 discusses how barriers to entry and localized support mechanisms directly impact the geography of independent cultural production in the digital age. To address the third research objective, Section 5.3 discusses how independent cultural producers adapt their business to the Internet age by networking with both customers and other cultural producers. I conclude in Chapter 6 by discussing how the findings presented in this dissertation contribute to existing knowledge of the cultural industries and by suggesting avenues for future research.

CHAPTER 2

LITERATURE REVIEW

2.1 Defining the Cultural Economy

The cultural economy is the theoretical framework from which this dissertation draws its inspiration. The term "cultural economy" refers to the rapid convergence between economic development strategies and the commodification of human culture (Scott 1997). This convergence gives rise to a variety of industries "making products with high aesthetic, semiotic or 'semaphoric' value and content" (Reimer, Pinch, and Sunley 2008, 152; Lash and Urry 1994; Molotch 1996; Scott 1997; Santagata 2004). The outputs of cultural industries are goods and services with greater subjective meaning than utilitarian purpose (Bourdieu 1993).

Examples of "goods" may include "manufactured products through which consumers construct distinctive forms of individuality, self-affirmation, and social display," such as fashion or jewelry, while "services" may "focus on entertainment, edification, and information," such as films, music, or museums (Scott 2004, 462).

Over the past two decades, the cultural economy has accounted for an increasing share of economic output in many advanced capitalist economies as they shift strategies to achieve economic competitiveness (Scott 2004). During much of the 20th century, firms and their constitutive national economies achieved competitiveness by placing downward pressure on operating costs in the secondary sector (Pratt and Jeffcutt 2009a). Such strategies included moving manufacturing centers to places with lower wages and regulations and substituting manual labor with technology.

While these strategies are still important to economic competitiveness, there is also a more recent push to emphasize quality, innovation, and creativity as the basis of competition (Harrod 1995; Castells and Hall 1994; Florida 2002c; Malecki 2007). The "old economy," in other words, trades in price, while the "new economy" trades in ideas (but for a critical view of this dichotomy, see Pratt 2004; Pratt and Jeffcutt 2009a).

Clearly, firms that emphasize quality, innovation, and creativity and trade in "ideas" represent a tremendous variety of industries and come from a broad range of economic sectors. Indeed, it would be rather difficult to find a firm that does not at least claim to emphasize quality, innovation, and creativity in some form or fashion. The ubiquity of the term "creative economy" further

complicates defining the cultural economy because these two terms, along with "creative industries" and "cultural industries," are often used interchangeably (Pratt 2004; Pratt and Jeffcutt 2009a). Because of the ambiguity of the term "cultural economy," a brief point of clarification is warranted.

The term "cultural industries" gained prominence in the late 1990s and early 2000s with a series of studies that sought to identify those industries that supply cultural products and carry symbolic content, convey social meaning, and/or provide personal gratification (e.g. Melucci 1996; Scott 1997; Tilly 1994; Holt 1997). Though not all studies agree upon a single definition of the cultural industries, they generally refer to "those domains of economic activity that are focused on a cultural output," such as "the audiovisual industries, sport, live performance, heritage and the visual arts" (Pratt 2004, 120; see also Melucci 1996; Diani 2003).

The term "creative industries," by contrast, refers to a wide variety of high human capital jobs that epitomize the new economy. The term gained usage following the publication of Richard Florida's (2002c) best-selling book The Rise of the Creative Class. The creative class, who labor in the creative industries, "engage in work whose function is to 'create meaningful new forms'" (Florida 2002c, 68), presumably by applying their skills and advanced training to

generate new ideas and arrive at innovative solutions for complex problems. Critics charge that the "creative class" construct measures human capital rather than cultural or creative output (Markusen 2006). Other critics maintain that it is inappropriate to label firms that produce creative products as "creative" because creativity is "a process requiring actors, knowledge, networks and technologies that interconnect novel ideas and contexts" rather than a discrete entity that can be measured (Pratt 2004, 120).

Scholars also argue that the terms "creative class" and "creative industries" carry negative political baggage. In the United Kingdom, the "creative industries" are purely a political construct of the New Labour party. After gaining power in 1997 the party sought to associate itself with the knowledge economy of the 21st century rather than Britain's declining industrial base (Oakley 2004). In the United States, the creative industries are associated with neoliberal urban development agendas "framed around interurban competition, gentrification, middle-class consumption and place-marketing" (Peck 2005, 740).

Bearing in mind the numerous criticisms directed at the terms "creative industries" and "creative class," I will use the terms "cultural economy" and "cultural industries" rather than "creative economy" or "creative industries." Furthermore, the object of inquiry in this study clearly has "high aesthetic,

semiotic or 'semaphoric' value and content" (Reimer, Pinch, and Sunley 2008, 152), which is a defining characteristic of a cultural industry.

In addition to debates over terminology, scholars have yet to agree upon how to delineate the boundaries of the cultural economy. Although some scholars exclude cultural products that others include and vice versa, there are two approaches used to operationalize the cultural economy. In the industrial approach, the cultural economy is measured by summing together the employees and/or establishments that trade in cultural products. This approach defines the cultural economy according to what a worker or a firm produces.

The occupational approach, by contrast, defines the cultural economy on the basis of what the firm or worker *does* rather than on what they *make* (Markusen et al. 2008). For example, the industrial approach would count the number of employees and establishments in the Los Angeles film industry, whereas the occupational approach would distinguish between actors, directors, costume designers, and all other subcategories of employment that comprise the film industry.

Having established the concept of cultural economy, the following sections review specific aspects that dominate the literature. I identify two themes that are commonly thought to shape the geography of the cultural economy:

agglomeration and knowledge. Following a review of literature pertaining to these two themes, I turn to how modern technology influences the factors that shape the geography of the cultural economy.

2.1 Agglomeration in the Cultural Industries

The most commonly cited attribute of the cultural industries is their tendency to concentrate in large metropolitan areas (e.g. Storper and Scott 1995; Scott 2000a; Bassett, Griffiths, and Smith 2002; Turok 2003; Power and Scott 2004; Scott 2004; Schoales 2006; Reimer, Pinch, and Sunley 2008). To explain the urban concentration phenomenon, scholars often turn to agglomeration theory, which dates back to Alfred Marshall's (2007; 1920) studies of burgeoning industrial towns in 19th century Britain.

Marshall famously pointed out that there is "something in the air" when firms and workers are in close proximity to one another that creates and transmits knowledge. He noted that workers who cluster in industrial districts belong to a specialized community that rapidly diffuses the "secrets" of an industry, enabling them to learn their trade faster and produce more efficiency-boosting innovations than their counterparts outside the district.

Over one hundred years later, Marshallian notions of industrial agglomeration are still prevalent in economic geography literature. Scholars have since refined Marshall's agglomeration theory by distinguishing between two types of agglomeration economies that provide different sets of benefits: urbanization and localization.

Urbanization economies are efficiencies and cost savings that result from the agglomeration of *diverse* economic activities in one region or urban area (Malmberg, Malmberg, and Lundequist 2000; Scott 2000b). Efficiencies accrue because cultural industries frequently transact with one another in both traded and untraded ways. Traded transactions include services, supplies, and personnel, while untraded interactions include the conventions and rules that coordinate economic life (Storper 1997; Scott 2006a). Proximity in dense urban areas accelerates the speed of these transactions while also increasing trust between the parties involved (Storper and Venables 2004).

Cost-saving benefits accrue because diverse firms can mutually take advantage of local resources and institutions (such as universities) rather than having to bear the total cost of knowledge, information, and research facilities on their own. Multiple firms, even if they are in competition, can access these resources without necessarily exhausting them for others. From the perspective

of a cultural producer, local artists, graphic design students, and university-sponsored art programs can be major sources of ideas and personnel. Since cultural industries "are frequently subject to competitive pressures" (Scott 2004, 462), they benefit substantially from the efficiency-boosting and cost-saving features of urbanization economies.

Localization economies are efficiencies that result from the co-location of firms within the *same* industry. Prominent examples of localization economies are the high-tech industry in Silicon Valley (Saxenian 1994; Bresnahan, Gambardella, and Saxenian 2001) and the film industry in Los Angeles (Scott 1996). Specialized firms cluster around these industries and provide sophisticated services that are not available elsewhere, further increasing economic performance. Workers increase their skill profiles by moving freely between similar firms, enabling them to enhance and diversify their knowledge base in the process. Firms then benefit by investing fewer resources in training new employees because they enter with a wealth of knowledge gained elsewhere. Localization economies also increase the chance that firms will be exposed to early adopters of a new technology, potentially giving them a competitive advantage over latecomers (Kelley and Helper 1999). A number of scholars have documented localization economies in the cultural industries,

especially in the film industry (Coe 2001; Bassett, Griffiths, and Smith 2002; Turok 2003), the design industry (Vinodrai 2006; Reimer, Pinch, and Sunley 2008; Sunley et al. 2008; Leslie and Rantisi 2009), and new media (Pratt 2000; Batt et al. 2001; Christopherson 2002).

In addition to the economic benefits of agglomeration, cultural industries concentrate in particular urban areas because of policies specifically intended to attract them. These policies are especially influenced by recent research drawing parallels between the co-location of cultural industries and human capital. As many influential scholars demonstrate, cities and regions with more "talent," or higher levels of educational attainment, have a higher quality of life and higher rates of economic growth compared to places with low levels of educational attainment (Glaeser, Scheinkman, and Shleifer 1995; Florida 2002b; Glaeser et al. 2004; Shapiro 2005).

Scholars have documented these relationships since at least the 1960s (Jacobs 1961, 1969; Lucas 1988; Mankiw, Romer, and Weil 1992). The idea that high human capital workers flock to specific places with a particular set of lifestyle attributes, however, did not take shape until the turn of the 21st century (e.g. Brooks 2000; Florida 2000; Florida and Gates 2001; Florida 2002b, 2002a, 2002c; Latham 2003; Florida 2003; Morse 1991; Glaeser and Gottlieb 2006; Currid 2009).

In the past decade, urban policy makers and politicians have increasingly invested in projects intended to attract creative and highly educated individuals, entering into what McCann (2004) describes as the "competition for talent."

Artistic and cultural industries are key factors in the competition to attract high human capital individuals. While highly educated individuals move to cities with jobs that match their skill set, they also move to artistically and culturally rich places for consumptive and symbolic reasons (Brooks 2000; Florida 2002c; Markusen and King 2003; Currid 2006, 2009). For example, highly educated people show a strong preference for living in lively downtown neighborhoods with unique bars, cafes, and nightlife (Glaeser, Kolko, and Saiz 2001; Clark et al. 2002; Clark 2004). The presence of artists and other cultural workers in these places signals a vibrant, authentic urban landscape that is particularly attractive to high human capital workers (Lloyd 2005; Currid 2009). Alternative, edgy street scenes, in turn, signal a tolerant, open social milieu and help cultivate a "quality of place" that factors into the location decisions of highly educated workers (Florida 2000, 2002a).

Downtown investors, therefore, often target artists because they are thought of as agents of urban revitalization (Jacobs 1961; Zukin 1989; Lloyd 2005; Currid 2009). As a result, art and the cultural industries have become influential

components of urban economic development strategies. The policy outcome is to create urban environments that will attract bohemians and other "creative" people (Reimer, Pinch, and Sunley 2008).

A number of scholars, however, are highly critical of urban revitalization policies targeting the cultural industries purely for economic gain. The policies explicitly market alternative lifestyles, "authentic" urban spaces, and creativity itself not for their intrinsic value but for their economic utility. City officials remake old neighborhoods and urban cores into the trendy, edgy places that attract the creative class while displacing lower income established residents who are less "valuable" to the city's economy (Peck 2005; McCann 2007; Donegan and Lowe 2008; Markusen et al. 2008). Even the artists who originally moved into warehouse lofts for cheap studio space are eventually priced out by the wealthy and highly educated residents they helped attract (Zukin 1989). Furthermore, the relationship between the cultural economy and economic development relies upon "fuzzy causal logic" because the location decisions of artists are distinct from other high human capital workers, potentially rendering the amenities that are important for attracting highly skilled workers less important that one may think (Markusen 2006, 1922). These criticisms

notwithstanding, the cultural economy's role in urban revitalization is only set to increase in the coming decades.

A final reason cultural industries tend to agglomerate relates to the unique demand conditions for cultural products. Sophisticated local demand conditions are key determinants of an area's ability to foster successful industries because they push producers to innovate better products that eventually become competitive in globally distributed markets (Porter 1990; Brooks 2000; Glaeser, Kolko, and Saiz 2001; Florida 2002c). A sophisticated local consumer base for the cultural industries comprises "individuals who attend art galleries, buy the art on the wall, go to opera and play openings, and generally support the arts in tangible, economically measurable ways" (Currid 2009, 379). Therefore, cultural industries agglomerate around sophisticated consumer bases because they require a "considerable population with disposable income to consume cultural products… (and) fund and support their goods and services" (Currid 2009, 371).

2.3 Unique Knowledge

The second theme appearing in many studies on the cultural economy is the role of unique forms of knowledge. The type of knowledge important to cultural industries is distinct from the types of knowledge relevant to other sectors of the

new economy, such as engineering and computer programming (Coenen, Moodysson, and Asheim 2004; Asheim, Coenen, and Vang 2007; Gertler 2008; Moodysson 2008). Whereas scientific and technical industries depend upon analytical and synthetic knowledge, the cultural industries depend upon symbolic knowledge.

Analytical knowledge is most important when new knowledge comes from verification processes inherent in the scientific method. The outputs of this type of knowledge are readily codifiable. Codification refers to an underlying symbol system, such as text-based communication, that governs how one uses the knowledge. To apply codified knowledge, one must follow a standardized set of rules that can be easily repeated once mastered (Storper and Venables 2004). Examples of industries that depend on analytical knowledge are drug development and biotechnology (Gertler 2008).

Synthetic knowledge arises from novel combinations of existing knowledge. This type of knowledge comes from experimentation and trial-and-error discovery. The prevailing cultural, institutional, and regulatory environments strongly shape synthetic knowledge (Gertler 2008). Synthetic knowledge is important in research and development facilities that make incremental improvements to existing products.

Finally, the cultural industries like film, music, fashion, design, and art depend upon symbolic knowledge (Asheim, Coenen, and Vang 2007). Rather than creating new products, symbolic knowledge deals with the creation of new cultural meaning, such as fashion and art (Drake 2003). Cultural industries tend to be design-intensive and require that workers stay abreast of rapidly changing trends and craft skills (Sunley et al. 2008). This sort of knowledge is transferred tacitly, which is to say through "a set of rules which are not known as such to the person following them" (Polanyi 1958, 49-53; cited in von Hippel 2005). Successful tacit knowledge transfer "requires social interaction and the development of shared understanding and common interpretative schemes" (Lam 2005, 125).

Since tacit knowledge is not codified into a written set list of rules or instructions, it is best transmitted via face-to-face communication in a "buzz environment" (Storper and Venables 2004). Buzz is the localized flow of specialized knowledge and information between workers in the same industry (Bathelt, Malmberg, and Maskell 2004). For example, workers in the film industry of Los Angeles or the art industry of New York happen upon insider news, gossip and chance meetings by just "being there" (Gertler 2003). The information and networks associated with the buzz environment are difficult to

access remotely because of their reliance on face-to-face communication, giving cultural industries an incentive to cluster in one place.

Cultural workers have additional incentives to agglomerate. Many cultural workers make their living from short-term projects and contracts and work with a variety of small firms, which can lead to highly variable and unstable employment prospects (Christopherson 2002; Grabher 2002). To shield against downturns in employment, many cultural workers establish dense social and professional networks with former colleagues, clients, and firms (Reimer, Pinch, and Sunley 2008). Maintaining these networks allows cultural workers to build up a positive reputation and establish trustworthiness, which can lead to more contracts and assignments on projects.

Knowledge of employment opportunities, information regarding a potential colleague's trustworthiness, and access to informal professional ties are forms of tacit knowledge that depend "upon face-to-face meetings and are fostered by serendipitous meetings such as those encouraged by urban settings" (Reimer, Pinch, and Sunley 2008, 162; see also Jacobs 1969; Granovetter 1982; Andersson 1985; Lorenzen 2002). Cultural workers benefit from clustering because they gain superior access to tacit knowledge and buzz.

2.4 The Cultural Economy in the Digital Age

Although agglomeration and knowledge are the most dominant themes in the literature, a growing body of research considers the relationship between modern information and communication technologies (ICT) and cultural products. In research inquiries ranging from new media (Pratt 2000; Christopherson 2002), the music industry (Leyshon 2009), and the film industry (Currah 2007a, 2007b), scholars are attempting to resolve the tensions between decentralization pressures created by ICT on the one hand and the continuing importance of geography to the cultural economy on the other. The rise of digitally traded cultural content, such as MP3 music files, artistic images, and films, means that the modern cultural economy is especially susceptible to decentralization.

The Internet allows for instant acquisition, manipulation, reproduction, and redistribution of digitized cultural content at little or no cost (Benkler 2006). With over one billion Internet users in the world (Dicken 2007), digital production and consumption networks potentially change how the cultural economy operates. In particular, the digital turn interacts with three important aspects of the cultural economy: agglomeration, knowledge, and amateurization.

2.4.1 Agglomeration in the Digital Age

As the prior sections have shown, contemporary economic geography literature rests on the premise that proximity matters (see also Porter 1990; Krugman 1991a, 1991b; Porter 1998). In addition to efficiency boosting and cost-saving benefits, agglomerations greatly increase a firm or individual's ability to transfer and absorb knowledge (Audretsch and Feldman 1996; Glaeser 1999; Maskell and Malmberg 1999). Spatial concentration facilitates knowledge exchange and learning through "haphazard, serendipitous contact among people" (Jacobs 1961, 1969; Andersson 1985; Florida 2002c). The collective benefits confer a substantial competitive advantage to economic actors within agglomerations (Porter 1990, 2000).

However, technological advancements of the past few decades change the ways in which economists and geographers understand the spatial organization of the cultural economy. Modern transportation and communications technologies, for example, have a "time-space shrinking" effect as they help overcome the frictions of classic geographic concerns such as distance, space, and time (Brunn and Leinbach 1991; Adams 2009). Due in part to time-space shrinking technologies, economic activity is becoming "deterritorialized" in the modern age (Dicken 2007, 19). In other words, economic interactions can now

take place in *topological* space as commodities move between networks of nodes regardless of their location in physical space. In the terms of Manuel Castells (1996, 2000), the economy is shifting from being a "space of places" to a "space of flows," meaning it functions as nodes in a network whose ability to process and distribute information is more important than physical location.

Deterritorialization has important implications for the 21st century cultural economy. For example, whether the creative industries will continue to cluster in global cities is not entirely clear in the digital age (Reimer, Pinch, and Sunley 2008). On the one hand, the largest metropolitan areas and global cities are seen as privileged nodes that have superior capacity to receive, process, and transmit information that generates cultural products (Scott 2000a). Some cultural industries continue to grow in large cities despite contraction in other places, suggesting that industrial activity is "reinforced by agglomerative spatial dynamics" (Power 2003, 178). While ICT facilitates the global distribution of cultural content, it may also strengthen existing agglomerations as localized production expands to meet rising exports (Scott 2004).

On the other hand, "new technologies, techniques and communication networks facilitate creative practice in a growing range of sites" such as small cities, suburban locations, and rural areas (Hracs 2010, 75). For example, the

Internet grants cultural workers the freedom to access markets and information regardless of their location (Markusen and Schrock 2006). In addition, the availability of cheap and accessible technology capable of producing and distributing art, music, or films has increased dramatically in the past ten years (von Hippel 2005). Digital technologies lower the barriers to entry in cultural production and increase the amount of competition within some sectors of the cultural economy (von Hippel 2005). These technologically-mediated trends create new opportunities for small production centers to compete in the cultural economy, even if one or a few large centers remain dominant (Scott 2001, 2004; Reimer, Pinch, and Sunley 2008; Hauge and Hracs 2010).

2.4.2 Knowledge and ICT

The second interaction ICT has with the cultural economy concerns knowledge flows. Tacit knowledge acquisition is traditionally seen as localized learning processes mediated through face-to-face interaction (Asheim 1996; Maskell and Malmberg 1999). Spatial agglomerations, in part, are a response to the need to exchange certain types of knowledge that cannot be exchanged effectively over great distances (Jaffe, Trajtenberg, and Henderson 1993; Asheim, Coenen, and Vang 2007).

However, recent scholarship maintains that tacit knowledge acquisition in cultural industries is more complicated than just "being there" because it requires diverse inputs and buzz from beyond the immediate locality (Gertler 2008; Sunley et al. 2008). Even though spatial agglomeration is still important, the knowledge-based industries also rely on long-distance sources of information to stay competitive (Gertler 2003). Bathelt et al. (2004) refer to these non-local sources of information as "global pipelines," which are translocal professional and personal networks through which valuable information flows.

Advanced ICT facilitates knowledge flows through global pipelines by "decoupling information from a physical location" (Gorman and Malecki 2002, 402), thereby compressing the time-space relationship between physically distant economic actors (Amin and Cohendet 2004; Moriset and Malecki 2009). Some geographers are skeptical of the importance of technologically mediated knowledge flows because "it is difficult to imagine the rich diversity of physical proximity, where the nuances of body language and face-to-face communication convey as much as (if not more than) verbal communication, being matched by virtual proximity" (Morgan 2004, 5).

Others counter, however, that face-to-face interaction is an important way to share knowledge, but not the only way (e.g. Urry 2004; Torre and Rallet 2005;

Torre 2008; Gertler 2008; Jones, Spigel, and Malecki 2010). The "communities of practice" literature, for example, maintains "it is relational proximity, rather than geographical proximity per se, that supports the joint production and sharing of tacit knowledge between economic actors" (Gertler 2008, 208; see also Allen 2000). Relational proximity refers to the common codes, languages, and conventions shared between economic actors in similar fields (Torre and Rallet 2005). These commonalities, rather than spatial proximity alone, make knowledge sharing considerably easier. In the absence of shared conventions and norms, physically proximate sites may have no relational links, while "sites that might appear distant and unconnected on a linear plane" share knowledge efficiently (Amin and Cohendet 2004, 93).

Through relational proximity, individuals can still benefit from specialized knowledge and buzz without living in the cultural cluster. For example, Jones et al. (2010) demonstrate empirically that the blogosphere creates a network of "virtual" buzz in cultural industries. In the case of New York's theater industry, this virtual buzz allows people anywhere in the world to obtain detailed, up-to-date knowledge from industry insiders. In cultural industries with digitized output, such as video game design, individuals from all over the world may

contribute code and design elements of the game without ever meeting any of the other developers (Arakji and Lang 2007).

2.4.3 Amateurization

The rise of amateur cultural production is the final interaction between ICT and the cultural economy. The increasing accessibility and lowering costs of information, publishing platforms, and editing tools have allowed amateur producers to enter the cultural industries en masse (Leadbeater and Miller 2004; Shirky 2008). These readily available online resources lower the barriers to entry in cultural production and increase competition within some sectors of the cultural economy. Eric von Hippel (2005) refers to the amateurization of cultural production as the "democratization of innovation."

The Internet-fueled amateur turn disrupts the cultural economy by producing socio-technical changes that fundamentally alter the bases of competition within cultural industries (Christensen 1997; Leyshon 2003). Using the Internet to access markets and information, hobbyists and enthusiasts can find their niche in the cultural economy without needing to locate in an area large enough to support demand for their products (Markusen and Schrock 2006). While elite cultural industries in large production centers such as fashion

in New York (Rantisi 2004; Currid 2007b) and films in Hollywood (Scott 2005; Currah 2006) traditionally dominate the cultural economy, the Internet creates new opportunities for small production centers to compete in niche markets, even if one or a few large centers remain dominant (Scott 2001, 2004; Reimer, Pinch, and Sunley 2008).

One important caveat, however, is that the Internet is far from being a spaceless, placeless phenomenon. Although the time-space continuum of the world has shrunk due to ICT advances, the global economic landscape is still highly uneven. The digital infrastructure is overwhelmingly urban, leaving many small towns and rural areas behind (Dodge and Kitchin 2001; Malecki 2002; Zook 2005). In addition, service provision favors wealthy places as companies compete for wealthy consumers (Gorman and Malecki 2002; Grubesic and Murray 2004). Having recognized the uneven geography of the Internet, however, it is also important to note that it is possible to have real-time online interactions with people anywhere else in the world even if broadband connectivity is relatively weak (Adams 2009).

2.4.4 Independent Craft Production and ICT

The phenomenon of independent (indie) craft production presents an ideal opportunity to study the relationships between ICT and agglomeration, knowledge, and amateurization. While other cultural industries such as fashion, film, and art were well established prior to the widespread adoption of the Internet, the indie craft phenomenon owes much of its rise in popularity to virtual networking between crafters all over North America (Johnson 2008).

Dating back the mid-1800s, traditionalists view technology as a threat to arts and crafts (Jönsson 2007). For traditionalists, the sudden introduction of technology in the pastoral landscape, represented by the "machine in the garden" in 19th century literature (Marx 1964), is largely to blame for the irrevocably changed relationship between humans and the material world. Machines and technology are antithetical to the ideal of craft, which means that crafts were designed, produced, sold, and shipped by a single person using low-tech or no-tech methods.

Modern indie crafters, by contrast, fully embrace technology and are producing what Press (2007, 252) calls a "quiet revolution" as they turn to the Internet and digital media to explore new creative strategies. The Internet is vital to modern indie crafts because it facilitates communication and knowledge

flows, “with the result that people can often work when, where, and with whom they want. This is turn leads to a more distributed approach to domain knowledge, where the power of the system resides more in adaptable configurations of expert niches, and less in institutionalized territories” (McCullough 1996, 266). In other words, prior to the Internet information distribution was hierarchical and came from recognized authority figures. In the digital age, however, there are multiple specialized channels through which information flows, enabling a proliferation of grassroots, non-institutional ideas that keep crafts edgy and fresh.

The non-hierarchical structure of indie crafts has also paved the way for thousands of amateurs to participate in cultural production in ways that are not typical of other sectors in the cultural economy. As Becker (1982) explains, an intricate network of gatekeepers strongly influences the value of and market for cultural products. Gatekeepers are “intermediaries and distributors that actively evaluate, distribute information and generate value and status for art/culture in a systematic way" (Currid 2007a, 388). These intermediaries are dealers, critics, and specialized journalists who govern the art world by influencing the public’s perception of what is “good” and “valuable” (Becker 1982; Crane 1989; Caves 2000; Currid 2007a).

Gatekeepers also influence who and what is available on the market by controlling the channels of distribution (Hirsch 1972; Entwistle 2006). Cultural industries have “contact men” (Hirsch 1972) who make decisions about which music will sell in record stores, which fashions will appear in retail stores, and which artists will be commercially viable. Gatekeepers, in sum, are “essential in the successful transformation (and transmission) of art/culture from symbolic to economic value" (Currid 2007a, 388).

In sum, indie crafters are small and independent producers who use new technologies to participate in the cultural economy. Indie crafters combine traditional and web-based social networks to form their own geographically distributed markets and valuation systems for cultural products (Walker 2008). The democratic nature of information and the ability to make connections virtually has helped the indie craft community grow from being scattered and isolated interest communities into a cohesive, well-organized consumer movement.

The following section presents an in-depth review of the history and community ethos of the indie craft movement. The intent is to familiarize the reader with independent cultural production and establish the meaning of “indie craft community” and “indie craft movement.” Section 5.2 and its

constituent subsections will be particularly useful for the interpretation of both quantitative and qualitative results in future chapters.

2.5 Arts and Crafts Through Time

2.5.1 Defining Craft

The meaning of "craft" has been evolving since the late 19th century. At different times the word has referred to folk art, pastoral art, decorative art, design art, modern art, and even activist art. Regardless of the label, crafters differentiate themselves from other cultural producers by controlling every aspect of the design and manufacture of an item and "invest (their) personality or self into the object produced" (Campbell 2005, 27). Items may include jewelry, clothing, furniture, or other material objects.

On a conceptual level, the definition of craft is rather elusive because it refers to a point of view, "an approach, an attitude, or a habit of action... It is a way of doing things, not a classification of objects, institutions, or people" (Adamson 2007, 4). This "way of doing things" refers to the unique type of workmanship and knowledge required of craft producers.

Compared to an industrial producer, for whom work is collective, predictable, and certain, work for a craft producer is most often individual,

unpredictable, and risky (Pye 1968). The "risky" or uncertain nature of craft production requires the craftsperson to invest substantially in his or her personal knowledge. An industrial producer does not need to possess a complete knowledge of how to assemble the final product because knowledge is distributed among many actors possessing many different skills (Dormer 1997). Crafts, on the other hand, are made and designed by the same person and require the craftsperson to know all the steps in the production process (Harrod 1995).

The most common way to increase knowledge of a craft is from hands-on experience, often through an apprenticeship with a master or in a similar type of one-on-one teaching environment (Needleman 1979). During this process the craftsperson increases his or her personal knowledge substantially by picking up on subtle practices that can only be discovered through demonstration, observation, and experimentation (McCullough 1996; Dormer 1997). Over time, the apprentice gradually acquires skill, which is the most fundamental defining feature of a craftsperson.

The importance of the relationship between personal knowledge and skill is best articulated by Michael Polanyi's (1958) work on tacit knowledge. In the oft-

cited passage below, Polanyi discusses the existence of skill, or "touch" in this case, and the difficulty of adequately defining the term:

> Musicians regard it as a glaringly obvious fact that the sounding of a note can be done in different ways, depending on the 'touch' of the pianist. To acquire the right touch is the endeavor of every learner, and the mature artist counts its possession among his chief accomplishments. The pianist's touch is prized alike by the public and by his pupils: it has a great value in money. Yet when the process of sounding a note is analyzed, it appears difficult to account for the existence of touch" (Polanyi 1958, 50; cited in McCullough 1996).

The masterful performance Polanyi describes may refer to music, to the arts, or to trades traditionally associated with crafts such as carpentry or metalworking. Regardless of the trade, skilled professionals distinguish themselves not by the *outputs* of production, but by the *process* of production.

Craft also defines itself in opposition to "fine art," or perhaps more accurately, fine art defines itself in opposition to craft. On a very basic level, crafts are material and functional while fine art is optical and purely aesthetic (Adamson 2007). On another level, however, the division between fine art and crafts is more philosophical. Many fine artists dismiss crafts because they carry

"the stigma of amateurism" (McCullough 1996, 15). The word "craft" is often intended as a "pejorative term, too often associated with kitsch, macramé, stoneware pots and DIY (do-it-yourselfers)" (Cooke 2007, 2). Crafters, on the other hand, criticize fine art for its lack of accessibility, high costs, and high barriers to entry. For many hobbyists and DIY enthusiasts, craft is an alternative creative platform that is "a nonhierarchical, democratic activity, open to all and necessary in a world supersaturated with impersonal consumables" (Cooke 2007, 2).

Even within the craft community itself there are oppositional stances concerning the true meaning of craft and the merits of certain activities over others. Pastoral craft, born from the tradition of craftspeople in rural Europe, generally carries a positive connotation. On the other hand, hobbyists and DIY enthusiasts are often dismissed as amateurs who lack the skill level and attention to detail of a true craftsperson (Adamson 2007). Despite divisions over identity, pastoralists, hobbyists, amateurs, and DIY enthusiasts are united by a shared commitment to skill, knowledge, and handmade production methods. As the proceeding section demonstrates, the ethos underpinning this shared commitment draws from nearly two centuries of intellectual refinement.

2.5.1 The Evolution of Craft

In medieval Europe, there was a societal distinction between "artes mechanicae" and "artes liberales," which referred to the art of work and the art of knowledge, respectively (McCullough 1996). However, there was no hard division between the artes mechanicae and what we now consider as "crafts." All manufacturers used labor-intensive, handmade production techniques by necessity and thus there was no specific cultural meaning attributed to "hand crafted" or "handicrafts" (Cooke 2007).

By the 19th century, however, the Industrial Revolution changed society's concept of labor and work. The shift towards industrial production methods increased the value of efficiency and standardization while the value of skill and handiwork decreased (McCullough 1996). In this social climate, prominent intellectuals feared that the prevailing attitude towards craft and automated production methods were dehumanizing and alienating people from their work (McCullough 1996).

Scholars such as Karl Marx, William Morris, and John Ruskin reacted with alarm to this changing reality and introduced the first "self-conscious" ideas of crafts and craftspeople. Their 19th century view of the craftsperson still exists today and is "set against a division of labor that involves the separation of

design and manufacture – a dichotomy that carries with it the implied, if not explicit, contrast between inalienable, humane, authentic and creative work, on the one hand, and purely mechanical, unfulfilling and alienating labor, on the other" (Campbell 2005, 25).

Labor, they reasoned, is "ennobling, humanizing and, hence, the ideal means through which individuals could express their humanity" (Campbell 2005, 25). William Morris, for example, "wrote and lectured about the importance of the joy inherent in craftwork and the significance of recognizing it as an artistic endeavor distinct from skilled trades or manufacturing" (Cooke 2007, 3). By introducing a production system that valued efficiency over aesthetics, industrialists changed the ways in which people related to the object world on a variety of levels.

On a financial level, industrial objects were cheaper because of a factory's ability to produce hundreds or even thousands of standardized items every day. While lower prices paved the way for millions to enter the middle class, it also gave birth to a "throwaway society" that failed to make connections among consumer behavior, labor standards, and environmental degradation (Cooper 2005).

On a psychic level, consumers grew apart from producers. The traditional marketplace brought buyers face-to-face with the makers of craft goods, resulting in a transaction that "begins in rough equality and ends in mutual benefit" (Zukin 2004, 12). Through personal interactions with producers, consumers could gain an appreciation for the labor and skill required to produce an item, while the producer could benefit financially. Trading with producers in face-to-face marketplaces kept the economy local and personal. Industrial production, by contrast, divorced makers from sellers, leaving an impersonal, globally distributed production chain in its wake.

Finally, on an aesthetic level, consumer goods were no longer the unique products of human self-expression and creativity, but rather were the banal and mundane artifacts of modernity (Campbell 2005). Mass-produced, generic objects replaced the unique and ornate features of craft production.

2.5.2 The Rise of Indie Crafts

Although the specter of the Industrial Revolution has long passed, the philosophical underpinnings of craft persist and have evolved over time. For Morris and others in the late 19th century, craft was a political response to what they perceived as negative forces shaping labor and industry. In the first half of

the 20th century, however, the political aspect of craft was mostly abandoned (McCullough 1996). Craft became associated with boutiques and inherited a Luddite label that was out of touch with the new modernity. Rather than being an incisive critique of modernity, handicrafts became associated with the "leisure class" (Veblen 1899, 1934) who displayed their wealth and prestige by investing time in antiquated hobbies rather than working (Adamson 2007). Seen through they eyes of a generation that experienced two world wars and the Great Depression, handicrafts were frivolous and self-indulgent.

Beginning in the 1950s, with profound social change on the horizon, a new generation became "discontented with the impersonal sense of big business (and) looked to craft for personal satisfaction within a bureaucratized world, becoming 'gentle revolutionaries,' resisting the banalities of suburban life" (Cooke 2007, 6). The new generation was particularly attracted to the notion that craft can reacquaint "people with the nature of how things are made" (McCullough 1996, 244) and be employed "as a rebuke to the prevailing state of affairs in the art world" (Adamson 2007, 149).

The post-war generation sought to re-politicize craft while also making it more accessible to those beyond the closed institutions of the art world. Craft's genesis was, after all, as a social critique, and "has always had a subversive

potential" (Cooke 2007, 6). In the 19th century, the political message of craft was to speak out against the adverse effects of mechanization on the quality and integrity of labor. While post-war adherents to the philosophy of craft retained this message, they also subverted accepted social conventions by experimenting with new genres, media, and styles on their own terms rather than those of mainstream academics and wealthy patrons (Oakes 2009).

The desire to engage in creative production on one's own terms eventually became known as the independent, or "indie" ethos. Although there are various artistic genres that embrace the indie ethos, they are united by a commitment to "rebellion, risk, tenacity, innovation, and resistance to convention" (Oakes 2009, 209). In the 1950s, the Beat movement exemplified the indie ethos as artists, poets, and writers redefined what was considered an appropriate or acceptable topic to address through the arts. In the 1960s and 1970s, the back-the-to-landers and the burgeoning feminist movement appropriated the ideal of craft to signal self-empowerment and independence (Cooke 2007; Halfacree 2007).

By the 1980s, however, the energy of the youth movements from prior decades dissipated and many former revolutionaries settled into suburban life and started families. Their children soon grew frustrated as they saw many of the dreams and promises of social change unfulfilled. Racial and gender

discrimination were still fixtures of American society. Record labels, music magazines, and other entertainment outlets successfully commodified the fashion, ideals, and cultural products of the "hippy" generation and sold it back to the public. In the terms of the cultural economy literature, multinational industries commodified human culture and had significant control over the avenues to success in cultural production (Scott 1997).

In response, youth from across the country, and particularly in the Pacific Northwest, began finding new ways to circumvent the mainstream cultural industries and express themselves on their own terms (Oakes 2009). The new counterculture identified with the do-it-yourself (DIY) ethos of the punk scene that emphasized difference, uniqueness, self-sufficiency, and above all, independence. For example, when aspiring new musicians could not afford studio time, they recorded in makeshift home studios using cheap and low-quality equipment. When the mainstream music press refused to cover their shows, they created their own press and distributed zines[1] (Triggs 2006). Finally, when mainstream labels rejected their sound and message as being too edgy, they created their own labels and distribution systems.

[1] Short for magazine, these are independently produced newsletters that are often copied, stapled, and distributed by the same individual. They tend to deal with political topics such as discrimination, racism, sexism, and freedom.

A rise in the number unemployed skilled workers from the dot-com bust of 2000 also helped indie crafting gain popularity in the Pacific Northwest. The bust created a surplus of individuals with a high degree of human capital in the region who needed new ways exercise creative impulses. Newly unemployed skilled workers were also searching for ways to simplify their lives and live in a more economically and environmentally sustainable manner, a lifestyle Schor (1998) describes as "downshifting."

Many of the highly educated and trained individuals learned traditional skills such as carpentry, sewing, pottery, and knitting as a way to make items for themselves and find new uses for items they already owned. Handmade and DIY items were an eco-friendly way to consume, since many projects come from recycled and reused materials.

Out of this climate of "experimentation, environmentalism, and eclecticism" emerged *ReadyMade Magazine* in 2001 (Oakes 2009, 187). *ReadyMade* is a Berkeley-based magazine and website that features a variety of DIY projects and how-to guides for those interested in living a "creative lifestyle." *ReadyMade* emphasizes self-empowerment, living a sustainable lifestyle, and finding creative uses for everyday items.

The commitment to sustainability, eco-friendliness, and living a "creative lifestyle" articulated in *ReadyMade* define the ethos of modern indie crafts. For some indie crafters the ethos includes a desire to spark a "consumption revolution" by forming "a community based on celebrating individual creativity and artisanal skill (and) rejecting mass-produced goods" (Walker 2008, 236). The consumption revolution is not simply a "refinement of mass consumer culture, but an overt challenge to it" (Walker 2008, 236). By challenging mass consumer culture, indie crafters take up political and/or social causes with the intention of making the world a better place. The recently coined term "craftivism" is often used to refer to the political and social mission of indie crafts (Greer 2007, 2008; Black and Burisch 2010).

The ethos of the modern indie craft movement is actually quite similar to its 19th century predecessor. Both movements' adherents express alarm at the ways in which outside forces change fundamental relationships between humans and the cultural artifacts they produce. In the 19th century, the outside forces took the form of fully mechanized factories that dehumanized workers and alienated consumers from the object world. In the 21st century, the outside forces take the form of a globalized economy that further exacerbate the existing fears of dehumanization and alienation. By shifting production to places with poor

environmental and labor records, the modern global economy physically and emotionally separates the production process from the act of consumption. While 19th century intellectuals were concerned about the factory's ability to produce millions of cheap, standardized products that deny consumers an outlet for creative self-expression, they could not have imagined the extent to which that fear would become embedded in modern consumer society. Through the centuries, the consistent message of craft production has been that consumers can resist the pressures of modernization and maintain their independence within capitalism (Holt 1997; Campbell 2005; Walker 2008).

2.6 Review of Primary Points

The purpose of this chapter has been to define key terms and establish a trajectory of thought. I first defined the cultural economy and situated indie craft production within a cultural economic framework. I then highlighted the importance of agglomeration and unique knowledge to understand the nuances of the cultural economy. After reviewing the appropriate literature and discussing the geographical implications of these two themes, I argued that technology influences our understanding of the cultural economy in three ways.

First, technology extends new opportunities to new places and challenges the geographic constraints that make agglomeration a defining feature of the cultural economy. Second, technology grants a new generation of creative producers access to knowledge that was once constrained to place. Third, technology makes it easier for amateurs and part-time workers to become cultural producers, thereby increasing competition within the cultural economy.

I concluded by arguing that the indie craft movement presents an ideal framework through which to study the links between technology and the modern cultural economy. In the following chapter I draw upon the background I have established to implement a research design and select appropriate data collection techniques.

CHAPTER 3

METHODS AND RESEARCH DESIGN

3.1 Characteristics of a Mixed Methods Design

To answer the research questions posed in Chapter 1, this dissertation uses a mixed methods research strategy. A mixed method design collects and analyzes quantitative and qualitative data in the same study (Creswell 2003). Although some scholars use the terms synthesis, multiple method, or multimethod to describe this research approach (Tashakkori and Teddlie 2003; Stewart et al. 2008), "mixed methods" has recently become the conventional term (Creswell 2003).

Research covering a wide range of topics cites numerous benefits to implementing a mixed methods research design (e.g. Winchester 1999; Coyle and Williams 2000; Bradshaw, Wood, and Williamson 2001; Langhout 2003; Madsen and Adriansen 2004). First, results gleaned from one method may inform or extend results gained from a different method (Coyle and Williams 2000; Langhout 2003). For example, whereas quantitative analysis may produce generalizable findings, it often lacks the in-depth understanding that qualitative analysis can provide. The results of qualitative analysis, by contrast, are highly

subject to the interpretation of the researcher and may explain a small number of cases that do not apply to a larger population. When researchers implement both methods in a complementary way, they add depth and richness and yield stronger inferences (Tashakkori and Teddlie 2003).

Second, a mixed methods design subjects research questions to a range of approaches to test if different methods consistently return similar results (Denzin 1989). This technique, commonly referred to as triangulation, rests on the assumption that no single method adequately addresses multiple explanations for the same problem (Patton 1999). Triangulation is also a response to the claim that qualitative methods lack validity (Blaikie 2000; Hemming 2008). Using both quantitative and qualitative methods, researchers can better explore alternative explanations and increase the validity of results (Johnson and Turner 2003; Stewart et al. 2008).

The mixed methods research design poses important challenges as well. Combining and interpreting results gleaned from different methods requires a good deal of skill on the part of the researcher. Mixed methods also require a more extensive data collection period and require that the researcher be proficient in both quantitative and qualitative data collection and analysis (Creswell 2003).

3.2 Types of Mixed Methods Designs

There are three primary strategies used to carry out mixed methods research: concurrent, transformative, and sequential (Creswell 2003; Miller and Fredericks 2006). When using a concurrent strategy, the researcher collects quantitative and qualitative data simultaneously "and then integrates the information in the interpretation of the overall results" (Creswell 2003, 16). Concurrent procedures often nest one type of data within another to examine either different questions or different levels of analysis in the same study. For example, an investigation into the effects of a university policy may distribute a quantitative survey to students and conduct interviews with administrators.

Researchers using the transformative strategy are interested in a particular theoretical lens more so than the methods themselves. The theoretical perspective may be a conceptual framework, an ideology, or advocacy position that strongly influences the research idea, the data collection methods used, and the research expectations (Creswell 2003). Transformative strategies are often employed in social sciences studies using a Marxist or feminist perspective. These two popular theoretical lenses are particularly well suited for the transformative strategy because the researcher's ideological position, rather than positivism or objectivity, has a strong bearing upon the selection of the research

questions and the interpretation of the results. For example, in Neil Smith's (1979, 1982, 1987) studies urban gentrification, the choice to focus on the displacement of low-income residents and uneven development followed from his prior choice to use Marxism as the dominant theoretical perspective in his research. In transformative studies such as Smiths', the interpretation and analysis of the results are funneled through a pre-determined theoretical lens.

This dissertation uses the sequential strategy[2] (Figure A-1), which elaborates upon the findings of one method with another method (Creswell 2003). The choice of which method to use first, either quantitative or qualitative, is left to the discretion of the investigator. In this research, the first research sequence (phase) uses quantitative methods to examine the geography of independent cultural industries.

The second phase elaborates upon those findings to add greater levels of detail and deeper insights than quantitative methods can provide. Since the second phase further explains the results of the first phase, this type of strategy is called the sequential explanatory procedure (Creswell 2003). In the sequential explanatory procedure, qualitative data are particularly useful for examining unexpected patterns or results that arise from quantitative analysis.

[2] Refer to Appendix for all relevant tables and figures.

3.3 Quantitative Data Collection

Etsy (www.etsy.com) hosts over three million items for sale at any given moment, making it the largest and most significant online market for indie crafts. The website provides each registered seller a "shop" where she or he may display photos and descriptions of items for sale. The website charges 20 cents for each item listed and takes 3.5 percent of the transaction cost. Crafters generally write a brief biography on their shop profile informing customers about store policies and directing them to personal blogs, Twitter accounts, or other online resources.

Since customers purchase items online and receive them through the mail, Etsy provides a series of ways to increase the level of trust and familiarity between customers and sellers. In addition to being able to send a private message to a seller, potential customers can see how previous customers have rated a seller according to the quality of the product and the smoothness of the transaction. Customers can also see when a seller "opened" his or her Etsy store and how many previous sales he or she has made.

Importantly, customers can also see where a particular seller lives. While the location feature is voluntarily for sellers, Etsy offers this option for two primary reasons. First, the location tool is a practical way for customers to sort through

the substantial quantity of items for sale. A customer living in Maine may not want to buy an item from a seller in Oregon simply because the postage and the time it takes to receive the item in the mail will likely increase. Other customers may want to purchase handmade jewelry specifically from Santa Fe or pastoral art from Vermont. Searching by location is an effective tool to simplify searches for particular items.

Second, Etsy encourages customers to use the location-based search engine to support the "buy local" movement:

> We're finding more and more people are interested in making purchases closer to home, whether to reduce their carbon footprint, support small businesses in their community, or to benefit their local economy. Use Etsy's Shop Local to connect with artists, crafters, and store owners in *your* town! (Etsy 2009)

These publicly accessible spatial data provide an unofficial census of artists who operate through Etsy and list a usable location. Since Etsy is the undisputed leader in the online indie crafts market (Taylor 2009), and the web is an integral component of the indie crafts movement (Johnson 2008), I argue that registered Etsy users are a reasonable proxy for the population of indie crafters in the United States.

In December 2009, an assistant and I downloaded the locations of all Etsy shops registered between the website's inception in July 2005 and November 2009. After downloading the locations from the shops of all 505,000 registered Etsy sellers, I checked each the spatial validity of each location. This procedure involved discarding unusable place names because they were fictitious (e.g. Never Never Land), not specific (e.g. southern California), or outside of the United States[3] since this research focuses exclusively on the U.S. cultural economy. Following a validity check, approximately 280,000 of the original 505,000 records remained.

Using a geographic information system, I aggregated all accounts with valid place names to the county level for the continental United States. For example, if the cities of Knoxville and Farragut of Knox County, Tennessee register 150 and 50 accounts, respectively, Knox County has 200 total accounts. Each metropolitan component (county) was then aggregated into 361 Metropolitan Statistical Areas (MSA). For example, the components of the Knoxville, Tennessee MSA are Anderson, Blount, Knox, Loudon, and Union counties. To determine the population of indie crafters living in the Knoxville MSA, I summed together the populations of the five component counties. All counties

[3] Etsy estimates that U.S. sellers comprise 86 percent of registered users (Etsy 2008).

that are not components of an MSA according to the Office of Management and Budget's 2005 definition of MSAs (Census 2005) are excluded from this analysis.

Also excluded from this analysis are the Alaskan MSAs of Anchorage and Fairbanks, the Honolulu, Hawaii MSA, and twelve additional MSAs in the continental United States. I chose to exclude the Anchorage, Fairbanks, and Honolulu MSAs due to the presence of potentially confounding variables. For example, sellers generally factor the cost of shipping into the price, potentially making the cost of Alaskan and Hawaiian crafts higher. Customers from the continental U.S. may also be wary of purchasing from Alaska or Hawaii due to the increased delivery time.

Twelve mainland MSAs[4] were excluded on the basis that they are outliers with abnormally high or low values due to unique circumstances. For example, the number of arts institutions and supporting industries in the Barnstable Town, Massachusetts MSA seems disproportionately large until one considers that the customers are the wealthy tourists and residents of Cape Cod. Similarly, the array of entertainment services in the Myrtle Beach, South Carolina MSA reflects a tourist economy rather than a vibrant urban setting teeming with

[4] The excluded MSAs are Ocean City, NJ; Pittsfield, MA; Barnstable Town, MA; Myrtle Beach, SC; Bridgeport, CT; Vineland, NJ; Salisbury, MD; Sandusky, OH; Hinesville, GA; Pine Bluff, AR; Danville, VA; Carson City, NV.

creative energy. Conversely, small MSAs such as Hinesville, Georgia and Pine Bluff, Arkansas have very few, if any, artistic industries and negatively skew the distributions of many independent variables.

The rationale for limiting the analysis to MSAs is two-fold. First, the cultural industries concentrate overwhelmingly in urban areas (Florida 2002c; Markusen and Schrock 2006). Non-metropolitan counties comprise only eight percent of registered Etsy accounts and ten percent of artistic employment in the United States (McGranahan and Wojan 2007).

Second, current data for population estimates, demographic characteristics, and employment statistics are less comprehensive and less reliable for non-metropolitan areas. By focusing exclusively on metropolitan areas, I can incorporate the most recent data available to assess accurately spatial patterns of cultural production in the digital age.

3.4 Quantitative Data Analysis and Hypotheses

As stated in Chapter 1, the first objective of this research is *to examine the patterns of agglomeration in independent cultural production*. I use two standard quantitative techniques to accomplish this objective. First, I use a location quotient to see where crafters selling through Etsy are concentrated in the

United States. Location quotients "compare an area's percentage share of a particular activity with its percentage share of some basic aggregate" (Appold 1995, 32). The goal of this procedure is to examine the relative spatial concentrations of a particular phenomenon. The formula used to calculate the location quotient is the following:

$$Location\ Quotient = \frac{(Indie\ Crafters\ in\ MSA/Total\ Employment\ in\ MSA)}{(Total\ Indie\ Crafters\ in\ US/Total\ Employment\ in\ US)}$$

The second quantitative method I use is regression. Although location quotients provide an overview of the geographic distribution of indie crafters, the technique is unable to offer insights into why one dot on the map appears more prominent than another. Using regression I can examine how particular factors influence the number of indie crafters in an MSA while holding other factors constant. In the following subsections, I introduce the variables included in the regression model, present the rationale for their inclusion, and discuss their anticipated influence.

3.4.1 Indie Crafters

The dependent variable in the model is *Indie Crafters*. This is the number of Etsy accounts in an MSA per 10,000 residents according to 2008 population estimates. Data come from Etsy's website (www.etsy.com) and were obtained in the manner described previously.

3.4.2 Social Characteristics

The first group of independent variables measures the presence of local social characteristics that have an ideological relationship with the indie crafts movement. In this section, I argue that MSAs with high proportions of same-sex headed households, high levels of social and cultural diversity, large concentrations of alternative urban agricultural operations, and high numbers of social and environmental advocacy organizations signal a social milieu that embraces the philosophical tenets underpinning indie crafts. These tenets include openness to alternative worldviews and rebellion against the status quo.

Tolerance is the proportion of same-sex headed households in each MSA. These data are from the ACS (American Community Survey) three-year estimates (2006 to 2008). The ACS questionnaire gives respondents the opportunity to indicate which type of household describes their current living

arrangement. The *Tolerance* variable is the sum of "unmarried partner-households" with "male householder and male partner" or "female householder and female partner" per 10,000 households.

Support for including the *Tolerance* variable comes primarily from Richard Florida's work on the creative class (Florida and Gates 2001; Florida 2002b, 2002c). For Florida, local acceptance of alternative lifestyles is a signal that the region is open and tolerant of nonmainstream views. In related work, Florida (2002a) demonstrates empirically that artistic and cultural production thrive in tolerant urban environments. Drawing from this logic, I pose the following hypotheses:

H_0: *Tolerance* has no statistical effect upon *Indie Crafters*

H_A: *Tolerance* significantly increases *Indie Crafters*

Urban Farms is the number of community-supported agriculture (CSA) operations and agricultural cooperatives divided by the ratio of crop to land area in each MSA. Community-supported agriculture is a market arrangement that allows consumers to buy produce directly from farmers. For an upfront fee, the consumer receives weekly, in-season produce from an agreed upon pickup location. Similarly, a cooperative is an agricultural arrangement in which

farmers pool their resources to minimize individual risks and mutually benefit from one another's expertise.

Thompson and Coskuner-Balli (2007) maintain that alternative agricultural models are a critical response to the corporatization of American farming and draw parallels between the ideology underpinning these arrangements and the arts and crafts movement. Both movements seek to transform prevailing trends in mainstream consumerism by wresting control of agriculture or creativity from corporations and placing them in the hands of local individuals. I argue that high levels of interest in alternative urban agricultural arrangements indicate a willingness to challenge the status quo of prevailing market functions. Based upon this argument, I pose the following hypotheses:

H_0: *Urban Farms* has no statistical effect upon *Indie Crafters*

H_A: *Urban Farms* significantly increases *Indie Crafters*

Data for this variable are from the 2007 USDA Census of Agriculture. The choice to divide by the ratio of crop to land area rather than land area alone was made to account for low density MSAs with outlying component counties that have an unusually high proportion of land under cultivation. For example, MSAs in the Midwest often have a high number of CSAs and cooperatives

because peripheral counties are heavily agricultural compared to outlying counties of MSAs on the coasts. The purpose of the variable is to capture the extent to which an MSA engages in *urban* agricultural practices and arrangements, not to determine how agricultural the MSA is in general. Failure to account for MSAs with many functionally rural component counties does not accurately accomplish this goal.

Diversity is the percentage of foreign-born residents in the MSA population. The data for this variable are from the three-year estimates of the ACS (2006-2008). The rationale for including this variable draws primarily from the work of Jane Jacobs, who has long argued that the economic and social diversity of cities in compact space leads to "haphazard, serendipitous contact among people" that in turns stimulates creativity (Jacobs 1969). Great cities are places where people from all backgrounds comingle and share their energy and ideas to stimulate innovation and wealth (Jacobs 1961). Dense urban areas foster a creative milieu because they facilitate heterogeneous interactions that accelerate innovation and learning (Jacobs 1961; Andersson 1985). Building upon Jacobs, Florida (2002c) has more recently asserted that the diversity of cosmopolitan cities stimulates creativity because open social networks are more conducive to

experimentation and resist tradition. Drawing from the analyses of Florida and Jacobs, I pose the following hypotheses:

H_0: *Diversity* has no statistical effect upon *Indie Crafters*

H_A: *Diversity* significantly increases *Indie Crafters*

Advocacy is the number of "social advocacy organizations" (NAICS 8133) per 1,000 MSA residents. Social advocacy organizations include human rights organizations and environmental organizations. The choice to include *Advocacy* is based upon the ethos underpinning the modern craft movement. As reviewed in Chapter 2, many indie crafters view their trade as a more socially and environmentally sustainable alternative to mainstream capitalism. I use *Advocacy* as a proxy for the level of local support for pro-social and pro-environmental views, and hypothesize the following relationship with the dependent variable:

H_0: *Advocacy* has no statistical effect upon *Indie Crafters*

H_A: *Advocacy* significantly increases *Indie Crafters*

3.4.3 Demographic Characteristics

The second group of independent variables measures select demographic characteristics that are typically related to artistic production. Drawing upon commonly cited literature pertaining to the cultural industries, I maintain that MSAs with high proportions of young adults and highly educated individuals offer a social environment that is conducive to artistic production.

Young Adults is the percentage of residents between the ages of 25 and 34 years of age according to the three-year estimates[5] (2006 to 2008) of the American Community Survey (ACS). The rationale for including this variable is two-fold. First, a large proportion of indie crafters fall into this demographic cohort (Levine and Heimerl 2008). One of the key features of the indie crafts movement is that young people reclaim and rebrand domestic skills that are typically associated with much older generations (Walker 2008).

Second, young people are often at the forefront of art- and culture-led revitalization strategies in urban areas (Currid 2009). Investments in downtown art galleries, studios, and theaters often attract additional investments in cafes,

[5] Three-year estimates are the average characteristics of a location collected over a three-year period. The sample for this dataset is larger than the yearly sample size.

bars, and other nightlife activities that cater to young people. Drawing from this literature, I pose the following hypotheses:

H_0: *Young Adults* has no statistical effect upon *Indie Crafters*

H_A: *Young Adults* significantly increases *Indie Crafters*

Education is the percentage of adults over the age of 25 with at least a Bachelors Degree. Data are from the 2006-2008 ACS three-year estimates. Once again drawing from Florida's work, levels of advanced education are highly correlated with artistic and creative output (Florida 2002c). Social philosopher Pierre Bourdieu (1984) also draws a parallel between educational attainment and the arts. For Bourdieu, places with higher levels of educational attainment express interest in the arts and culture as a vehicle to obtain social status. Based on this logic, I pose the following hypotheses:

H_0: *Education* has no statistical effect upon *Indie Crafters*

H_A: *Education* significantly increases *Indie Crafters*

Income Gini is a measure of local income inequality. This measure is the Gini coefficient for the income distribution of each MSA. A Gini coefficient of 0 would indicate perfect income distribution, meaning that all incomes are equal.

A Gini coefficient of 1 would indicate maximum inequality, meaning a significant gap between the highest and lowest incomes. These data are pulled directly from the ACS calculations. *Poverty* is a related measure of local socio-economic status. This variable comes from the ACS three-year estimates and is the percentage of all individuals living below the poverty line.

The rationale for including these two variables is two-fold. First, while similar analyses use per-capita income as an independent variable (Florida 2002b, 2002c), preliminary trials indicate significant multicollinearity problems with measures of educational attainment. The variables *Income Gini* and *Poverty* are proxies for income and diagnostic tests indicate no problems with multicollinearity.

Second, I expect that cities with large disparities between rich and poor and those with high poverty rates negatively impact the number of indie crafters. The indie craft movement is a bottom-up expression everyday or "vernacular" creativity (Edensor et al. 2010; Hracs 2010; Markusen 2010). In other words, indie crafters tend to create art in their spare time and are generally not full-time or professional artists. The items they produce are often functional rather than abstract and reflect the aesthetic of the middle-class. I argue that high levels of inequality and poverty indicate a local creative milieu dominated by the elite

rather than the middle-class. Whereas the elite art world is exclusive, indie crafts are inclusive and accessible. I expect indie crafters to thrive in cities that do a better job of fostering a middle-class. Drawing from these arguments, I pose the following hypotheses for these two variables:

H_0: *Income Gini* has no statistical effect upon *Indie Crafters*

H_A: *Income Gini* significantly decreases *Indie Crafters*

H_0: *Poverty* has no statistical effect upon *Indie Crafters*

H_A: *Poverty* significantly decreases *Indie Crafters*

3.4.4 Level of Support

The next set of independent variables measures the levels of support and resources local artists have available. Jackson et al. (2006, 41) maintain that cities where artists can find economic support and arts-related employment "provides an indication that the place has a cultural ecological system supporting the development of artists." Evidence of this "cultural ecological system" may be the presence of arts-oriented charitable organizations or employment opportunities in theaters and other ancillary arts industries.

As Jane Jacobs (1961) and others (Clark et al. 2002; Lloyd 2005; Currid 2009) have argued, artists also need places to meet and spontaneously exchange ideas with other creative people. These places include cafes, bookstores, and bars. Recently, "meeting places" may also refer to virtual spaces such as chat rooms and message boards. In this section, I measure the "cultural ecological system" available to indie crafters while also considering the digital infrastructure.

Art Firms is the percentage of self-employed artistic firms (NAICS 71151) relative to the total number of self-employed firms. These data come from the 2008 Nonemployer Statistics (NES) database provided by the U.S. Census Bureau. Firms included in the NES database are very small and have no paid employees.

The rationale for choosing NES data rather than the more commonly used Metro Business Patterns (MBP) data is that the life of the small-scale, self-employed artist included in the NES survey is quite similar to that of most indie crafters. For both types of artists, artistic production is not a primary source of income. Many indie crafters and self-employed artists are small-scale entrepreneurs who are attempting to get their work recognized and on the market while maintaining a full-time career. To sustain their small art businesses, both types of artists often depend upon community resources and

other artists. As a reflection of the level of artistic entrepreneurialism in a local area, I pose the following hypotheses:

H_0: *Art Firms* has no statistical effect upon *Indie Crafters*

H_A: *Art Firms* significantly increases *Indie Crafters*

Institutions is the sum total of charitable organizations, art dealerships, and fine art schools per 10,000 residents. Data for charitable organizations are from the 2008 release of the National Center for Charitable Statistics (NCCS). The NCCS is a data repository for the non-profit sector and is hosted at the Urban Institute in Washington, DC. Data for art dealerships (NAICS 45392) and fine arts schools (NAICS 61161) come from the 2008 Metro Business Patterns. The components of this variable capture the level of artistic resources available to indie crafters in each city. Cities with more grants, awards, educational institutions, and arts representatives tend to have robust cultural and arts scenes as well (Jackson, Kabwasa-Green, and Herranz 2006). Furthermore, many indie crafters receive training and support from art schools and professors. I therefore pose the following hypotheses:

H_0: *Institutions* has no statistical effect upon *Indie Crafters*

H_A: *Institutions* significantly increases *Indie Crafters*

Ancillary is sum total of theater companies (NAICS 71111), musical groups (NAICS 71113), dance companies (NAICS 71112), other performing arts companies (NAICS 71119), and museums (NAICS 71211) per 10,000 residents. These data come from the 2008 Metro Business Patterns. The logic for including this variable relates to the nature of employment in the art world. Art is often a secondary income for artists because the market for arts and crafts can be unstable. Many artists supplement their income by lending their talents to set and costume design at theater or dance companies, advertising campaigns and posters for bands, and to other specialized creative services (Markusen and Schrock 2006). I hypothesize that cities with employment opportunities in ancillary artistic industries will offer a more stable economic environment for indie crafters. Carrying that logic forward, I pose the following hypotheses:

H_0: *Ancillary* has no statistical effect upon *Indie Crafters*

H_A: *Ancillary* significantly increases *Indie Crafters*

Business is the sum total of cafes (NAICS 722213), sporting goods stores (NAICS 45111), craft supply stores (NAICS 45113), and microbreweries per 10,000 residents. These data also come from the 2008 Metro Business Patterns. The components of this variable capture the urban amenities that pertain to

crafters. A number of studies maintain that post-industrial cities compete for talented, young, creative class professionals with amenities such as cafes, bars, art galleries, and urban parks (Glaeser, Kolko, and Saiz 2001; Clark et al. 2002; Clark 2004).

As Markusen (2006) notes, however, the "creative class" includes a broad spectrum of workers whose only commonality is educational attainment. Artists, for example, may not have the same settlement patterns and amenity preferences as industrial engineers. For this reason, I chose to select only the urban amenities that correspond well with lifestyles of indie crafters.

Cafes tend to have a dual function for indie crafters. First, cafes often function as art galleries for independent and amateur artists. Cafes tend to have lower barriers to entry than traditional galleries and are not beholden to the tastes of wealthy donors or a board of directors. Second, cafes are important as "third place" hangouts for many indie crafters (Oldenburg and Brissett 1982). A third place is a public setting that offers its inhabitants an alternative social environment to work and home. Whether it is a café, a bar, or a bookstore, the third place provides "opportunities for experiences and relationships that are otherwise unavailable" (Oldenburg and Brissett 1982, 270).

The inclusion of sporting goods stores and craft supply stores captures the type of consumer amenities that directly pertain to indie crafters. The logic for including sporting goods stores is twofold. First, artists and other creative people often maintain an active lifestyle that includes hiking, kayaking, and other outdoor sports (Florida 2002c; McGranahan, Wojan, and Lambert 2010). High concentrations of sporting goods stores reflect a local demand for gear and equipment required to maintain an active outdoor lifestyle. Second, the bicycle shop[6] reflects the political dimension of independently minded consumerism. In the 21st century, cycling has become a symbolic rebuke against the overwhelming dominance of automobile culture (e.g. Cupples and Ridley 2008; Aldred 2010). I argue that concentrations of sporting goods stores reflect both a demand for equipment required to maintain an active outdoor lifestyle and a desire to make an ethical statement through consumerism.

Craft supply stores are essential to the consumption practices of indie crafters. While it is possible to order materials online, the presence of a physical store is an important asset for indie crafters. Anecdotal evidence gathered from field observation suggests that crafters enjoy patronizing local craft stores because they can evaluate the quality of the materials and shop at their own

[6] In the NAICS dataset, the bicycle shop is the most common type of "specialty-line" sporting goods store.

convenience. I argue that high concentrations of craft supply stores indicate a local demand for crafting supplies and positively correlate with the population of indie crafters.

Data for microbreweries come from the Brewers Association and represent all commercial microbreweries operating in urban areas as of 2007. Microbreweries are small-scale beer producers that have recently emerged as a rebuke to the mass-produced and homogeneous tastes of major producers like Miller and Anheuser-Busch (Carroll and Swaminathan 2000). Microbreweries produce small batches (less than 2 million barrels per year) of specialty beers that serve a niche market of choosy consumers and connoisseurs (Baginski 2008). The companies are independently owned and operated and must use traditional production methods and ingredients to distinguish the taste of microbrews from that of mass-produced beers (Tremblay and Tremblay 2005).

Microbreweries and indie crafts appeal to the sophisticated tastes of "creative class" consumers who shun generic, mass-produced items in favor of authentic, unique, and locally sourced alternatives (Hannan, Carroll, and Polos 2003; Schnell and Reese 2003). Niche producers like microbreweries and indie crafters often sponsor local events, volunteer in local organizations, and offer free classes or seminars as a way to give back to the community (Baginski 2008).

These actions are ways to foster close relationships with the communities that niche producers serve. Drawing from the logic outlined above, I pose the following hypotheses:

H_0: *Business* has no statistical effect upon *Indie Crafters*

H_A: *Business* significantly increases *Indie Crafters*

Internet is the number of providers of residential high-speed Internet connections per 10,000 residents. Data come from a 2008 report by the Federal Communications Commission (FCC). The Internet is the primary tool crafters use to communicate with other crafters, to disseminate their work to the public, and to reach geographically distributed customers. The co-location of multiple providers in one city increases competition among providers, leading to lower prices and better service (Grubesic and Murray 2004). While every metropolitan area has at least some access to the Internet, high-speed provision tends to be strongest in cities with moderate to high population densities and incomes (Grubesic and Murray 2004). Due to the importance of the Internet to indie crafting, I pose the following hypotheses:

H_0: *Internet* has no statistical effect upon *Indie Crafters*

H_A: *Internet* significantly increases *Indie Crafters*

3.4.5 Natural Amenities

The final variable included in this analysis is *Natural Amenities*. These data are from McGranahan (1999), who creates an index to measure the extent to which an area provides mild winters and summers, mountain ranges, and bodies of water that provide aesthetic and recreational enjoyment. Cities scoring high on McGranahan's natural amenity index have correspondingly high concentrations of artists and "creative class" workers (McGranahan and Wojan 2007; Wojan, Lambert, and McGranahan 2007b; McGranahan, Wojan, and Lambert 2010). According to research building upon McGrahanan's index, the primary factor driving the positive association between artists and natural amenities is the desire to live near scenic vistas and to enjoy outdoor recreational opportunities. Drawing from these findings, I pose the following hypotheses:

H_0: *Natural Amenities* has no statistical effect upon *Indie Crafters*

H_A: *Natural Amenities* significantly increases *Indie Crafters*

3.5 Qualitative Data Collection

3.5.1 Semi-Structured Interviews

After completing the quantitative phase of the project, I collected qualitative data through semi-structured interviews. Semi-structured interviews generally begin with a list of predetermined questions and then adopt a flexible, conversational tone during the course of the interview (Hemming 2008). The interviews may be thought of as conversations with a purpose (Burgess 1984; Mason 2002). The participant works through questions on his or her own terms but does not completely control the discussion (Schoenberger 1991). The goal of the semi-structured interview is to "understand the world from the subject's point of view, to unfold the meaning of people's experiences, to uncover their lived world prior to scientific explanations" (Kvale 1996, 1).

Between August 2010 and December 2010, I recruited participants by volunteering at craft fairs in Chicago and Atlanta in the fall of 2010. The fairs are large events in which hundreds of indie crafters exhibit and sell their merchandise. During the course of my volunteer work I built relationships with fair organizers and other volunteers and exchanged contact information. After returning from the fairs, I contacted acquaintances via email to arrange a phone interview. To gain more participants I also emailed the heads of organized

crafter organizations to advertise the research project and solicit telephone interviews. Using this recruitment technique I completed 11 interviews over the phone. I also interviewed four personal acquaintances in the local (Knoxville, TN) crafting community for a total of 15 interviews. Each interview lasted between 45 and 60 minutes and was recorded and transcribed in full (see Table B-1 for background information on each participant).

Participants began each interview with broad questions pertaining to their background and initial interest in indie crafts. After establishing basic background information, the interview then moved into questions pertaining to their use of technology in sales, networking with customers, and networking with crafters. I concluded each interview by asking participants to discuss his or her future plans with respect to their indie crafts business. As the participants responded, I encouraged them to speak freely and offered limited prompts.

3.5.2 Participant Observation

While volunteering at the indie craft fairs I also engaged in an ethnographic research technique known as participant observation. Ethnographic research is the "study of people in naturally occurring settings or 'fields' by methods of data collection which capture their social meanings and ordinary activities,

involving the researcher participating directly in the setting, if not also the activities, in order to collect data in a systematic manner but without meaning being imposed on them externally" (Brewer 2000, 6). Ethnographic methods vary according to the needs of the study and may range from pure observation to pure participation (Spradley 1980).

In pure observation, the researcher has no active interaction with the study participants. Information may be acquired through either watching behaviors or interactions as a complete outsider or from reading newspapers, diaries, and other historical accounts (DeWalt and DeWalt 2002). In pure participation, the researcher takes on the identity of the participants and ceases to identify as an investigator (Jorgensen 1989; DeWalt and DeWalt 2002).

Participant observation is a form of ethnographic research that falls between these two extremes in that the method involves both participation and observation. By using this technique, I was able to actively participate in the social setting and do what the participants do "as a means of trying to learn the cultural rules for behavior" (DeWalt and DeWalt 2002, 20). I occasionally recorded observations during and took descriptive field notes after each volunteer shift, as suggested by qualitative methods literature (Pole and Morrison 2003; Hemming 2008). Even though I actively participated in the social

setting, my identity remained intact. In other words, I made it clear from the beginning that I was a student researching indie crafts for my dissertation.

3.6 Qualitative Data Analysis

To analyze the interview data, I coded the transcripts of the interviews. The process of coding involves reading through the transcripts in search of similar themes and placing them into categories before trying to interpret those categories (Rossman and Rallis 1998; Creswell 2003). As Kozinets (2010, 119) explains, "these codes label the data as belonging to or being an example of some more general phenomenon" and emerge through a close reading of the data rather than from predetermined categories.

I analyzed the qualitative material in three phases. First, I recorded my immediate reactions and highlighted important themes directly following each interview. Second, I listened to each recorded interview in full, pausing the recordings often to make additional notes while identifying salient themes. Third, I read through the transcripts in full and further refined my notes, this time organizing blocks of text into themes with shared phrasing, sequencing, and relationships. This abstraction process places groups of codes into a small number of general conceptual constructs and reduces hundreds of pages of

transcribed text into a manageable form (Miles and Huberman 1994; Kozinets 2010).

Generalizability does not play a dominant role in qualitative research as it does in quantitative research (Creswell 2003). The strength of qualitative findings is their validity. To ensure validity, Morse et al. (2002) recommend three “verification” strategies that investigators must be aware of during the research process. These strategies help "the researcher identify when to continue, stop or modify the research process in order to achieve reliability and validity and ensure rigor” (Morse et al. 2002, 17).

First, a valid qualitative study requires “methodological coherence,” which ensures that the relationship between the research question and the method stays the same throughout. This strategy requires the researcher to select the qualitative technique or techniques at the outset and see them through to the end of the project. In the case of the current research, I followed this strategy consistently applying the same two techniques (semi-structured interviews and participant observation) to Research Questions 2 and 3 from start to finish.

The second verification strategy to ensure validity is to choose an appropriate sampling strategy. At its most basic level, an appropriate qualitative sample only includes those who have strong knowledge of the research topic. In

the present research, I purposefully selected participants who are currently and actively involved in the indie craft community. All 15 participants are either part-time or full-time crafters who attend fairs, make and sell their own products, and use online resources in their business operations. Another aspect of selecting an appropriate sample is to ensure that the size is adequate for the research needs. A qualitative sample is adequately sized when responses reach a state of saturation and replication (Morse 1991). By the 15th interview, I was satisfied that no new information would be gleaned by including additional participants.

The third and final strategy to ensure validity is to collect and analyze data concurrently. As more data become available, the researcher re-analyzes and continues to develop a consistent narrative and identify prominent themes. This is an iterative process that enables the researcher to identify what he or she still needs to accomplish through further research. As discussed previously, I followed this strategy in the coding process. From the first interview to the 15th interview, I made new notes and revisited old ones to maintain consistency in my questioning and develop emerging themes.

CHAPTER 4

QUANTITATIVE RESULTS

4.1 Chapter Overview

The purpose of this chapter is to address the first objective of this dissertation: to quantitatively examine the patterns of agglomeration in independent cultural production. To accomplish this objective I examine the patterns of agglomeration using a variety of commonly applied techniques in similar geographic inquiries (e.g. Florida 2002a, 2002b; Markusen and Schrock 2006; Currid and Connolly 2008). The dependent variable in the following analyses is the *Indie Crafters* variable introduced and discussed in the previous chapter.

I begin with a simple count of indie crafters in each metropolitan area to gain a basic understanding of which cities host the largest numbers of indie crafters. I then move on to examine the relative concentrations of indie crafters in each city using a location quotient. These two sections allow an examination of the patterns of agglomeration in independent cultural production and a comparison of how those patterns differ from mainstream cultural industries.

Following that section I gauge the strength of the linear relationships between *Indie Crafters* and the independent variables using correlation analysis. I then move on to linear regression analysis to measure the proportion of variance in the dependent variable that can be predicted by the independent variables. While not a spatial analysis method, this technique allows me to analyze the place-based characteristics that explain the geography of independent cultural production. In other words, this technique allows me to predict the per capita population of indie crafters in a city with a specific set of values for the independent variables included.

4.1.1 Basic Counts of Indie Crafters

At the MSA-level, the cities with the highest number of Etsy.com (hereafter referred to as "Etsy") accounts are also traditionally dominant artistic cities. With respect to the total number of artistic occupations, New York, Los Angeles, and San Francisco are the "Big Three" (Florida 2002b; Markusen and Schrock 2006), followed by Washington, DC and Seattle. In the Etsy rankings, New York, Los Angeles, and Chicago are the "Big Three," while San Francisco and Seattle round out the top five (Table C-1).

In addition, Etsy accounts and standard artistic occupations show similar degrees of metropolitan concentration. The top five Etsy MSAs host over 24 percent of the total number of indie crafters. By comparison, over 29 percent of census-designated artistic occupations are concentrated in the top five metropolitan areas (McGranahan and Wojan 2007).

The size of the MSA population roughly corresponds to the number of Etsy accounts registered to each metropolitan area, but there are a few interesting exceptions. First, relative to its population, Portland, Oregon registers far more Etsy accounts than one would expect. Though Portland ranks 25th in terms of its metropolitan population, it ranks sixth in terms of total Etsy accounts and comprises nearly three percent of all registered Etsy users. Likewise, Seattle is the 13th largest metropolitan area but still registers nearly 3.5 percent of all Etsy accounts. Conversely, the cities of Miami, Houston, and Detroit (ranked 6th, 8th, and 9th in MSA population, respectively) together comprise fewer than four percent of all registered Etsy accounts.

4.1.2 Location Quotients of Indie Crafters

While useful as a starting point, analyzing the absolute number of artists in a metropolitan area masks important spatial characteristics such as relative

geographic concentration. For example, that New York and Los Angeles register the most Etsy accounts is not surprising since they are also two most populous metropolitan areas. To examine Etsy accounts relative to the size of the metropolitan population and mitigate the influence of high populations, I used a location quotient.

In a location quotient, a score of 1.0 means that Etsy's concentration is in proportion relative to the cumulated total of other metropolitan areas (i.e. the overall national value). A score of greater than 1.0 signifies a higher than average concentration, while a score of less than 1.0 signifies a lower than average concentration. With respect to the concentration of Etsy accounts, second- and third-tier cities have location quotients that greatly exceed 1.0 whereas many of the largest metropolitan areas do not (Table C-2).

There is a contiguous band of high scoring MSAs stretching from San Francisco to Seattle that includes many small- and medium-size MSAs of the Pacific Northwest. Seven of the top fifteen MSAs are concentrated Oregon or Washington alone (Figure C-1). A more diffuse regional pattern is evident in "New West" cities (see Shumway and Otterstrom 2001; Winkler et al. 2007) such as Provo (UT), Santa Fe (NM), Boulder (CO), and Missoula (MT).

Other cities emblematic of the New West, such as Salt Lake City (UT), Boise (ID), and Flagstaff (AZ) also boast rather high location quotients, as do medium-sized "college towns" like Lawrence (KS), Ann Arbor (MI), Charlottesville (VA), and Athens (GA). College towns, however, are not necessarily indicators of indie craft concentration. For example, Tuscaloosa (University of Alabama, 0.74), Lafayette, Indiana (Purdue University, 0.75), and College Station (Texas A&M, 0.94) have rather low location quotients. In fact, Southeastern and Rustbelt metropolitan areas have quite low concentrations of Etsy accounts in general.

The Southeastern cities of New Orleans (0.92), Memphis (0.87), Miami (0.69), and Birmingham (0.45) and the Rustbelt cities Buffalo (0.97), Flint (0.68), Detroit (0.67), and Cleveland (0.89) have below average concentrations. Metropolitan areas located in interior California (e.g. Fresno, Bakersfield, and Stockton) also have rather low location quotients. As the following sections will demonstrate in greater detail, cities in these two regions tend to lack the characteristics more commonly associated with indie craft production, such as high educational attainment and high concentrations of self-employed artistic entrepreneurs.

Whereas indie crafters tend to concentrate in small- and medium-sized metropolitan areas, research using census data to measure concentrations of

artistic occupations depicts a very different geography. Florida's (2002a) "Bohemian" location quotient and Markusen and Schrock's (2006) artistic location quotient rank Los Angeles, New York, San Francisco, Washington, DC, Seattle, and Boston as the top six metropolitan areas for concentrations of artistic occupations. Portland ranks 8th for Florida and 11th for Markusen and Schrock (Table C-3).

By contrast, Etsy concentrations are strongest in small- and medium-sized MSAs. Traditionally strong concentrations of artistic occupations such as Los Angeles, New York, and Washington, DC rank outside the top 60 Etsy location quotients. Only Seattle and San Francisco rank highly for Florida, Markusen and Schrock, and the Etsy location quotient. There are at least three reasons why the geography and concentration of indie crafting does not correspond neatly to those of census-defined artist production.

First, research using census-defined artistic employment categories (such as Florida and Markusen) focuses only on the largest cities. For example, one important difference between Florida (2002a), Markusen and Schrock (2006), and the present research is the number of metropolitan units surveyed. Florida includes the top 50 MSAs by population and Markusen and Schrock include only the top 29 MSAs. The defense for focusing overwhelmingly on only large,

global cities draws from the assumption that art and culture flourish in the unique social milieus that these places are thought to offer (for a review, see Chapter 2).

As a result, the other studies do not consider the importance of second- and third-tier cities like Eugene (OR), Corvallis (OR), Asheville (NC), and Bellingham (WA). These methodological differences do not affect the calculation of the location quotient since the equation compares a regional variable value to a national baseline. The methodological differences do, however, affect the respective rankings of metropolitan areas. In other words, while the location quotient scores are comparable across studies, the ordinal rankings of the MSAs are not.

Second, as Markusen and Schrock (2006) readily admit, the census is a poor estimate of the true number of artists and cultural producers in a metropolitan area because it severely undercounts the number of employees in these industries. Many artists are part-time or self-employed, and therefore do not show up in official counts. Nonetheless, the census figures are easy to access, spatially defined, and readily available, so they appear in a large number of studies. Although the conclusions drawn from studies using census data carry substantial weight in policy circles, they should be interpreted with caution.

Third, many cultural industries studies assume that art and culture is a monolith. In other words, the prevailing assumption is that the terms "fashion" and "film" industries refer to elite firms in New York and Los Angeles, respectively. There are no allowances made for individuals who may be highly creative and work in a similar cultural industry but have no interest in New York fashion or the Los Angeles film industry. A creative individual with an interest in fashion, for example, may make clothes from home for a niche market and have no relationship to the corporate or elite fashion world. As the following sections will demonstrate, the place-based characteristics and motivations driving the geography of indie craft production are distinct from those assumed to drive the mainstream cultural economy.

4.2 Locational Characteristics Associated With Indie Crafts

4.2.1 Correlation Analysis

In the following section I conduct a correlation analysis to measure the strength and direction of the statistical relationship between Indie Crafters and the independent variables (Table C-4). Independent variables that are highly correlated with the dependent variable, indicated by a correlation coefficient close to 1, have a strong linear relationship.

Correlation analysis results indicate that high educational attainment, more so than any other variable, correlates strongly with concentrations indie crafters. The Pearson product-moment correlation coefficient between *Indie Crafters* and *Education* is 0.756, indicating a positive and highly significant relationship.

Larger cities with a high proportion of jobs high in human capital drive the relationship between *Indie Crafters* and *Education*. San Jose (CA), San Francisco (CA), Seattle (WA), and Denver (CO) are examples of larger, economically diverse cities with higher populations of indie crafters. This relationship suggests that educational attainment is a significant factor in the geography of indie crafting and will be further examined with multivariate regression.

With a correlation coefficient of 0.712, the presence of independently operated *Art Firms* also correlates strongly with *Indie Crafters*. Traditionally strong artistic havens such as Santa Fe (NM), Kingston (NY), Napa (CA), and Portland (ME) stand out as having high concentrations of both indie crafters and independently operated art firms.

The correlation between *Indie Crafters* and *Art Firms* makes intuitive sense because independently operated firms are a sign of entrepreneurialism in artistic production. Due to the precarious nature of employment in the cultural economy (Christopherson 2002), it is very likely that the proprietors of

independently operated art firms expand their business by selling through online stores such as the one on the Etsy website.

The correlation coefficients between *Indie Crafters* and *Business* (0.562), *Institutions* (0.546), and *Ancillary Arts* (0.413) are strong and statistically significant at the 0.01 level. Since these three variables measure different aspects of local support and opportunities to participate in the arts, the results come as little surprise. As Jackson *et al.* (2006) demonstrate empirically, artistic and cultural production thrive in communities with strong institutional support for the arts.

The variables *Tolerance* (.478), *Advocacy* (.363), and *Urban Farms* (.300) measure social characteristics and have a significant and positive relationship with *Indie Crafters*. Cities traditionally allied with the political left such as San Francisco (CA), Portland (OR), Seattle (WA), and Ithaca (NY) drive the relationship between *Tolerance* and *Indie Crafters*. This result lends support to prior work demonstrating an empirical linkage between tolerance and artistic production (Florida and Gates 2001; Florida 2002b).

While still significant at the 0.01 level, the correlation coefficient between *Urban Farms* and *Indie Crafters* is weaker than for other variables. A closer inspection of the data reveals that while *Urban Farms* is strong in important

havens for *Indie Crafters* like San Francisco (CA), Bellingham (WA), and Portland (OR), it is also strong in less important cities like Scranton (PA), Duluth (MN), and Riverside (CA). The correlation coefficient between *Advocacy* and *Indie Crafters* is similarly weak, but still significant at the 0.01 level. These three variables demonstrate the importance of unique social characteristics to the geography of indie crafting.

Natural Amenities (0.124) is statistically significant, but the relationship is considerably weaker than the other variables. One reason for this weak relationship is because of the geography of cities with high *Natural Amenities* scores. Cities in interior California (e.g. Salinas, Modesto, El Centro, Fresno, Madera) and coastal Florida (e.g. Punta Gorda, Naples, Sebastian, Lakeland) top the list of the natural amenity index but are not important cities for indie crafters. In the former region, the cities are economically distressed and in the latter region, the cities are well-known retirement destinations. These two characteristics are not typical of cities where indie crafting is strong.

The operationalization of McGranahan's natural amenity index is another reason behind the weak relationship between *Natural Amenities* and *Indie Crafters*. The variables comprising the natural amenity index are January temperature, July temperature, July humidity, sunny days in January,

topographic relief, and proportion of land in water. Towns in the Central Valley of California rank very highly in the natural amenity index because relative to the rest of the country they have above average January temperature, below average summer humidity, and a high number of sunny days in January. While Florida metropolitan areas have more humidity, they have a higher proportion of land in water, which is proxy for outdoor recreation.

Interestingly, the relationship between *Internet* and *Indie Crafters* is insignificant. This relationship is most likely due to the nature of the dataset (as are some of these other low or spurious relationships). Rather than measuring the proportion of MSA residents with Internet connections, this variable measures the number of service providers per 10,000 residents, which is an indirect means to assess connectivity. Also demonstrating insignificant correlations are the *Diversity* and *Income Gini* variables. The most diverse cities in the United States tend to be along the border with the United States and Mexico where indie crafting is particularly weak. Because of the marginalized economic status of many minorities, income inequality tends to be greatest where concentrations of minorities are high (Moller, Alderson, and Nielsen 2009).

4.2.2 Multivariate Regression Results

I now turn to multivariate regression to understand the characteristics that explain independent cultural production in a statistical sense (all variables, the justification for their inclusion, and data sources are discussed in Section 3.4). To ensure the assumptions of normality are met, the dependent variable and all independent variables have been transformed using the logarithm function. Therefore, the results of the regression model are interpreted as percent change (for descriptive statistics of untransformed and log transformed data, see Table C-5).

Prior to arriving at the final model, I first included all fourteen independent variables in the regression analysis (Table C-6). I then removed the least significant variables and ran the regression again (Table C-7). The results of this dissertation, however, are based on the third run of the regression model (Table C-8). The final specification excludes insignificant variables without decreasing the overall explanatory power of the model or changing the coefficients of the nine remaining significant predictor variables.

Tables C-6, C-7, and C-8 also include the variance inflation factor (VIF) and tolerance value, which are diagnostics to detect multicollinearity among the independent variables. The common rule of thumb is that a VIF greater than 5.0

and/or a tolerance value less 0.20 signal the presence of multicollinearity. Using these commonly accepted thresholds, the diagnostic tests indicate no problems with multicollinearity in any of the models. Finally, to test the assumption of homoscedasticity I plotted the model residuals against the fitted values of the final model (Figure C-2). Visual inspection of Figure C-2 indicates there are no problems with heteroscedasticity.

As expected from the correlation analysis, *Education* has the strongest effect upon the geography of indie crafting. Holding all other effects constant, a one percent increase in *Education* yields a 0.445 percent increase in the number of indie crafters per 10,000 MSA residents. Related to educational attainment is *Young Adults*. Holding all other effects constant, a one percent increase in *Young Adults* yields a 0.132 percent increase in the number of indie crafters per 10,000 MSA residents.

Following *Education*, *Art Firms* also has a strong influence upon the geography of indie crafts. Holding all other effects constant, a one percent increase in *Art Firms* yields a 0.318 percent increase in the number of indie crafters per 10,000 MSA residents. The model substantially overpredicts MSAs that are traditionally strong in artistic employment, such as Santa Fe (NM), Kingston (NY), and Nashville (TN). On the other hand, recently emerging

centers for artistic employment such as Bend (OR) and Olympia (WA) are underpredicted. Once again, the model underestimates the importance of the Pacific Northwest region.

This result suggests even though indie crafters can use the Internet to overcome geographic constraints, location is still an important concern. Large numbers of independent art firms signal the presence of a community that supports entrepreneurialism in the arts. However, the model indicates that traditional support mechanisms such as charitable organizations, art dealerships, and fine art schools are not necessarily helpful to indie crafters. Holding all other effects constant, a one percent increase in *Institutions* yields a 0.103 percent decrease in the number of indie crafters per 10,000 MSA residents. Furthermore, *Ancillary Arts*, which measures the presence of other traditional artistic industries such as theater companies and museums, is statistically insignificant.

The results for *Institutions* and *Ancillary Arts* indicate that indie crafters flourish in cities where the mainstream art world has less influence. In smaller MSAs like Portland (OR), Eugene (OR), and Asheville (NC), indie crafters have room to explore artistic media that are less accepted in mainstream art and do not have to compete for resources against world-class galleries and museums.

This result is also indicative of the rift between indie crafts and traditional art discussed in Chapter 2. Rather than co-locate alongside traditional artists, it appears that indie crafters self-sort into cities with strong indie crafting communities and less established traditional artists.

While *Institutions* and *Ancillary Arts* are measures adopted from studies concerned with traditional and census-defined artistic employment, *Business* more directly relates to indie crafting. Holding all other effects constant, a one percent increase in *Business* yields a 0.131 percent increase in the number of indie crafters per 10,000 MSA residents. Indie crafters are attracted to cities offering cafes that can serve as "third places" or informal galleries, unique microbrew pubs, and retail catering to the specific consumer demands of indie crafters. Previous studies have also associated urban amenities with artistic employment (Florida 2002b; Clark 2004), but have not differentiated between the types of amenities that serve the needs of artists with diverse sensibilities.

Holding all other effects constant, a one percent increase in *Natural Amenities* yields a 0.122 percent increase in the number of indie crafters per 10,000 MSA residents. As discussed in Section 4.2, high amenity cities in interior California and coastal Florida diminish the explanatory power of *Natural Amenities* due to their relative unimportance as indie crafting hubs. While *Natural Amenities* does

influence the geography of indie crafting, other factors such as educational attainment and local support for artistic entrepreneurs are more important explanatory factors. As this and other studies demonstrate, however, high human capital people and artistic entrepreneurs are attracted to high amenity locations such as cities in the New West and the Pacific Northwest.

Despite being unrelated to *Indie Crafters* in the correlation analysis of Section 4.2, *Internet* has a significant and positive affect upon the geography of *Indie Crafters*. Holding all other effects constant, a one percent increase in *Internet* yields a 0.126 percent increase in the number of indie crafters per 10,000 MSA residents. This result makes intuitive sense given that having an Etsy account presupposes Internet access.

The two social characteristics, *Urban Farms* and *Tolerance*, have a statistically significant but relatively small influence upon the geography of indie crafting. Holding all other effects constant, a one percent increase in *Urban Farms* yields a 0.086 percent increase in the number of indie crafters per 10,000 MSA residents. Similarly, a one percent increase in *Tolerance* yields a 0.078 percent increase in the number of indie crafters per 10,000 MSA residents, holding all other effects constant. These results are in line with previously discussed linkages between *Urban Farms*, *Tolerance*, and *Indie Crafts*. In the case of the former, local interest in

alternative agricultural arrangements signals willingness challenge prevailing norms in mainstream consumerism (Thompson and Coskuner-Balli 2007). In the latter instance, local acceptance of non-traditional lifestyles signals a social milieu that is open to new ideas and embraces change (Florida 2002c).

Contrary to expectations, the variables *Advocacy*, *Diversity*, *Poverty*, and *Income Gini* are not statistically significant. Of these four, the most surprising is *Advocacy*. One possible explanation for the lack of significance is that centers for advocacy tend to concentrate in capital cities where they can access politicians and legislators and not necessarily in progressive cities. For example, Springfield (IL), Jefferson City (MO), Lansing (MI), Tallahassee (FL), and Harrisburg (PA) rate very highly as centers for *Advocacy* but fare less well as hubs for indie crafting. Similar to college towns, these cities are second- and third-tier MSAs with a large proportion of employment in the public sector. Larger state capitals like Boston, Nashville, Atlanta, or Denver, by contrast, have more a diverse employment base and smaller proportions of employment in the public sector.

The insignificance of *Diversity* is also surprising given that previous studies associate diversity with an open, tolerant social environment that is conducive to artistic production (Florida 2002b; Clark 2004). Florida's research, however,

only examines the largest metropolitan areas and excludes numerous small- and medium-sized cities along the Mexico-United States border where diversity indicators are highest. For example, 42 of the 50 most diverse cities are located in Texas, California, or New Mexico; nearly all of these cities have fewer than two million residents. With a few notable exceptions, these cities have low educational attainment, poor Internet access, and high levels of poverty. While extremely diverse, these cities rank near the bottom in terms of indie crafting, as indie crafters tend to live in places with high levels of educational attainment and financial means to support the arts.

For similar reasons, the variable *Poverty* is also insignificant. Although *Income Gini* was expected to negatively influence the geography of indie crafting, the variable is statistically insignificant. Income inequality is greatest in the retirement communities in the Sunbelt, especially in Florida and Arizona, where indie crafting is not particularly strong. Income inequality is also great in cities with high poverty rates, which tend to host relatively few indie crafters.

In order to test the robustness of the model and coefficients, I also ran the three regression models excluding dependent variable values greater than two standard deviations from the mean. This technique excludes the 20 cities with the highest number of indie crafters per 10,000 MSA residents. The purpose is to

test the extent to which the strongest indie crafting cities drive the relationships observed in the model. As Table C-9 indicates, excluding the 20 most important indie crafting cities decreases the adjusted r-square drops from 0.685 to 0.633, indicating only a slight decrease in the overall explanatory power of the model. Although the variable *Tolerance* is no longer statistically significant, the significance and strength of the statistical relationships for the remaining variables are very similar to the model using the full dataset. The robustness test, therefore, indicates a strong model that is not solely driven by a small number of atypical cases.

4.3 Interpreting the Results

The regression model accounts for over 68 percent of the variation in the dependent variable. The prevalence of indie crafters in a particular city, therefore, can be explained by a few key attributes. Indie crafters tend to live in cities with high levels of educational attainment that have an established cohort of independent entrepreneurs in the arts. While these cities tend to lack major artistic institutions or significant linkages with supporting industries, they have a progressive social milieu and offer unique amenities that serve niche interests, such as microbreweries and craft stores.

These results largely confirm the expectations based upon literature pertaining to both the cultural economy and to indie crafting itself. A closer inspection of the residuals, however, reveals a number of outliers whose actual per capita population of indie crafters is either higher or lower than the model predicts. In this final sub-section of Chapter 4, I take a closer look at these outliers to question why the model accurately predicts certain cities, but over- or under-estimates the values of others.

After running the regression model, I sorted the 346 MSAs by the size of their residual (Table C-10). Since Providence, Rhode Island has a residual of 0.00, I labeled all values greater than Providence as being "underpredicted" and all values less than Providence as being "overpredicted." In the former, the predicted value is less than the actual value, leading to a positive residual, and the opposite is true in the latter cases. I then divided the two groups of residuals into quintiles to distinguish which cases were drastically overpredicted or underpredicted from those that were only slightly too high or too low. In Table C-10, the cases labeled "Accurate" are those that fall into the quintile closest to Providence, or the lowest 20th percentile. The cases labeled "Slightly Over" or "Slightly Under" fall between the 20th and the 60th percentile, and the cases labeled "Over" or "Under" fall into the 60th percentile or greater.

For ease of discussion, Table C-10 is divided into two groups of cases. The first group contains the 20 most important indie crafting cities according to the number of indie crafters per 10,000 MSA residents. The value of the variable *Indie Crafters* is also at least two standard deviations from the mean in these 20 cities, making this threshold a convenient cutoff. The second group comprises large US cities, their respective ranking in the indie crafts hierarchy, and their residual label. Of the top 20 cities for indie crafting, the model substantially underpredicts twelve, including the nine highest-ranking indie crafting hubs.

The examination of the residuals reveals that there are important independent variables that are not included in the model. For example, there is a regional concentration of underpredicted cities the Pacific Northwest like Portland, Eugene, Corvallis, and Bend in Oregon, Bellingham, Seattle, and Olympia in Washington, and Santa Cruz in California.

Drawing upon accounts from popular culture and from academic scholarship (Rosenberg and Garofalo 1998; Schlit 2004; Spencer 2005; Walker 2008), I argue that indie crafting in the Pacific Northwest must be understood with respect to the region's history of pioneering independent and countercultural trends. The region's prominence in indie crafts grew out of the infrastructure that previously serviced the punk and grunge movements, which

developed in the suburbs and in working-class cities far from the established centers of cultural activity in San Francisco and Los Angeles (Oakes 2009).

For suburban youth in middle- and low-income towns, forming a band, starting an underground radio show, or distributing a zine became sources of self-empowerment. While nodes of punk and DIY culture operated autonomously throughout the United States during the 1980s, the scene was especially strong in Olympia, Washington where the seminal independent record companies K Records and Kill Rock Stars (KRS) were based (Rosenberg and Garofalo 1998).

By the late 1980s, a pro-feminist subculture developed within the male-dominated punk and DIY scene of Olympia. The chance to reject the mainstream and rebel against societal norms initially attracted young women and girls to punk and DIY culture. However, as the movement became violent and hyper-masculine in the mid-1980s, females became increasingly ostracized and were often confined to being supporters and fans of all-male bands (Schlit 2004). Concerned with the second-class status of women in the punk scene and inspired by anti-racist rallies they had attended in Washington, D.C., female punks started a zine called *Riot Grrrl* to encourage other women and girls to stop just being fans and start being producers (Schlit 2004).

The term “Riot Grrrl” came to represent the sentiment that women and girls could also control the means of cultural production and start producing music and zines that represented their own personal experiences. Through a bottom-up distribution system of zines and independent presses, Riot Grrrls took it upon themselves to distribute material covering all-girl bands and reviewing albums. More importantly, however, the independent press discussed issues that were of special important to women, such the treatment of women in culture, sexism, racism, and alienation. As Riot Grrrl zines moved through underground channels to nearby towns, identification with the movement spread beyond Olympia.

Punk girl-bands with names like “Bikini Kill” and “Heavens to Betsy” emerged from Olympia and quickly gained regional popularity. Fans, rather than major record labels or the mainstream press, distributed the music and publicized live shows. This grassroots mode of operation helped the Riot Grrrl phenomenon remain independent and underground for the first few years of its existence. However, the commercial success of other independent bands in the region like Nirvana and Pearl Jam soon brought unwanted attention to the Riot Grrrl and indie music scenes from the mainstream press and record labels (Rosenberg and Garofalo 1998).

The newfound attention eventually caused the Riot Grrrl and indie music scenes to fissure over debates about whether or not the scene was about ideology or profit. Pressure from the mainstream press to categorize and distill down the meaning of the movement eventually diluted the message of radical feminism and pushed original adherents away. By the mid-1990s, Riot Grrrl had become more of a fashion trend than a political message.

Even though corporate co-optation eventually led to Riot Grrrl's demise, the movement successfully helped females become cultural producers. As Schlit (2004, 127) explains, "if zine making and punk music were no longer modes of production relevant to the lives of participants, they were finding new ways to express their feminism." For some young women, music continued to be a viable outlet for creative expression from a feminist perspective.

Others transferred the spirit of rebellion and independence from Riot Grrrl to the domestic realm, where they could give new meaning to devalued "feminine" skills like sewing and knitting (Walker 2008). Drawing from the sense of independence and empowerment they inherited from the feminist movement in the 1970s, "women began to look again at domesticity as something to be valued instead of ignored. Wanting to conquer both a drill and a knitting needle, there was a return to home economics tinged with a hint of

irony as well as a fond embracement" of the homemaker lifestyle they previously ridiculed (Greer 2007). Just as the Riot Grrrl phenomenon had challenged the status quo by making a place for women in punk music, indie crafting challenged the perception that traditional skills were boring, uncreative, and old-fashioned. As many young women distanced themselves from the Riot Grrrl scene, they channeled its spirit into what became indie crafts.

While the model attempts to account for local interest in indie crafts, it does not adequately capture the historical relationship between the Pacific Northwest and indie crafting. For the historical reasons reviewed above, the small metropolitan areas of the Pacific Northwest are the most significantly underpredicted cases in the model.

4.4 Concluding Statements

In this chapter I have used quantitative techniques commonly employed in geography to address the first research objective. While mainstream cultural industries concentrate in major metropolitan areas, indie craft production flourishes in second- and third-tier cities. The Pacific Northwest stands out as being a major hub of crafting activity. Drawing upon a detailed literature

review, I attribute the region's attachment to indie crafts to its historical position as a center of independent and non-mainstream cultural production.

In the following chapter, I supplement the quantitative findings with qualitative research involving fifteen indie crafters. The use of qualitative methods in Chapter 5 allows this research to move beyond basic descriptions of indie craft's geography and to delve deeper into how individuals use modern technology. Of particular importance are the ways in which crafters use the Internet to reach customers and network with others.

CHAPTER 5

QUALITATIVE RESULTS

5.1 Agglomeration in the Digital Age

The purpose of this section is to address the second research objective posed at the beginning of this dissertation. In Section 5.1, I will explain how indie crafters use online resources. Of particular interest is an in depth examination of the advantages gained and challenges posed by using new technologies. Although online resources "democratize" participation in indie craft production, there remain considerable barriers to entry that prior research has mostly overlooked. In Section 5.2, I analyze the extent to which ICT helps independent cultural producers overcome the need to cluster.

5.1.1 Democratization and Accessibility

Using Etsy, the Internet's top marketplace for indie crafts, crafters can overcome some of the factors that traditionally shape the geography of the cultural economy (see Chapter 2). For example, the Internet makes it possible to sell to customers from all over the world regardless of their location and mitigates the need to live near a sophisticated consumer base or in a large

metropolitan area. Furthermore, by operating online crafters avoid the cost and maintenance of setting up a brick-and-mortar retail space. As one participant explained:

> People don't need to have a physical space outside their home. If they have a few extra square feet where they can knit their baby booties or whatever they're doing they can ship it out with priority mail using the boxes they know those baby booties will fit into. They don't even have to go to the post office (Participant 6).

The ability to operate online is especially beneficial for small-scale producers and hobbyists looking to make extra income. A small-scale producer may have difficulty producing enough crafts to justify the cost of renting a booth at a craft fair or maintaining a physical store. Online, however, a crafter may sell items as she or he completes them without having to work around fair deadlines or pay for inventory space:

> I think that a lot of people are making these things anyway and it's great for them to have sort of an outlet with which they share it, and ultimately

> make a profit on their work. The Internet gives them an opportunity that they wouldn't have had otherwise. Because to do something like a craft fair takes time and money and you have to pay for the booth and have an agreeable set up and all these things. Maybe I only turn out three things a year, but I can have an Etsy site and realize some sort of profit on the work that I'm doing (Participant 3).
>
> I think it gives people who can't really produce a lot of things because they have a full time job, or whatever it is they're doing, maybe they can't produce a lot, but they can produce ten things, or maybe one thing a month. It's possible for them to sell this on Etsy and other websites. Whereas it's not worth putting up signs in cafes around the city saying "I make this and this" because it's too much work. But it takes 2 seconds to set up an account on Etsy. And there is no loss; it's a few cents per picture. People can have their dream of selling things they made without any loss whatsoever (Participant 2).

In addition to operating an Etsy shop, many crafters can increase revenue by filling custom orders from local and non-local clients. For example, Participant

14 operates a full-time craft business from her home in St. Louis by receiving custom orders from boutiques in cities across the United States as well as New Zealand and Australia.

> They (boutiques) will contact me if they need new stuff, or if I have new designs ready I'll send them an email. I'll send them a link to the pictures that have everything and they'll tell me what they like. What's great about my stuff is that it can be customized, so even if I'm showing it in a certain color, if they have other colors that are more prominent in their store, I can customize my product to merchandize well with theirs. So they'll put in an order, they'll say I want six of this, three of those, two of those, and I'll put it together and I'll ship it out to them. I use the USPS to ship out to them. It's just a lot of maintaining email contact even if I don't have new stuff for them (Participant 14).

Undoubtedly, the ability to work from home and gain access to remote markets creates new opportunities for many people to participate in the cultural economy. On the surface, the Internet appears to democratize access to cultural production by lowering the barriers to entry (von Hippel 2005). In the case of

indie crafts, barriers to entry refer to the costs associated with renting retail space, proximity to a customer base, and the small scale of most operations. However, the following section demonstrates that while entry into the cultural economy may be more democratic than in the past, success is another matter entirely.

5.1.2 Work Behind the Scenes

Crafters agreed that online resources make craft production more accessible to more people by increasing access to information, supplies, and customers. However, it takes considerable time and effort to realize any financial returns. Since most crafters have full-time jobs outside of indie craft production, available time and limits to the amount of effort one can expend on craft production pose substantial barriers to financial success. From the outside, these barriers are not always evident:

> One of my personal goals is to help people see the reality of it. When people are young and they think, I want to be a crafter, and I'm going to make all this money, and I'm going to support myself and be independent… Yes, you can do that, but it is a lot of work. Let's say that

> there's a teenager who really wants to be a crafter when they grow up. They go to an art show and they see people selling and they think it's like that every day and it's not. There's a lot of behind the scenes work that goes into it (Participant 6).

For most indie crafters who operate online, the "behind the scenes" work refers to virtual store maintenance. First and foremost, virtual store maintenance requires an attractive interface. Since potential customers cannot physically interact with the merchandise, high-quality photos are an essential element of a virtual store's interface. As Participant 5 describes, the seemingly straightforward process of taking photos, editing them, and then posting them online is a big time commitment:

> It (selling online) is time consuming, like if you're into Flickr or Facebook, or anything where you post a lot of pictures. You know, you would have to maybe crop your photos and clean them up and maybe change the size and scale them down a bit. But you have to do all those steps before you can post a picture anywhere online (Participant 5).

In addition to presenting an attractive interface, virtual store maintenance involves coming up with succinct, interesting, yet informative descriptions for each type of product available. This, too, is a time consuming process:

> Writing the description… is the killer, in addition to getting the pictures off your camera and stuff like that. You want it to be interesting for people to read or else they'll get bored and not read it, so you try to describe it as best you can and that does get time consuming (Participant 5).

Opening an online store is the easy part. On Etsy this process simply involves creating a username, filling in a few boxes with personal information, and listing an item for sale. Photos are not required, nor are product descriptions. In that sense, anyone with an Internet connection can set up an online store within minutes and the marketplace for indie crafts is truly democratic. As the quotes above show, however, even basic shop maintenance such as taking photographs and writing product descriptions can be quite time consuming.

5.1.3 Standing Out Online

In order for the online store to succeed, crafters must actively market their shop to generate traffic, in addition to editing and posting photographs and writing unique descriptions for each product. Standing out can be especially problematic on Etsy, which as of February 2011 has close to 300,000 active sellers. In order to get noticed online and drive traffic to individual shops on Etsy, indie crafters must use a variety of social media platforms. The following quotes from five different interviews illustrate the various strategies indie crafters employ online to stand above the crowded field of indie crafters selling online:

> (Getting noticed online) is a really big problem, especially now that Etsy has gotten so big. It used to be just listing items once a day would help keep you in the top of the search rankings on the site. That just doesn't really work any more because people are listing 24 hours a day from all over the world and they are busy. I think promoting yourself, like I have a Facebook fan page and I sometimes pitch my products I'm launching to different blogs. I also have blogger friends that are super kind and will

write me up when I have something new going on. I'm very fortunate (Participant 8).

At the time (ten years ago) Live Journal was pretty well used, there wasn't Facebook there wasn't MySpace, so I really had no problem getting traffic. I was probably making more sales doing it that way at the time than I am through Etsy because Etsy had a curve where for a while and I was selling really well. Now it's gotten so large that it's easy to get lost. So I still find that my best sales are when I post things on my blog or now Facebook as opposed to just trying to promote the shop in general (Participant 10).

Etsy is inundated with crafts. Even if you sometimes try to search your own name it doesn't come up. So, Etsy is definitely a hard one, you really have to work it. You have to be dedicated and have postings everyday and go on their forums, and just be an advocate for your online Etsy business (Participant 4).

> You make or break yourself on Etsy. You get out of it what you put into it. So if you don't want to be contacting your customers and you don't want to re-post your items and you don't want to make your store look fresh and new, then you won't get sales (Participant 14).

> I have an Etsy shop that I keep very lightly stocked. That's mostly to refer people to if for whatever they want to make an online purchase instead of in person. I also have a Facebook fan group. I do a lot of my marketing through Facebook because it's a really easy interface and I can hit a pretty significantly sized group of people with minimal effort. I also have a blog and it gets a little bit of attention… But most of my focus in marketing myself is through Facebook just because it's easy. And that's where I have the broadest group of people who might be interested in me (Participant 12).

As recently as five years ago, doing some basic promotional work was enough to drive traffic to an individual's shop. Due to Etsy's meteoric rise since that time, indie crafters are finding it necessary to actively promote their shops on other social media platforms, especially through Facebook. In addition to

Facebook, many indie crafters maintain a personal blog and actively network with other bloggers to advertise for each other.

After photographing, writing product descriptions, and of course actually making the crafts, promotional work requires still more time. Considering that most indie crafters have no employees, even routine aspects of operating a business can pose a significant barrier. In the following quote, Participant 12 offers a comprehensive account of many factors that one must consider prior to operating an online shop:

> The amount of effort to get your things together online is not insignificant. It takes a lot of energy to do that. More than I think people would suspect that it does. Because if you're just going put together some crappy photography you're not going to do well. And then you also need to promote that shop online somewhere to get any traffic… access to online is readily available to anyone. Anyone can go set up a website with minimal effort. People aren't thinking about, but then I have to maintain that. And then not only do I need to maintain it. I need to market it. And if I'm going to have a shop connected to it then I have to stock the shop. You become this brick and mortar store in cyberspace. All

things you need from regular stores you need online too. Maybe it's an abbreviated version of those things but then you have to also think do I want to have a life? Here are some of the things that I think about. Do I have the space to set up a photo box all the time? Because to have a good online shop you need to always be taking pictures and putting things up pretty regularly if you're going to stay in people's consciousness. So there are physical space considerations for an online store. And then can I be disciplined enough to put an item every few days and then still find time to create, to make my craft? It's tougher than it looks. It looks like "I'll just go put together an Etsy shop." It's not that easy. Sure you can do it but if you want to ever sell anything it's harder than that. Like I said I've put close to very minimal effort into my shop and in two years I've sold like 30 things through my store. Which is really, in the world of Etsy, that's like next to nothing. I've gotten what I put into it. I haven't put that much energy into it so there you go (Participant 12).

Many crafters have also adopted specific strategies on Etsy to make sure their shop is easier to find. The website offers customers a variety of ways to search for items and particular shops. One sorting method sorts items into

categories using descriptive tags selected by the seller. For example, a customer may click on the "Jewelry" tag and immediately navigate to the jewelry page, which displays the first twenty of the over 1.8 million items from any crafter who has used this descriptive tag.

The items the customer sees on the first page are those have been most recently posted, giving sellers a tremendous incentive to update their shop frequently. Crafters who make a substantial proportion of their income from Etsy sales invest a large amount of time just trying to stay at the top of the "most recent" list.

> Say you make twenty t-shirts. Instead of listing all 20 at once, space it out. List one at 1:00, another at 2:00, so that you're constantly at the top of the list because how a lot of people search for items on Etsy is they use the "Shop Local" feature and then they type in their zip code. The search results that come up from that search box are based on how recently that item was added to Etsy. There's a guy at Bee Hive that makes t-shirts and that's his full-time job is to make the shirt and sit at the computer and list them because they get so many sales that's just how they do it. They're

> rocking it out on Etsy just by being strategic with when they list (Participant 6).

In order to make posting frequently a worthwhile endeavor, sellers must use analysis tools provided by Etsy to understand the days and times in which traffic to the website peaks. While reiterating the importance of photographs and product descriptions, Participant 14 describes the time-consuming process of trying to manage an Etsy store:

> Photographs are definitely something that I'm still improving upon and I think many people who do Etsy will tell you that's the number one thing to work on. But other than that it's just a lot of re-listing your products all the time. Every day re-listing your products or posting new products and you kind of have to be aware of times of day that might get more traffic. And even like the titles of things, something quirky or something that's trendy that people might be searching for. Etsy has all sorts of tools like that. They'll tell you the most searched for phrase for the month of July or something and if you wanted to you could go tag your items if they apply with that certain phrase. So there are all sorts of things that are

> changing, constantly changing. It could be a full-time job just dealing with your Etsy shop and trying to get things updated with that (Participant 14).

The amount of time required to maintain an online shop can be discouraging for some crafters whose primary interest is using their talents to produce creative items. The tedium of maintaining an online shop moved Participant 11 to consider hiring a manager for the online aspect of her business:

> I hate doing that kind of stuff (online maintenance), and I've actually talked to someone to do that type of thing for me, like hiring someone to do that because I just don't have time to do it nor the desire to do it. And I think that somebody that enjoys doing that type of thing would be much better at it than I would (Participant 11).

Others are finding that online shop maintenance is more time consuming than it is worth and opt instead to do only craft fairs, farmer's markets, and custom work. Participant 13, for example, opened an Etsy account when she originally established her crafting business in 2007, but has decided to no longer

maintain her online store due to the hefty time commitment it would require. Instead, she focuses on selling at local events such as the farmer's market:

> I make the best sales at the market and do well enough that I want to list my stuff on Etsy but the time that takes to photograph everything… And then I'm also selling this stuff. So I'm going through it (merchandise) pretty fast. I've pulled out of doing anything like that (maintaining an online presence)… I don't do the networking. I know the networking involved in Etsy, I know what you have to be doing. Talking in the forums and all that kind of stuff. I just don't have that kind of time (Participant 13).

Similarly, Participant 10 is seeking an alternative outlet for some of her items. Rather than abandoning Etsy entirely, she decided to shift some of her focus away from Etsy in favor of more custom work:

> I actually want to do more custom work. I'm finding that much more gratifying right now. I'm finding Etsy to be a little less useful for me now in terms of making things and trying to sell them online. A lot of the stuff

> I make I have a real hard time putting online because each thing is unique and there's a lot of time involved in, ok I just made this dress I need to find somebody to model it, and take pictures and list it online. I just find that it's just more and more complicated. I think my Etsy store will change into items that can be easily reproduced so there's less effort in trying to sell those as one item online… Basically I see things going it two different directions. Etsy is going to have to go one direction and be for easier for items to sell. And the custom market, I want to do more of that offline. Not necessarily offline but not necessarily through Etsy per se, but through other social media and social networking (Participant 10).

The quotes above illustrate the spectrum of challenges facing indie crafters in the Internet age. Available time and willingness to invest effort into online shop maintenance are key factors that mediate success in the business of selling indie crafts online. To overcome the difficulties associated with selling online, indie crafters have set up a variety of support mechanisms. As the following section demonstrates, these support mechanisms are localized, which begins to offer insight into why craft production has a defined geography that favors certain places over others.

5.2 Social Support Mechanisms

Of particular interest in this final subsection is the role of place in the digital age. For example, are there advantages to living near other indie crafters that the Internet cannot confer? The interviews presented below reveal that while social networking online is essential to business success in indie crafts, it does not necessarily negate the need to live among a supportive local community of other indie crafters. As independent entrepreneurs in a risky economic environment, indie crafters set up a variety of social support mechanisms that benefit from both online and offline resources.

5.2.1 Business Groups

The most prominent support mechanism in the indie craft world is the Craft Mafia. A Craft Mafia essentially functions like a local union for indie crafters. Members host and publicize local craft shows and limit participation to a select group of people. The purpose of exclusivity is to ensure that particular categories of crafts do not face too much competition in each show. For example, a Craft Mafia will limit the number of knitters admitted to a show so that the knitters who are present will have stronger individual sales. The same

admission limitations apply to jewelry makers, embroiderers, and all other categories of craft involved in a Craft Mafia show.

The name "Craft Mafia" is a trademark owned by the original Craft Mafia, founded in 2003 by a small group of women in Austin, Texas. There are now Craft Mafia chapters operating in thirty cities in both the United States and the United Kingdom. Each local chapter licenses the brand name "Craft Mafia" for 250 dollars a year from the original founders in Austin. As more people join a local chapter they can split up the cost among the members.

The advantage to purchasing a license is that the Craft Mafia brand has become highly recognizable in the indie craft world. Craft Mafia licensed shows have a reputation for quality and carry a certain amount of cachet in the eyes of the attendees. Members of the Craft Mafia gain access to well-publicized shows that help them build professional networks to learn about other shows, events, and business opportunities:

> What I'm looking for is business help and questions and people to… I want to learn from other people being successful. There are people in the Craft Mafia or alumni who got to the point where they quit their day job

and that's their business. They live off of that. I want to learn from them, so I'm hoping that will happen (Participant 4).

They do two shows a year and that gave me access to a network of crafters and also access to a couple shows a year. I was finding it sort of challenging to even know where to look to participate in a show that wasn't like grandma craft stuff. I know I don't want to be with people selling wreaths and teddy bears and things like that. That's not going to be my audience. It gave me a way to find people. If I were going to make a suggestion to anyone who was new it would be to find a local crafter organization or start one and get involved that way because the crafter community… it's pretty small. There are really only a handful of people that are putting together shows (Participant 12).

I needed somewhere I could fit in. I was in between the fashion and craft world and I needed to find somewhere that people who understood and could help. So I started doing a lot more research and I found the St. Louis Craft Mafia and I found out about shows that they did. And they really become my bread and butter as far as where I can sell. That came

> after the boutiques but it's definitely been extremely helpful (Participant 14).

Using these networks, crafters are also able to distribute some of their operating costs in ways that mutually benefit the members:

> A Craft Mafia is a collective... It helps crafters make it more viable, maybe even a profession in some sense, so that they live off of it. Most crafters do another thing at least part time. But when you're involved in a collective like that, for marketing purposes or renting a space collectively, it's less money (Participant 2).

In many large cities, there are often other crafting collectives that boast similar goals. Participant 6, for example, has been involved in multiple crafting collectives that offer their own unique benefits:

> I was in a pottery co-op with nine other crafters here in Atlanta. We all paid our rent. It was two hundred dollars a month. That's a lot when you have your house rent and your other bills and you're relying on your

> pottery sales to pay your rent and plus make a profit on top of that. I like to work together and help people, specifically with people I know and have been behind the scenes working a long time and working hard… I'm now in Bee Hive, which is a retail space. I don't know how many designers but we all rent space. It's really affordable. The Bee Hive takes a 15 percent commission of our sales after we meet our monthly goal of our rent. It's really awesome (Participant 6).

She is also part of a group called Lady Rogue, whose purpose is to bring local crafters together to discuss common questions about running a business, setting up shows, and building a brand. At the last meeting she attended, members offered advice about business checking:

> Some of the people at the meeting aren't really at the point where they need a business checking, and then other people at the meetings are more established and they'll stand up say, "I use Sun Trust, and I really like them," and then someone else will say, "I think you should use a community bank because they'll remember your face and remember your name. Business 101, always get a checking at the community bank and

> not one of the big banks." Everyone just offers their expertise and just goes around in a circle and talks. That's how it was at the last meeting I went to. It (Lady Rogue) is to help people see that they can do it. It's not rocket science (Participant 6).

More than anything, the Lady Rogue business community is a form of social support that introduces people who are used to being on the creative side of business to the financial side of business:

> You meet once a month, sometimes more. It's gotten bigger in the last year, she'll have people come in and talk about important topics to small business. It's kind of, she has people come in and talk and you can present what you're doing to this group of friendly, like-minded, non-judgmental people and sound things out before you implement them in your business. It really helps to have a bunch of other people. Not everybody is a crafter. There's a lot of different business formats in that. It tends to be like crafters all stick together and we don't tend to be very good at business. And it's nice to have a circle that includes not just crafting people but all sorts of other business types. They think of ideas

> that you might use in your crafty business and you're like, oh that would work (Participant 10).

Support mechanisms such as the Craft Mafia and Lady Rogue underscore the importance of community to the successful operation of the indie crafting business. Even though crafters compete against each other to make a living, they are also highly inter-dependent. Crafters need to be able to put on shows collectively to draw in crowds, so it is to their mutual advantage if they help one another. Help may be in the form of business advice, networking, or in personal encouragement:

> They (indie crafters) are very supportive of each other. You always interact with another artist in the way that you want to offer what you can to help them develop and help them grow. I find that is very strong. No one is competitive or like I don't want to share my techniques with you because you're going to run off and do it. There's that confidence. With art and with crafting, it's a big risk and it takes a lot of courage to do it. And there's a lot of self-doubt that you have to get through when you do a creative endeavor like this. Singing, writing, making jewelry,

> whatever. You are putting your ideas out there and it's hard for people (Participant 9).

As Participant 14 indicates, the supportive nature of the indie crafts business is unique compared to other sectors of the cultural economy:

> I straddle the line between fashion and the crafting world. Definitely in the crafting world there's much more a sense of community and helping each other and wanting each other to succeed. It's not so cut throat. Because maybe more so than in other areas you need each other in the crafting world to make it work, to draw in the crowds and to come to these art shows. And that's how people are going to spend their money. And you just got to learn, there's so much that goes you that you have to learn from each other. You have to get tips from each other. Especially when you're doing it all yourself if you're a small business owner. There's no possible way that I could know every sort of art form out there, how to do all my business and how to do graphic design for my business cards and my logo and my packaging. There's no way that one single person could do that. So it is great to have that community where

> can pull from everybody's strengths and they're more than willing to help you do that and there's just a real sense of belonging (Participant 14).

Beyond organized support mechanisms, informal partnerships and helping arrangements are also quite common. In the statement below, Participant 12 describes a recent event in which local crafters decided to informally gather to help others manage time-consuming tasks:

> I just had another crafter send me an email saying that she wanted to do some sort of Amish barn raising with crafters and to send an email if you want to sign up. The idea is that once a month we go to someone's house and help them with some of the not so fun tasks of doing their business. She makes potholders so we'll go over and help her cut fabrics for that and the next time we'll go to someone else's and maybe that's helping them package their items, or whatever's not really doing their art… And those kinds of situations are very common. They're really helping relationships (Participant 12).

While the support mechanisms built into the craft community rely on face-to-face connections and physical contact, the Internet plays a major role in helping people find one another and organize events:

> What I have concluded about the Internet and social networking is that it's a really great tool for getting people together face-to-face. I do see where there's always that question of if the technology is isolating us or bringing us together. Where it's most successful is bringing us together in real life. That's what I love about MeetUp (www.meetup.com). It's using the Internet to help us organize and find people of similar interests and go out do things together face-to-face. It's so much better than typing… We have an email Yahoo group, whenever there is a show or something people are posting that, they're posting opportunities. If there's a holiday it's almost every day. Here's a holiday show you can sign up for if you want. So there's definitely that aspect, just that we're all helping each other know about opportunities locally to get in shows… I think it's helping us build these connections a lot faster than we were. I don't know if I'd be doing the art that I'm doing without the Internet. The things that

> I do and the ideas that it's spurred, I couldn't have gone to that many galleries and seen what I've seen (Participant 9).

The speed with which the Internet helps like-minded individuals find each other is often credited as a key reason that interest in indie crafts has grown in recent years (Johnson 2008). Prior to the Internet, indie crafters were more isolated and less aware that there were people with similar interests in their city. There were fewer craft shows and support organizations because they were difficult to organize.

Today, the ability to use simple Internet-based communications tools such as email groups, Facebook groups, and blogs has significantly increased the amount of information available to crafters. Simply accessing these virtual networks can expose a crafter to a wide range of opportunities that she or he may have never realized. Rather than distributing and separating the indie craft community, therefore, the Internet is an efficient way to bring people together on a local level.

5.2.2 Local Civic and Financial Support

Crafters' use of the Internet has an interesting relationship to geography. On the one hand, the ability to access customers and information from virtually anywhere in the world with an Internet connection suggests dispersion. With respect to the cultural economy, the Internet helps crafters overcome many of the constraints that traditionally shape the geography of the cultural industries. Indeed, many crafters do use the Internet to transact with non-local clients and to fill custom orders from distant locations.

On the other hand, crafters also use the Internet to bolster personal connections with members of their *local* community. Crafters can harness the organizational ability of the Internet to establish efficient social support mechanisms. These support mechanisms help crafters diffuse some of the costs and time commitments among a large group of people, thereby making basic business operations more manageable.

The ease with which crafters can find collectives and various forms of support, however, varies between cities. As the quotes below indicate, the variation in different types of support is a key reason why the geography of indie crafting is unevenly distributed.

In Portland, Oregon, the primary hub of indie craft production in Chapter 4, there are social and civic support mechanisms that are not present in other cities. Participant 8, who had previously lived in Portland prior to moving to Atlanta, found that Portland had a readily accessible support infrastructure:

> I am in love with Portland, and the DIY community there is unbelievable. I think one part of it is that they don't have a sales tax and it makes it, as a new businessperson, figuring out that part was one of the hardest things I ever had to do. You don't have to worry about the sales tax. Portland also has a ton of great crafting groups. They have groups of crafters with Etsy shops, they'll photograph your stuff for you. There are also all these help programs for artists, they'll help you find loans and grants. They do all these things through the government that help support the crafty community, which I've just never heard of in any other place. They make it really, I wouldn't say easy, but it's a really supportive community, like in the crafting community and even beyond (Participant 8).

By contrast, it was much more difficult to get established in Atlanta. With fewer small-scale, independent entrepreneurs attempting to set up a business, the commercial bureaucracy was less adept at helping her:

> In Atlanta you're on your own. It took me a lot of phone calls to figure out what I needed to do. My business wasn't fitting into any slot, so I had to figure it out based on things that are comparable. Like I do consignment and wholesale and the woman I spoke to at the tax office didn't even know what consignment was. I was trying to figure out if I need to pay tax on my consignment. I didn't know about anything, I was new to this. Since a crafting business doesn't fit into a particular slot it's a little harder. I think in places like Portland where it's stronger it would be easier (Participant 8).

The above passage highlights two aspects of local support that actively shape the geography of indie craft production. First, cities such as Portland with built-in civic support make it easier for indie crafters to get established. The lack of a sales tax reduces significantly the amount of paperwork that an independent businessperson would normally have to complete. Second, there is

a financial support system in Portland consisting of groups that help crafters secure funds and government-sponsored grants targeting the arts. The absence of civic and financial support in other cities does not make it impossible to become a successful indie crafter; it just makes it more difficult.

5.2.3 Levels of Competition

Although being in a city with strong support mechanisms has advantages for indie crafters, there is a notable disadvantage as well. When small business resources are more readily accessible, more people attempt to access them, leading to greater levels of competition. The presence of more indie crafters means less overall access to a finite amount of resources and greater difficulties in getting noticed. Participant 7, for example, is now considering a move to Portland from Atlanta to be a part of the vibrant indie crafts community, but questions whether or not such a move makes business sense:

> Actually I think it would be more competitive (in Portland), which is kind of why I'm a little shy with our move out there. There are so many talented people, they're so established, they're so well known, that it almost seems like it might be easier here in Atlanta to grow our business.

> It just seems like less competition, we can differentiate ourselves from everyone else. But Portland seems more daunting in terms of the craft scene (Participant 7).

In addition to increased levels of competition in Portland, Participant 7 must consider the time it would take to establish a professional network in Portland. In Atlanta she is an established figure in the indie crafts community and already knows the local people who start craft shows and request custom orders. That knowledge took time to accrue because it revolves around relationships, trust, and friendships. Although it would be possible to build a new network in Portland, the amount of time it would take may not be worth it:

> I rely heavily on my network here (in Atlanta) to get business. Going out there, in terms of personal relationships and building our network and building our business, in that direction, would take a little longer than if we built a strong brand and really build a great web presence and sell nationally. I think both would take time, but with my established network here it would be easier. That was part of our discussion, we have a great network here, we really know a lot of people, and it's been really

> beneficial. It's not easy to give up because in Portland we know a few people, but those things take a lot of time and effort. It's difficult (Participant 7).

Another city with a high concentration of indie crafters is Asheville, North Carolina. Participant 11 had recently moved to Knoxville from Asheville after operating a small independent business in Asheville that marketed itself as a "green" decorating company. She, too, has found that living in a city with fewer indie crafters makes it easier to find a competitive niche:

> I had a business in Asheville and it was really hard to get into a niche because it was very saturated. There's a lot of green business so you have to be a lot more competitive. I'm finding that even though it's just less than one hundred miles, Knoxville is up and coming in green business and I have done really well since April. I've done much better than I expected, about three times the amount of business than I expected. So I think there's a lot of just supply and demand and have found Knoxville to be on the cusp… There are a lot of people who are interested in it but not a lot of businesses that are providing. In Asheville I would have to

> step up my costs and my overhead tremendously to make more of a name for myself. Tons more advertising, tons more networking. Here (Knoxville) I've booked 15 events just from being at the Farmer's Market (Participant 11).

Participant 13 also moved to Knoxville relatively recently from Los Angeles. She finds that the higher concentration of artists and crafters in Los Angeles makes it difficult to know how to get established. In smaller cities, by contrast, it is much easier to get started:

> Coming from the LA area, I would have been way too intimidated to do anything out there so I think that moving here is a big part of why we just jumped in. Knoxville's so small that this is less intimidating. And there's a lot of talent here, I'm just talking about sheer population and the amount of artists and crafters within that smaller population. It makes it not as scary (Participant 13).

After living in New York City for a time, Participant 15 has moved to a number of different cities and has also found that in smaller places it is easier for an artist or a crafter to find his or her footing:

> Just because it (New York) is a big city in art and music and industry, it's just a place where people go to cultivate that. Anything you do there are a ton of people who have done it a million times better, and that's always the case. But in New York it's right in your face. I found that discouraging (Participant 15).

In sum, the above sections have shown that while the Internet creates new opportunities to participate in the business of indie crafting, it also creates new barriers that are less obvious. Crafters in cities with support mechanisms, such as business groups and Craft Mafias, can better manage these barriers. Furthermore, it is to a crafter's advantage to have a local community of other professional crafters because they can more easily stock craft fairs and share in some of the costs of operating a small business. These advantages are a function of proximity and offer insight into understanding the uneven geography of indie craft production.

Places with high concentrations of indie crafters tend to have additional civic and financial resources available that can be advantageous. While quantitatively Portland and Asheville stand out as places with high concentrations of indie crafters, the qualitative analysis shows that with higher levels of local competition it is much more difficult to get established. In that respect, it is easier to become a successful indie crafter in a place with a vibrant but smaller indie crafts community.

5.3 Maintaining Social Networks

The third objective of this research is to analyze the role of ICT in social networks. The results of the interviews reveal two distinct social networks that incorporate ICT in different ways. When networking with customers, interactions are often geographically dispersed. To overcome the impersonal nature of interacting over the Internet, both customers and sellers divulge personal details of their lives. This process gives both parties the impression that they know one another and attempts to mimic face-to-face market transactions. When networking with other crafters, interactions are often local and the Internet is merely an organizational tool. Rather than replacing the need interact

with one another in a "buzz" environment, the Internet helps crafters organize and manage local social networks.

5.3.1 Networks with Customers

The traditional marketplace for crafts is one in which the producer and the consumer engage in a face-to-face, personal commercial transaction. As reviewed in Chapter 2, one of the goals of the craft movement is to bring consumers closer to producers. Even though most indie crafters are active online and use the Internet to find out about local meetings, face-to-face contact with customers is still highly important to modern indie crafters:

> I enjoy the markets because I have conversations. Everyone who buys something from me, we have a conversation. What I sell mostly at the markets is my jewelry boxes that I refinished. They take quite a bit of time to do. They're one of a kind, they're hand done, they're very unique. They cost a little bit more. They range from the like 60 to 150 dollars apiece. They're definitely something people are buying as a special gift for special occasions… I like that face-to-face interaction and the conservation. The markets are really fun. I do them because I enjoy them

> and I have a good time and I hope I do sales. If I get to talk to people I still always have a good day (Participant 9).

> That's the cool thing too, not selling strictly online, I get to talk to the people. If they come back, I get to tell them things, like this is made out of a man's tie and a vintage earring. They'll be interested. I can actually talk to them face-to-face. And we have people who will share their story, like what inspired them to buy something. I have this photo necklace that had a photograph of a telephone, an old phone up close. And she bought it and said, "My dad used to collect these." I need to start writing down these stories because people share their stories. And I photograph most of the things that I make so I need to keep a journal with most of their stories in it. They'll tell me why they're buying something. And then they'll come back and tell me what they did with the painting, or say "I wore your whatever to this." That's really cool (Participant 13).

A marketplace with physical interaction is a way for consumers to develop a bond with producers through conversation. By developing a bond the consumer

and the producer can create a more personal and meaningful shopping experience than one could find in a big-box store.

Although the importance of the traditional marketplace is still a defining feature of the indie crafts movement, the popularity of indie crafts has surged due in large part to the advent of Etsy. At first glance, the rise of an online marketplace seems antithetical to the philosophical mission of indie crafts. Not only are market transactions online rather than face-to-face, they are geographically distributed rather than local.

Crafters employ a variety of online strategies to overcome this apparent paradox. On Etsy, the most basic strategy is to spend time creating a unique, informative public profile. This helps the customer feel like he or she knows the seller and is a virtual proxy for the unique shopping experience of the farmer's market or a craft fair.

> It (Etsy) allows you to find ways to make the person who is buying from you feel kind of warm and fuzzy about buying from you in a way that eBay doesn't. eBay sellers are pretty anonymous, but on Etsy every seller has a profile and that's a way to make it personal. That's

> kind of a reaction to or an acknowledgement of the fact that the work was handmade by a person (Participant 3).

> (When presenting yourself online) people want to know what you're up to personally. They don't just want to know about the craft shows you'll be at. That's kind of boring (Participant 8).

Beyond just putting basic information on Etsy, many crafters also maintain a blog or a Facebook group to offer additional information. The crafter generally puts a link to his or her blog on the Etsy store and encourages the customer to click over. Additional information may include accounts of a crafter's daily life or work schedule so that the customer can feel that he or she knows the crafter personally.

> The Internet gives us a false sense that we know people. If somebody goes to my shop they can go read my blog, and I'm pretty open in the stuff that I write. I think if you look at some of the most successful sellers they kind of do the same thing. Their life is online in some aspect. Even if you're buying and you don't technically know this person I think one

> thing is that you kind of feel like you know this person and you could imagine that this person lives down the street, and that's definitely one thing that Etsy and Internet shopping… it is a paradox, but at the same time we kind of live a world where a lot of our closest friends are people that we don't see every day that are online. And that whole medium allows you to have friendships you wouldn't necessarily have because of geography (Participant 10).

To mimic "real life" marketplaces, customers and sellers attempt to personalize the online shopping experience by exchanging personal stories. From the customer's perspective, these stories relate to why they are purchasing an item, while the seller will often share what inspired him or her to produce a particular item. The desire to share in a personalized experience gets to the foundational aspects of the craft traditional ethos. The following passages are examples of how crafters and their customers share these experiences in the digital era:

> The three guys who have purchased from me purchased through Etsy and they let me know through email, "I'm giving this to my wife." I got

that same sort of sense of this is a special gift, I knew the story, and I get a lot of satisfaction out of that. When I send it off I know it's going to Brian in Chicago and it's going to his girlfriend or whatever. There's a little bit of the personal thing for both of them (Participant 9).

It's important to me that when somebody buys something that I make that there's a story, or that there's some kind of mythology related to them buying something. So it isn't just like going to some store in mall and buying something. It's the actual human connection and touch behind it. So with my blog I talk about stuff I'm working on but I also talk a little about my life so if someone is interested they can know who they're buying from and why. I think since we live in a culture right that so many people are disconnected with each other and we sit behind computers all day and they go home and they're tired, and the only of communicating with people is going out for a drink. People are so hungry for new things and like different kinds of lives and fantasy that I think a lot of people really, I know I really like to know the story behind what I'm buying or see what other people in the world are doing. It's really inspiring (Participant 15).

When shipping an item out after making an online sale, most crafters send a hand written message along with item to thank the customer and to encourage them to purchase again in the future. Once a seller receives an electronic notification of an online sale, he or she will often message the customer immediately online to acknowledge the sale rather than send an automated confirmation message. These strategies are intended to uphold the traditions of the idealized craft marketplace while adapting to the reality of the online store:

> My experience in buying things through Etsy is that when you go to people's pages they really personalize it in a way that I almost feel like I can see them sitting in their living rooms and making this stuff. They say "Hi! This is my name, and this is where I'm from, and this is what I like to do." But not to the extent of a Facebook kind of thing, but really like this is me, personally talking to you right now, and you're looking at my stuff, and this is great, and this is why I like to make it. And then when you get their stuff, there's always a hand written note in there, with their name and they wrote it out. They say thank you. The first thing I ever bought from Etsy she wrapped it up in this cute little paper, and tied a

> bow to it, and it was like a really dirt cheap thing too, and she wrote "thank you so much for visiting my site, love Anna" or whatever her name was, and it was just, wow, that was so amazing. It really touched me, you know, that she would take that personal time to do that. And that what it all is about crafting, bringing it back to that personal touch, and I think you couldn't have it any other way. When you craft something you have this really personal connection with it and you don't want to just send it off. You want people to know it's a person that has created this for you. And, even the interactions I've had with buying from these people, they put a personal note on Etsy, and you write that. And I'll say, "this is really beautiful, thanks for making it, I'm happy I could buy it." And they'll send you a note back no matter how busy they are they'll do it. That's how I think people really personalize the Internet for themselves. And that's how the craft movement has become so big too, because it wouldn't be possible otherwise, because there is not a lot of money in it (Participant 2).

Through personalized communication a crafter can establish customer loyalty. Repeat customers are essential part of business because there are so

many other readily available options for customers online. Personalized communication is also a strategy crafters use to distinguish their items from those offered in a big-box retail store. The quandary many sellers face is that a customer can now find similar items in Target at a fraction of the cost. Although crafters cannot compete on price, they exploit the fact that big-box stores cannot build relationships with customers:

> I have a lot of repeat customers so a lot of it is just good communication with your customers, you know. Make sure you make that personal contact with them through a message, and I always put a little handwritten note with each product that I ship out so I can keep them coming back for more and I'll send a few business cards with them so they can pass those on to their friends. And then maybe their friends will come to my site. You know, really trying to use not just the Internet but really that grassroots marketing so that people can come to my site… If it's not personal then they might as well be shopping at a big box store or something. They want a story to go with their product. It's not enough to say I got it on Etsy, which is already cool to say I got it on Etsy and it's handmade, but then if you can kind of feel like you've had this

> connection with the designer it makes you feel a little bit more special and maybe your friends with them. That's what's good too on my Facebook page for my business, I will contact people through there and have personal conversations with them through there. I feel like that's sort of me, I like to talk about my things and describe them to people and sometimes you can convince them to try it on or to buy it or things like that. So you definitely don't want to lose that personal touch at all (Participant 14).

On the surface, the centrality of the Internet to indie crafts seems to undermine the value that the craft ethos places on face-to-face interaction and personal engagement between producer and consumer. Advanced ICT, after all, favors the "virtual" at the expense of the "real." Jönsson (2007, 242) argues, however, that "a closer scrutiny often shows that the two fields are more and more intertwined." Modern crafters use "technology for their own purposes… mixing it with age-old traditions, subverting its applications and giving them new symbolical values" (Jönsson 2007, 248). The results of this research provide empirical evidence of these statements and offer specific insights into how ICT supplements rather than replaces "real" or physical interactions.

5.3.2 Networks with Crafters

At its most basic level, the Internet is a tool that allows crafters to find one another efficiently. The ability to find one another, either online or in real life, is essential for indie crafters, but can often be difficult since the indie crafts community is still a niche interest with a relatively a small following. Finding other crafters can be an especially daunting challenge when someone has just moved to a new city. The experience of Participant 13 is particularly common after a crafter moves to a new city:

> I moved here (Knoxville) and didn't have any friends for a long time. I found a new friend on MySpace and saw that we have similar in music and I saw that she was into crafting and stuff. I emailed her, which is very unlike me and we became friends (Participant 13).

The Internet significantly speeds up the process of making initial contact and finding other crafters. After making initial contact, crafters are in a much better position to then establish a local social network offline. The experiences of Participant 5 are particularly illustrative of this point:

> At fist I was still a bit shy, and I wouldn't really get in deep conversations with people. But MySpace, I would say, opened the door to where I'm actually reading descriptions of what they're interested in, so that would spark conversations. Sometimes online, but in person as well, like if I saw them next time I would be like, "Hey, I really liked that you had this picture of this thing you made," and it would go from there. I would say it was 50/50, Internet to personal interaction... It wasn't so much a physical meet up I tried to make happen, it was more you randomly see this acquaintance in the street or at the next show that happens or whatever. We already had an acquaintanceship but then learned that they were into certain things (Participant 5).

After moving to St. Louis from Pittsburgh, Participant 14 faced a similar situation. She knew of the existence of the craft community but was unsure of how to become established. Her first step was to turn to online information, which then put her in the position to establish a local social network in the real world:

> For me it was a lot of getting online and Googling every phrase I could think of that would involve crafting or fashion or sewing in St. Louis. Once I found out what the key groups were, any time they had an event I was there. And I would introduce myself to people. If I knew that so-and-so was the president of this group, I would introduce myself. To them, even if I had to introduce myself six times before they would remember who I was, I would do it. That's how people got to know me. And then I became a part of these groups and then they were asking me to do things. I made contacts where they're asking me to come teach at their college or come speak to their students or be on the board for this or be on the board for that… It's important to know that there are other people out there doing what you do. You have to find them. Once you do find them there's a world of opportunities that awaits them, you just have to do the initial work to get out there (Participant 14).

The above quote also speaks to the persistence of barriers to entry in the digital age. Although Google brought a world of information to the fingertips of Participant 14, there remained a considerable amount of work to become established. After learning the names of individuals and interest groups online,

actually attending the events and expending the effort to make important contacts awaits. Indeed, attending local events such as craft fairs and farmer's markets is crucial to developing a local craft community and making a name for one's self:

> The more shows you do the more you find out about. Especially if you do one that's bad, people spend the whole time talking about other ones that were good. Or even at a good show you talk to other people, we're all kind of in the same mindset of getting our businesses out there, so that's what we talk about (Participant 8).

> Every time they (Atlanta's craft community) would have a show you would meet more people that were doing what you were doing. That specific thing really helped grow the local craft community and we really started getting more people at craft sites (Participant 10).

For crafters, the Internet's primary utility is helping people establish personal networks in the real world. The Internet significantly decreases the time it takes to make initial contact with a local crafting community. Once

crafters make initial contact, the long process of getting established and meeting helpful local people begins. While the Internet can assist with the process, it does not take the place of real world social networking.

5.4 Concluding Statements

In this chapter I have offered an in depth look at how indie crafters use online resources to manage their businesses and connect with others. While the Internet is of central importance to the success of indie crafting, it has not fully decentralized the movement. The Internet is a tool that helps crafters organize and communicate efficiently, but local social support mechanisms and networks with other local crafters are keys to the successful operation of an indie crafting business. The importance of local social connections and local support for small business is one of the primary reasons why crafting has a defined geography.

Although crafters can reach a geographically distributed customer base, the ability to maintain close contact between producer and consumer is central to the philosophy underpinning crafts. In an attempt to mimic the feel of a traditional face-to-face marketplace, successful crafters invest large amounts of time communicating online with customers and sharing personal stories. This is a strategy to personalize the distant nature of social interactions on the Internet.

In the final chapter I tie together the insights from the quantitative and qualitative results chapters. This final step of the research highlights the strengths of the sequential explanatory design chosen for this study. Recalling the methodological discussion in Chapter 3, interpreting the results from two phases using different methods offers insights that would not be evident from single method research design (Morse 1991; Creswell 2003).

CHAPTER 6

ANALYSIS AND CONCLUSIONS

6.1 Analysis of Results

This dissertation has used a mixed methods research design to examine the cultural economy in the digital age. The sequential explanatory design chosen has permitted the combination of quantitative and qualitative methods in complementary ways that add depth and richness to the results. Specifically, the research design used qualitative methods to elaborate upon and further explain the results of an earlier quantitative phase. In the following sections, I will briefly summarize the results of each phase of the research and analyze the key findings within the context of the prevailing literature.

6.1.1 The New Geography of the Cultural Economy

The first objective of this research has been to examine the patterns of agglomeration in independent cultural production. Using standard quantitative techniques for geographical research I showed that geographical constraints continue to influence cultural production in the digital age, but not in ways that have been accounted for previously.

In raw numbers, the most prominent indie crafting cities are the same as the most prominent cities for mainstream cultural production. New York, Los Angeles, San Francisco, Seattle, Chicago, and Washington DC are important to both mainstream and independent cultural production in absolute numbers. Similarly, both mainstream and independent cultural workers concentrate in a relatively small number of cities.

Examining the indie crafter population by metropolitan concentration as opposed to raw numbers offers additional insights into the geography of independent cultural production. When looked at from the perspective of a location quotient, it becomes apparent that second- and third-tier cities, especially those in the Pacific Northwest, are particularly important for indie crafting. Contrary to cultural economic research using census data, major metropolitan areas such as New York, Los Angeles, Chicago, and Boston do not have prominent concentrations of indie crafters.

Multivariate regression analysis reveals that many of the location-based factors that predict "Bohemians" (Florida 2002a) or signal an "artistic dividend" (Markusen and Schrock 2006) also predict the per capita population of indie crafters. Educational attainment and the presence of other artists are the most important predictor variables. Proxy variables related to local support for and

opportunities to participate in the arts are also positive and significant predictors. Finally, variables that reflect a progressive social milieu are positively related to presence of indie crafters, confirming expectations from related literature.

In a departure from previous findings (Jackson, Kabwasa-Green, and Herranz 2006), institutions such as museums and galleries negatively influence indie crafting and the ancillary arts variable is insignificant. One possible explanation for these results is the fact that institutions and businesses supporting the arts concentrate in major cities where indie crafting is not as strong. Many researchers find that the presence of urban amenities such as bars, cafes, and nightlife is a significant factor in the geography of cultural production (Glaeser, Kolko, and Saiz 2001; Florida 2002c; Clark et al. 2002; Currid 2009). While amenities are also a significant factor for indie crafters, those serving niche interests such as microbreweries and craft stores are most important.

Based on these results, I argue that the while the cultural economy in the digital age is not decentralized, it is also taking on different geographic forms compared to prior decades. The new geography of the cultural economy is more complex in that it still favors clustering on one level but deviates from traditional patterns of agglomeration on the other.

Traditionally, the geography of the cultural economy has been relatively straightforward to interpret. The bulk of cultural production takes places in large, globally important cities that offer efficiency-boosting agglomeration benefits and attractive urban amenities. After New York, Los Angeles, and San Francisco, otherwise known as the "Big Three," cultural production diminishes drastically further down the urban hierarchy (Markusen and Schrock 2006).

In the 21st century, clustering and spatial proximity remain important, contrary to predictions modern technology would spell the "death of geography" (Cairncross 2001; Friedman 2005) or the diminished economic importance of geography (von Hippel 2005; Tapscott and Williams 2006). As this and related research demonstrates empirically (Florida 2008; Currid and Connolly 2008; Baldwin et al. 2008; Reimer, Pinch, and Sunley 2008), agglomeration is still a defining feature of the economy. Unlike in previous decades, however, clustering is not necessarily synonymous with global cities. In the case of indie crafting, second- and third-tier cities, particularly those in the Pacific Northwest, actually have far greater concentrations of indie crafters than do major metropolitan areas.

One factor shaping the new geography of cultural production is the changing relationship between geography and technology. As others have

suggested (e.g. Scott 2001, 2004; Reimer, Pinch, and Sunley 2008; Hracs 2010), technology can create new opportunities for second- and third-tier cities to compete in the cultural economy alongside established first-tier centers. In the case of indie crafters, the Internet helps sellers access a globally distributed clientele and overcome the need to be physically near a sufficiently sized and sophisticated consumer base.

Technologically mediated changes make the geography of the 21st century more difficult to analyze. As Sunley et al. (2008) argue, the traditional clustering model derived from the manufacturing era may no longer be adequate to understand the modern cultural economy. There appear to be a variety of possible geographic patterns that define specific cultural industries rather than one dominant pattern that applies to all cultural industries. The case of indie crafts is but one example of how the geography of the cultural economy is changing in the digital age.

6.1.2 Clustering in the Digital Age

While the quantitative model accounts for nearly 70 percent of the variation in the *Indie Crafters* variable, there are important factors that remain unexplained. To address these remaining factors, the second objective has been

to explain how the use of online resources influences patterns of clustering and agglomeration using qualitative methods. More specifically, the purpose of the second objective was to examine clustering and agglomeration in the cultural economy beyond "cartographic accounts" (Reimer, Pinch, and Sunley 2008, 160). Although quantitative techniques offer an idea of where indie crafters reside, they do not offer insights into how the use of online resources influences patterns of clustering and agglomeration.

The results of fifteen in depth interviews show that the Internet democratizes indie craft production. In the first chapter of this dissertation, I posed the following question: What advantages do independent cultural producers gain by using new technologies? In answering that question, I argue that crafters take advantage of the fact that online stores require little or no start up costs. In addition, there is no need to rent and maintain a physical retail space because crafters can easily access the market for indie crafts through Etsy, the Internet's primary online market for crafts.

A second question posed at the outset asked how crafters use technology to overcome the need to cluster. The interviews demonstrate that crafters can use the Internet to access a geographically distributed customer base, which helps them overcome the need to be located near a sufficiently large, sophisticated

clientele. These new benefits of online resources, therefore, can potentially decentralize patterns of cultural production and diminish the important of agglomeration and clustering. Indeed, the quantitative results from the previous objective show that compared to mainstream cultural industries, patterns of independent cultural production are more diffuse and less associated with global cities.

Research lauding the benefits of democratization, however, has mostly overlooked the drawbacks associated with operating a small business in the digital age. In response to the question of new challenges posed by ICT, the qualitative results show that while online stores are easy to set up, maintaining them is no simple matter. A substantial amount of work takes place behind the scenes to get even a small business up and running. Rather than being cost-prohibitive, a small business in the digital age can be time-prohibitive. In addition, democratization leads to crowding, which in turn makes it far more difficult for individuals to get noticed.

To overcome some of the difficulties associated with operating an independent business online, crafters have a variety of social support mechanisms. Business groups and collectives help crafters diffuse the costs of operation and generate more attention. The need to collaborate is one of the

main reasons why indie craft production shows signs of clustering. Crafters can communicate with anyone in the world and find a globally distributed marketplace online, but day-to-day business operations require a helpful local community. For crafters, therefore, the Internet is an important tool to help crafters organize and collaborate on a *local* level.

Building upon these results, I argue that rather than undermining the importance of geography, the Internet actually enhances clustering and agglomeration. The Internet itself does not increase agglomeration or clustering, but it does increase *interaction* within the cluster. This acknowledgement is a new contribution to the debate concerning the role of geography in the digital age. The prevailing notion in current cultural economic literature is that technology decentralizes cultural production and increases the physical distance of market and social interactions. For example, using web-based markets, crafters can free the "provision of services from their point of consumption" (Morgan 2004, 5), thereby lessening or even negating the need for producers to be near consumers. Using online communications platforms, crafters gain "the rapid and self-empowering ability to disseminate ideas and products along with the chance to discover previously unknown pockets of community" (Oakes 2009, 189).

However, the results here suggest that the relationship between technology and the cultural economy plays out on a more local level. For crafters, the Internet's most important function is to help them find and organize information relevant to their own community. Although it is possible to make contacts on the other side of the world or access non-local information, the utility of those contacts and information is limited.

The Internet, therefore, does not diminish the importance of the sort of "haphazard, serendipitous contacts among people" that Jane Jacobs (1961) argues are vital to cultural industries. Instead, the Internet provides a quicker, more efficient way for individuals to make contacts virtually, which then leads local connections and collaborations in "the real world."

The present results also have important policy implications. In policy research pertaining to the cultural economy, Florida and colleagues (e.g. Florida 2002a, 2002c; Clark et al. 2002; Clark 2004; Currid 2009) focus almost entirely on the things a city can do to make life more attractive for the creative class. These strategies generally include revitalizing downtown real estate and investing in nightlife, cafes, and bars. While these activities may be part of what helps foster the growth of an artistic community, the results here signal the importance of also implementing local support mechanisms for artists and related workers.

This finding is consistent with recent work regarding arts-dedicated spaces in communities beyond the “Big Three” cultural production centers (Markusen and Johnson 2006; Markusen and Schrock 2006; Markusen 2007). In their report on fostering the arts in small towns, Markusen and Johnson (2006, 8) maintain that "artists' centers can help artists learn the business side of their work by ongoing exposure to each other and to entrepreneurial programs in a dedicated space.” Indeed, this research shows that crafters in cities with more resources for artists and a friendlier attitude to independent entrepreneurs have an easier time getting started in their business.

6.1.3 Local and Non-Local Networks

The third and final objective of this research has been to analyze the role of ICT in social networks. In particular, this objective explores how independent cultural producers use the Internet to create and manage social networks with both customers and other cultural producers. Accomplishing this objective gives additional insight into how online entrepreneurs actually use the Internet in their business operations.

Qualitative results show that crafters use the Internet in unique ways to communicate with geographically distributed customers. To garner repeat

business and distinguish the consumer experience from that offered in mainstream retail, crafters personally engage with the customer online. The goal is to mimic a real life market transaction with a warm personal exchange and a story to go along with each item purchased. This personalized strategy helps both sellers and customers create a *virtual* approximation of what Zukin (2004, 12) refers to as "a true marketplace (that) brings buyers face to face with sellers."

In the sense that the Internet offers a "true marketplace," however, the digital age is fraught with paradox. There is no question that online producer-consumer interaction leads to distal relations. Producers and consumers are physically and temporally separated from one another when market exchanges take place online. Some craft traditionalists fear that the diminished importance face-to-face and local economic interactions will spell the death of the arts and crafts movement.

In the Internet age, however, the market for indie crafts has never been stronger. The rise of indie craft's online popularity has led to more interest in starting new craft fairs and business groups that reincorporate the local and face-to-face interactions traditionally associated with the movement. Even though producers are now more distant from consumers, both parties are also learning how to use the Internet as a platform to create a psychic connection

with one another. The future of indie crafts, therefore, will be entirely online nor in local marketplaces. Instead, indie crafts in the 21st century will incorporate aspects of both the digital and the real world to continue growing and attracting new enthusiasts.

The Internet is also a tool that dramatically decreases the time it takes for crafters to find information about their local crafting community and get established. Although a world of information about crafting and business resources exists online, the most important service the Internet provides is the ability to find others locally and create what Granovetter (1973) terms "weak ties."

Weak ties are important for managing one's career and for access to insider information. Historically, they have been associated with place because they depend upon happenstance encounters and unplanned face-to-face meetings that urban settings encourage (Granovetter 1982; Lorenzen 2002).

Weak ties remain important, but take on a different character in the Internet age because they are quick and easy to establish online. Once initial contact is made, "weak" relationships may lead to offline, or "real world," connections that would have been difficult to initiate without online tools. In this sense, the Internet neither negates the role of place nor replaces face-to-face interaction.

Instead, crafters use the Internet as a tool to create social networks that are a hybrid between "real world" contacts and virtual contacts.

In this sense, the answer to the question "Are there advantages to living near a sizable community of independent cultural producers that the Internet cannot confer?" is somewhat unsatisfactory. On the one hand, initial contacts with crafters take place in topological space rather than physical space. In other words, making helpful acquaintances at first does not require physical proximity. No matter the location, the Internet helps crafters get their foot in the proverbial door of valuable social networks.

On the other hand, the ability to actually take advantage of those acquaintances and social networks generally requires physical proximity. For example, it does not do a crafter in Atlanta much good to virtually meet an important fair organizer in St. Louis. The Atlanta-based crafter cannot take advantage of the access and knowledge that fair organizer in St. Louis can provide because those resources are spatially bound to St. Louis.

6.2 Concluding Statements

6.2.1 Contributions to Geography

This research takes a step toward re-thinking the relationship between geography and the cultural industries in the 21st century. Geographers have long been interested in "time-space shrinking" technologies because they help overcome the frictions of classic geographic concerns such as distance, space, and time (Brunn and Leinbach 1991; Dicken 2007; Adams 2009). In research inquiries ranging from industrial location decision-making (Rice and Pooler 2009), new media (Pratt 2000; Christopherson 2002), the music industry (Leyshon 2009), and the management of creative content (Currah 2007a), geographers and economists are attempting to resolve the tensions between globalization pressures created by ICT on the one hand and the continuing importance of geography on the other. While the Internet appears to offer a wide range of opportunities and challenges to creative producers, the role of technology in the cultural industries remains poorly understood.

Although by no means a complete account, the research presented here offers some clarity to the relationships between technology, geography, and the cultural industries. There is evidence that proximity is no longer a necessary

requirement for the successful operation of cultural industries. As the virtual relationships between customers and sellers discussed here demonstrates, it is possible to foster trust and acquaintanceship online without co-presence. This is a significant finding because establishing trust through physical proximity is one of the primary factors thought to contribute to clustering in cultural industries (Banks et al. 2000; Lorenzen 2002; Storper and Venables 2004). Indie crafters' ability to operate in the absence of physical proximity lends support to research citing the "distance-killing" effects of modern technologies (Torre and Rallet 2005; Johnson, Siripong, and Brown 2006; Torre 2008).

As Moriset and Malecki (2009, 270-271) note, however, dispersion patterns at the micro level do not negate the importance of agglomeration at the macro level. In other words, it is possible for both dispersion and agglomeration to exist and even simultaneously increase in importance. With respect to indie crafting, for example, the ability to access and interact with a spatially distributed consumer base has given sellers more viable options to make a living from their crafts. At the same time, the difficulties in managing an online store and the advanced knowledge requirements of running a small business make locally derived sources of assistance indispensible.

The relationship between technology and geography does not produce a binary outcome, leading to either dispersion or agglomeration. Instead, the two are highly interrelated and appear to be co-evolving. As new technologies lead to geographically dispersed communication and interaction, new relationships on the ground form to manage those interactions.

6.2.2 Contributions to Craft Literature

In addition to the contributions for geographic research, the results here add insights into ongoing debates in the arts and crafts literature. Resolving the tension between the importance of face-to-face connections on the one hand and the use of impersonal technology on the other is at the heart of the debate. On the surface, the centrality of the Internet to indie crafts suggests that the craft ethos no longer values face-to-face interaction and personal engagement between producer and consumer. Advanced information and communication technologies (ICT), after all, seem to favor the "virtual" at the expense of the "real."

Jönsson (2007, 242) argues, however, that "a closer scrutiny often shows that the two fields are more and more intertwined." In other words, ICTs supplement rather than replace "real" or physical interactions. The results add

empirical support to this argument. For example, selling crafts online rather than in a physical marketplace has not replaced personal interaction between customers and sellers. As the results here demonstrate, crafters use communications technology to their advantage and engage customers online by sharing personal narratives. Modern crafters, therefore, are not Luddites nostalgic for simpler time. Instead, they use "technology for their own purposes… mixing it with age-old traditions, subverting its applications and giving them new symbolical values" (Jönsson 2007, 248).

6.3 Suggestions for Future Research

As of this writing, the relationships between independent cultural production, technology, and geography is relatively new research topic. Accordingly, the results of this dissertation have been exploratory in that they have uncovered new directions for future research. Although there are a number of ways to build from these findings, there are three future directions that would be especially beneficial.

First, during the data collection from Etsy, only the location information for all registered sellers was obtained. While this technique offers a large spatial dataset, it is not possible to distinguish between registered Etsy sellers who

merely have account versus registered Etsy sellers who are highly active. It is therefore possible that the population of indie crafters in some cities includes Etsy accounts associated with users who simply opened a free account and never intended to sell anything. Future research could use a more sophisticated data scraping technique to separate active sellers from inactive sellers and arrive at a more accurate population of indie crafters for each city.

Second, through both quantitative and qualitative techniques, I have shown that the Pacific Northwest is at the vanguard of independent cultural production. Anecdotal evidence from the interviews suggests that local civic and social supports are important factors that contribute to the success of this region. Future case studies of cities in the Pacific Northwest that focus on small business resources, local professional groups, and their influence upon independent cultural production would be particularly insightful.

Third, this research has focused entirely upon urban areas at the expense of rural areas. In recent years, however, a number of scholars question the prevailing notion that art and creativity are quintessentially urban phenomena (e.g. Banks et al. 2000; Jayne 2005; Atterton 2007; Wojan, Lambert, and McGranahan 2007a; Bell and Jayne 2010). Scholars commonly cite that artistic production has recently become more footloose because of advancements in

information and communications technology. For example, the Internet grants artists access to distant markets and frees them from the need to be in the city "where the action is" (Markusen and Schrock 2006, 1664).

Despite the recognition that ICT alters the geography of rural artistic production, there are relatively few empirical analyses of what these new geographies might look like. The indie crafts movement presents an ideal opportunity to examine how rural artistic production benefits from modern technology. In the absence of a physical community, how do rural crafters create the social support mechanisms that are common in urban areas? One possible way to pursue this line of research would be to gather data using the automated technique described in this study. Rural arts councils may also provide access to artists in invidual communities or have data on revenue and membership. Extending our knowledge of the cultural economy beyond global cities and select urban areas, especially in the context of the Internet age, would be welcomed contributions to the existing literature.

LIST OF REFERENCES

Adams, P. C. 2009. Geographies of Media and Communication: A Critical Introduction. Chichester, UK: John Wiley and Sons.

Adamson, G. 2007. *Thinking Through Craft*. New York: Berg.

Aldred, R. 2010. 'On the outside': constructing cycling citizenship. *Social and Cultural Geography* 11 (1):35-52.

Allen, J. 2000. Power/Economic Knowledge: Symbolic and Spatial Formations. In *Knowledge, Space, Economy*, eds. J. R. Bryson, P. W. Daniels, N. Henry and J. Pollard, 15-33. London: Routledge.

Amin, A., and P. Cohendet. 2004. *Architectures of Knowledge*. Oxford: Oxford University Press.

Andersson, A. E. 1985. Creativity and regional development. *Papers of the Regional Science Association* 56 (1):5-20.

Appold, S. J. 1995. Agglomeration, interorganizational networks, and competitive performance in the U.S. metalworking sector. *Economic Geography* 71 (1):27-54.

Arakji, R. Y., and K. R. Lang. 2007. Digital consumer networks and producer-consumer collaboration: Innovation and product development in the

video game industry. *Journal of Management Information Systems* 24 (2):195-219.

Asheim, B. 1996. Industrial districts as 'learning regions': A condition for prosperity. *European Planning Studies* 4 (4):379 – 400.

Asheim, B., L. Coenen, and J. Vang. 2007. Face-to-face, buzz, and knowledge bases: Sociospatial implications for learning, innovation, and innovation policy. *Environment and Planning C: Government and Policy* 25:655-670.

Atterton, J. 2007. The strength of weak ties: Social networking by business owners in the Highlands and Islands of Scotland. *Sociologia Ruralis* 47 (3):228-245.

Audretsch, D. B., and M. P. Feldman. 1996. R&D spillovers and the geography of innovation and production. *American Economic Review* 86 (3):630-640.

Baginski, J. D. 2008. On the Trail of Fine Ale: The Role of Factor Conditions in the Location of Craft Breweries in the United States. Master's Thesis, Department of Geography, University of Tennessee, Knoxville, TN.

Baldwin, J. R., D. Beckstead, M. W. Brown, and D. L. Rigby. 2008. Agglomeration and the geography of localization economies in Canada. *Regional Studies* 42 (1):117-132.

Banks, M., A. Lovatt, J. O'Connor, and C. Raffo. 2000. Risk and trust in the cultural industries. *Geoforum* 31 (4):453-464.

Bassett, K., R. Griffiths, and I. Smith. 2002. Cultural industries, cultural clusters and the city: The example of natural history film-making in Bristol. *Geoforum* 33 (2):165-177.

Bathelt, H., A. Malmberg, and P. Maskell. 2004. Clusters and knowledge: Local buzz, global pipelines and the process of knowledge creation. *Progress in Human Geography* 28 (1):31-56.

Batt, R., S. Christopherson, N. Rightor, and D. Van Jaarsveld. 2001. *Net working: Working patterns and workforce policies for the new media industry*. Washington, DC: Economic Policy Institute.

Becker, H. S. 1982. *Art Worlds*. Berkeley: University of California Press.

Bell, D., and M. Jayne. 2004. *City of Quarters: Urban Villages in the Contemporary City*. Aldershot: Ashgate.

Bell, D., and M. Jayne. 2010. The creative countryside: Policy and practice in the UK rural cultural economy. *Journal of Rural Studies* (Forthcoming).

Benkler, Y. 2006. *The Wealth of Networks*. New Haven: Yale University Press.

Black, A., and N. Burisch. 2010. Craft Hard, Die Free: Radical Curatorial Strategies for Craftivism in Unruly Contexts. In *The Craft Reader*, ed. G. Adamson, 609-619. New York: Berg.

Blaikie, N. 2000. *Designing Social Research*. Cambridge: Polity.

Boris, E. 1986. *Art and Labor: Ruskin, Morris, and the Craftsman Ideal in America*. Philadelphia: Temple University Press.

Bourdieu, P. 1984. *Distinction: A Social Critique of the Judgement of Taste*. Cambridge, MA: Harvard University Press.

Bourdieu, P. 1993. *The Field of Cultural Production*. New York: Columbia University Press.

Boyle, J. 2008. *The Public Domain: Enclosing the Commons of the Mind*. New Haven: Yale University Press.

Bradshaw, M., L. Wood, and S. Williamson. 2001. Applying qualitative and quantitative research: A social impact assessment of a fishery. *Applied Geography* 21 (1):69-85.

Bresnahan, T., A. Gambardella, and A. Saxenian. 2001. 'Old economy' inputs for 'new economy' outcomes: Cluster formation in the new Silicon Valleys. *Industrial and Corporate Change* 10 (4):835-860.

Brewer, J. D. 2000. *Ethnography*. Buckingham: Open University Press.

Brooks, D. 2000. *Bobos in Paradise: The New Upper Class and How They Got There*. New York: Simon and Schuster.

Brunn, S., and T. R. Leinbach eds. 1991. *Collapsing Space and Time: Geographic Aspects of Communication and Information*. London: HarperCollins.

Burgess, R. G. 1984. *In the Field: An Introduction to Field Research*. London: Routledge.

Cairncross, F. 2001. *The Death of Distance: How the Communications Revolution will Change our Lives*. Cambridge, MA: Harvard Business School Press.

Campbell, C. 2005. The craft consumer: Culture, craft and consumption in a postmodern society. *Journal of Consumer Culture* 5 (1):23-42.

Carroll, G. R., and A. Swaminathan. 2000. Why the microbrewery movement? Organizational dynamics of resource partitioning in the U.S. brewing industry. *American Journal of Sociology* 106 (3):715-760.

Castells, M. 1996. *The Information Age: Economy, Society and Culture*. Oxford: Blackwell.

Castells, M. 2000. *The Rise of the Network Society*. 2nd ed. Oxford: Blackwell Publishers.

Castells, M., and P. Hall. 1994. *Technopoles of the World: The Making of the 21st Century Industrial Complexes*. London: Routledge.

Caves, R. 2000. *Creative Industries: Contracts Between Art and Commerce*. Cambridge, MA: Harvard University Press.

Census. *Metropolitan statistical areas and metropolitan divisions defined by the Office of Management and Budget, December 2005*. Population Division, U.S. Census Bureau 2005 [cited.

Christensen, C. M. 1997. *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*. Boston: Harvard Business School Press.

Christopherson, S. 2002. Project work in context: Regulatory change and the new geography of media. *Environment and Planning A* 34 (11):2003 - 2015.

Clark, T. N. ed. 2004. *The City as an Entertainment Machine*. London: JAI Press.

Clark, T. N., R. Lloyd, K. K. Wong, and P. Jain. 2002. Amenities Drive Urban Growth. *Journal of Urban Affairs* 24 (5):493-515.

Coe, N. 2001. A hybrid agglomeration? The development of a satellite-Marshallian industrial district in Vancouver's film industry. *Urban Studies* 38 (10):1753 – 1775.

Coenen, L., J. Moodysson, and B. T. Asheim. 2004. Nodes, networks and proximities: On the knowledge dynamics of the Medicon Valley biotech cluster. *European Planning Studies* 12 (7):1003-1018.

Cooke, E. S. 2007. Modern craft and the American experience. *American Art* 21 (1):2-9.

Cooper, T. 2005. Slower consumption: Reflections on product life spans and the "throwaway society". *Journal of Industrial Ecology* 9 (1/2):51-67.

Coyle, J., and B. Williams. 2000. An exploration of the epistemological intricacies of using qualitative data to develop a quantitative measure of user views of health care. *Journal of Advanced Nursing* 31 (5):1235-1243.

Crane, D. 1989. *The Transformation of the Avant-Garde: The New York Art World, 1940-1985*. Chicago: University of Chicago Press.

Creswell, J. W. 2003. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* 2nd ed. Thousand Oaks, CA: Sage Publications.

Cupples, J., and E. Ridley. 2008. Towards a heterogeneous environmental responsibility: Sustainability and cycling fundamentalism. *Area* 40 (2):254-264.

Currah, A. 2006. Hollywood versus the Internet: The media and entertainment industries in a digital and networked economy. *Journal of Economic Geography* 6 (4):439-468.

Currah, A. 2007a. Hollywood, the Internet and the world: A geography of disruptive innovation. *Industry and Innovation* 14 (4):359-384.

Currah, A. 2007b. Managing creativity: The tensions between commodities and gifts in a digital networked environment. *Economy and Society* 36 (3):467-494.

Currid, E. 2006. New York as a global creative hub: A competitive analysis of four theories on world cities. *Economic Development Quarterly* 20:330-350.

Currid, E. 2007a. The economics of a good party: Social mechanics and the legitimization of art/culture. *Journal of Economics and Finance* 31 (3):386-394.

Currid, E. 2007b. *The Warhol Economy: How Fashion, Art and Music Drive New York City*. Princeton, NJ: Princeton University Press.

Currid, E. 2009. Bohemia as subculture; "bohemia" as industry: Art, culture, and economic development. *Journal of Planning Literature* 23 (4):368-382.

Currid, E., and J. Connolly. 2008. Patterns of knowledge: The geography of advanced services and the case of art and culture. *Annals of the Association of American Geographers* 98 (2):414-434.

Denzin, N. K. 1989. *The Research Act: A Theoretical Introduction to Sociological Methods*. New York: McGraw-Hill.

DeWalt, K. M., and B. R. DeWalt. 2002. *Participant Observation: A Guide for Fieldworkers*. Walnut Creek, CA: AltaMira Press.

Diani, M. 2003. Introduction: Social Movements, Contentious Actions, and Social Networks: 'From Metaphor to Substance'? In *Social Movements and Networks: Relational Approaches to Collective Action*, eds. M. Diani and D. McAdam, 1-20. Oxford: Oxford University Press.

Dicken, P. 2007. *Global Shift: Mapping the Changing Contours of the World Economy*. 5th ed. New York: The Guilford Press.

Dodge, M., and R. Kitchin. 2001. *Atlas of Cyberspace*. Reading, MA: Addison-Wesley.

Donegan, M., and N. Lowe. 2008. Inequality in the creative city: Is there still a place for "old-fashioned" institutions? *Economic Development Quarterly* 22 (1):46-62.

Dormer, P. 1997. *The Culture of Craft*. Manchester, UK: Manchester University Press.

Drake, G. 2003. 'This place gives me space': Place and creativity in the creative industries. *Geoforum* 34 (4):511-524.

Edensor, T., D. Leslie, S. Millington, and N. Rantisi eds. 2010. *Spaces of Vernacular Creativity: Rethinking the Cultural Economy*. London: Routledge.

Entwistle, J. 2006. The cultural economy of fashion buying. *Current Sociology* 54 (5):704-724.

Etsy. 2009. "TechUpdates: Shop Local.", Available from: http://www.etsy.com/storque/etsy-news/techupdates-shop-local-880/. Brooklyn, NY: Etsy.com.

Florida, R. 2000. *Competing in the Age of Talent: Quality of Place and the New Economy*. Pittsburgh, PA: R.K. Mellon Foundation, Heinz Endowments, and Sustainable Pittsburgh.

Florida, R. 2002a. Bohemia and economic geography. *Journal of Economic Geography* 2 (1):55-71.

Florida, R. 2002b. The economic geography of talent. *Annals of the Association of American Geographers* 92 (4):743-755.

Florida, R. 2002c. *The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community and Everyday Life*. New York: Basic Books.

Florida, R. 2003. Cities and the creative class. *City and Community* 2 (1):3-19.

Florida, R. 2008. *Who's Your City?: How the Creative Economy is Making Where to Live the Most Important Decision of Your Life*. New York: Basic Books.

Florida, R., and G. Gates. 2001. Technology and Tolerance: The Importance of Diversity to High-Technology Growth. In *Survey Series*, 1-12. Washington, D.C.: The Brookings Institution: Center on Urban and Metropolitan Policy.

Friedman, T. 2005. *The World is Flat: A Brief History of the Twenty-first Century*. New York: Farrar, Straus and Giroux.

Gertler, M. S. 2003. Tacit knowledge and the economic geography of context, or the undefinable tacitness of being (there). *Journal of Economic Geography* 3 (1):75-99.

Gertler, M. S. 2008. Buzz Without Being There? Communities of Practice in Context. In *Community, Economic Creativity, and Organization*, eds. A. Amin and J. Roberts, 203-226. Oxford: Oxford University Press.

Glaeser, E. L. 1999. Learning in cities. *Journal of Urban Economics* 46 (2):254-277.

Glaeser, E. L., and J. D. Gottlieb. 2006. Urban resurgence and the consumer city. *Urban Studies* 43 (8):1275-1299.

Glaeser, E. L., J. Kolko, and A. Saiz. 2001. Consumer city. *Journal of Economic Geography* 1 (1):27-50.

Glaeser, E. L., A. Saiz, G. Burtless, and W. C. Strange. 2004. The rise of the skilled city (with comments). *Brookings Wharton Papers on Urban Affairs*:47-105.

Glaeser, E. L., J. Scheinkman, and A. Shleifer. 1995. Economic growth in a cross-section of cities. *Journal of Monetary Economics* 36 (1):117-143.

Gorman, S. P., and E. J. Malecki. 2002. Fixed and fluid: Stability and change in the geography of the Internet. *Telecommunications Policy* 26 (7-8):389-413.

Grabher, G. 2001. Ecologies of creativity: The village, the group and the heterarchic organisation of the British advertising industry. *Environment and Planning A* 33:351-374.

Grabher, G. 2002. Cool projects, boring institutions: Temporary collaboration in social context. *Regional Studies* 36 (3):205-214.

Granovetter, M. 1973. The strength of weak ties. *The American Journal of Sociology* 78 (6):1360-1380.

Granovetter, M. 1982. The Strength of Weak Ties; A Network Theory Revisited. In *Social Structure and Network Analysis*, eds. P. V. Marsden and N. Lin, 105-130. Beverly Hills, CA: Sage.

Greer, B. 2007. Craftivism. In *Encyclopedia of Activism and Social Justice*, http://www.sage-ereference.com/activism/Article_n218.html: SAGE Publications.

———. 2008. *Knitting for Good!: A Guide to Creating Personal, Social, and Political Change Stitch by Stitch*. Boston: Shambhala Publications, Inc.

Grubesic, T. H., and A. T. Murray. 2004. Waiting for broadband: Local competition and the spatial distribution of advanced telecommunication services in the United States. *Growth and Change* 35 (2):139-165.

Halfacree, K. 2007. Back-to-the-land in the twenty-first century: Making connections with rurality. *Tijdschrift voor Economische en Sociale Geografie* 98 (1):3-8.

Hannan, M. T., G. R. Carroll, and L. Polos. 2003. The organizational niche. *Sociological Theory* 21 (4):310-340.

Hansen, H. K., J. Vang, and B. T. Asheim. 2005. The Creative Class and Regional Growth: Towards a Knowledge Based Approach. In *Regional Studies Association Annual Conference*. Aalborg, Denmark.

Harrod, T. 1995. *The Crafts in Britain in the 20th Century*. New Haven, CT: Yale University Press.

Hauge, A., and B. J. Hracs. 2010. See the sound, hear the style: Collaborative linkages between indie musicians and fashion designers in local scenes. *Industry and Innovation* 17 (1):113-129.

Heller, M. 2008. *Gridlock Economy: How Too Much Ownership Wrecks Markets, Stops Innovation, and Costs Lives*. New York: Basic Books.

Hemming, P. J. 2008. Mixing qualitative research methods in children's geographies. *Area* 40 (2):152-162.

Hirsch, P. 1972. Processing fads and fashions: An organization-set analysis of cultural industry systems. *The American Journal of Sociology* 77 (4):639-659.

Holt, D. B. 1997. Poststructuralist lifestyle analysis: Conceptualizing the social patterning of consumption in postmodernity. *Journal of Consumer Research* 23 (4):326-350.

Howe, J. 2008. *Crowdsourcing: Why the Power of the Crowd is Driving the Future of Business*. New York: Crown Publishing.

Hracs, B. J. 2010. Beyond Bohemia: Geographies of everyday creativity for musicians in Toronto. In *Spaces of Vernacular Creativity: Rethinking the cultural economy*, eds. T. Edensor, D. Leslie, S. Millington and N. Rantisi, 75-88. New York: Routledge.

Jackson, M. R., F. Kabwasa-Green, and J. Herranz. 2006. Cultural Vitality in Communities: Interpretation and Indicators. Washington, DC: The Urban Institute.

Jacobs, J. 1961. *The Death and Life of Great American Cities*. New York: Random House.

Jacobs, J. 1969. *The Economy of Cities*. New York: Vintage Books.

Jaffe, A., M. Trajtenberg, and R. Henderson. 1993. Geographic localization of knowledge spillovers as evidenced by patent citations. *Quarterly Journal of Economics* 108 (3):577-598.

Jayne, M. 2005. Creative industries: The regional dimension? *Environment and Planning C: Government and Policy* 23 (4):537-556.

Johnson, B., and L. A. Turner. 2003. Data Collection Strategies in Mixed-Methods. In *Handbook of Mixed Methods in Social and Behavioral Research*, eds. A. Tashakkori and C. Teddlie, 297-319. Thousand Oaks, CA: Sage Publications.

Johnson, D. K. N., N. Siripong, and A. S. Brown. 2006. The demise of distance? The declining role of physical proximity for knowledge transmission. *Growth and Change* 37 (1):19-33.

Johnson, G. 2008. Down the Tubes: In Search of Internet Craft. In *Handmade Nation: The Rise of DiY, Art, Craft, and Design*, eds. F. Levine and C. Heimerl, 30-35. New York: Princeton Architectural Press.

Jones, B. W., B. Spigel, and E. J. Malecki. 2010. Blog links as pipelines to buzz elsewhere: The case of New York theater blogs. *Environment and Planning B: Planning and Design*: *Forthcoming*.

Jönsson, L. 2007. Rethinking Dichotomies: Crafts and the Digital. In *NeoCraft: Modernity and the Crafts*, ed. S. Alfoldy, 240-248. Halifax, Nova Scotia: The Press of the Nova Scotia College of Art and Design.

Jorgensen, D. 1989. *Participant Observation*. Newbury Park, CA: Sage.

Kelley, M. R., and S. Helper. 1999. Firm size and capabilities, regional agglomeration, and the adoption of new technology. *Economics of Innovation and New Technology* 8 (1):79-103.

Kozinets, R. V. 2010. *Netnography: Doing Ethnographic Research Online*. Thousand Oaks, CA: Sage Publications.

Krugman, P. 1991a. *Geography and Trade*. Cambridge, MA: MIT Press.

Krugman, P. 1991b. Increasing returns and economic geography. *Journal of Political Economy* 99 (3):483-499.

Kvale, S. 1996. *InterViews*. London: Sage.

Lam, A. 2005. Organizational Innovation. In *The Oxford Handbook of Innovation*, eds. J. Fagerberg, D. C. Mowery and R. R. Nelson, 125-147. Oxford: Oxford University Press.

Langhout, R. D. 2003. Reconceptualizing quantitative and qualitative methods: A case study dealing with place as an exemplar. *American Journal of Community Psychology* 32 (3/4):229-244.

Lash, S., and J. Urry. 1994. *Economies of Signs and Space*. London: Sage.

Latham, A. 2003. Urbanity, lifestyle and making sense of the new urban cultural economy: Notes from Auckland, New Zealand. *Urban Studies* 40 (9):1699-1724.

Leadbeater, C., and P. Miller. 2004. *The Pro-Am Revolution: How Enthusiasts Are Changing our Economy and Society*. London: Demos.

Leslie, D., and N. Rantisi. 2009. Fostering a Culture of Design: Insights From the Case of Montreal, Canada. In *Creativity, Innovation and the Cultural Economy*, eds. A. C. Pratt and P. Jeffcutt, 181-199. London: Routledge.

Lessig, L. 2004. *Free Culture: How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity*. New York: Penguin Press.

Levine, F., and C. Heimerl. 2008. *Handmade Nation: The Rise of DiY, Art, Craft, and Design*. New York: Princeton Architectural Press.

Leyshon, A. 2001. Time - space (and digital) compression: Software formats, musical networks, and the reorganisation of the music industry. *Environment and Planning A* 33 (1):49-77.

Leyshon, A. 2003. Scary monsters? Software formats, peer-to-peer networks, and the spectre of the gift. *Environment and Planning D: Society and Space* 21 (5):533-558.

Leyshon, A. 2009. The software slump?: Digital music, the democratisation of technology, and the decline of the recording studio sector within the musical economy. *Environment and Planning A* 41 (6):1309-1331.

Lloyd, R. 2005. *Neo-Bohemia: Art and Commerce in the Post-Industrial City*. New York: Routledge.

Lorenzen, M. 2002. Ties, trust and trade: elements of a theory of coordination in industrial clusters. *International Studies in Management and Organization* 31 (4):14-34.

Lucas, R. 1988. On the mechanics of economic development. *Journal of Monetary Economics* 22 (1):3-42.

Madsen, L. M., and H. K. Adriansen. 2004. Understanding the use of rural space: The need for multi-methods *Journal of Rural Studies* 20 (4):485-497.

Malecki, E. J. 2002. The economic geography of the Internet's infrastructure. *Economic Geography* 78 (4):399-424.

Malecki, E. J. 2007. Cities and regions competing in the global economy: Knowledge and local development policies. *Environment and Planning C: Government and Policy* 25:638-654.

Malmberg, A., B. Malmberg, and P. Lundequist. 2000. Agglomeration and firm performance: Economies of scale, localisation, and urbanisation among Swedish export firms. *Environment and Planning A* 32 (2):305-321.

Mankiw, N. G., D. Romer, and D. N. Weil. 1992. A contribution to the empirics of economic growth. *The Quarterly Journal of Economics* 107 (2):407-437.

Markusen, A. 2006. Urban development and the politics of a creative class: Evidence from a study of artists. *Environment and Planning A* 38:1921-1940.

Markusen, A. 2007. An arts-based state rural development policy. *Journal of Regional Analysis and Policy* 37 (1):7-9.

Markusen, A. 2010. Challenge, change, and space in vernacular cultural practice. In *Spaces of Vernacular Creativity: Rethinking the cultural economy*, eds. T. Edensor, D. Leslie, S. Millington and N. Rantisi, 185-199. New York: Routledge.

Markusen, A., and A. Johnson. 2006. Artists' Centers: Evolution and Impact on Careers, Neighborhoods and Economies. In *Project on Regional and Industrial Economics*. Minneapolis, MN: University of Minnesota.

Markusen, A., and D. King. 2003. The Artistic Dividend: The Hidden Contributions of the Arts to the Regional Economy. In *Project on Regional*

and Industrial Economics. Minneapolis, MN: Humphrey Institute, University of Minnesota.

Markusen, A., and G. Schrock. 2006. The artistic dividend: Urban artistic specialisation and economic development implications. *Urban Studies* 43 (10):1661-1686.

Markusen, A., G. H. Wassall, D. DeNatale, and R. Cohen. 2008. Defining the creative economy: Industry and occupational approaches. *Economic Development Quarterly* 22 (1):24-45.

Marshall, A. 1920. *Principles of Economics*. London: Macmillan.

Marx, L. 1964. *The Machine in the Garden: Technology and the Pastoral Ideal in America*. New York: Oxford University Press.

Maskell, P., and A. Malmberg. 1999. Localised learning and industrial competitiveness. *Cambridge Journal of Economics* 23 (2):167-185.

Mason, J. 2002. *Qualitative Researching*. 2nd ed. London: Sage.

McCann, E. J. 2004. 'Best places': Interurban competition, quality of life and popular media discourse. *Urban Studies* 41 (10):1909-1929.

McCann, E. J. 2007. Inequality and politics in the creative city-region: Questions of livability and state strategy. *International Journal of Urban and Regional Research* 31 (1):188-196.

McCullough, M. 1996. *Abstracting Craft: The Practiced Digital Hand*. Cambridge, MA: The MIT Press.

McGranahan, D. 1999. Natural Amenities Drive Rural Population Change, 1-24. Washington, D.C.: Food and Rural Economics Division, Economic Research Service, U.S. Department of Agriculture.

McGranahan, D., and T. Wojan. 2007. Recasting the creative class to examine growth processes in rural and urban counties. *Regional Studies* 41 (2):197-216.

McGranahan, D. A., T. R. Wojan, and D. M. Lambert. 2010. The rural growth trifecta: Outdoor amenities, creative class and entrepreneurial context. *Journal of Economic Geography* 10:1-29.

Melucci, A. 1996. *Challenging Codes*. Cambridge/New York: Cambridge University Press.

Miles, M. B., and A. M. Huberman. 1994. *Qualitative Data Analysis: An Expanded Sourcebook*. 2nd ed. Thousand Oaks, CA: Sage Publications.

Miller, S. I., and M. Fredericks. 2006. Mixed-methods and evaluation research: Trends and issues. *Qualitative Health Research* 16 (4):567-579.

Moller, S., A. S. Alderson, and F. Nielsen. 2009. Changing patterns of income inequality in U.S. counties, 1970-2000. *American Journal of Sociology* 114 (4):1037-1101.

Molotch, H. 1996. L.A. as Design Product: How Art Works in a Regional Economy. In *The City: Los Angeles and Urban Theory at the End of the Twentieth Century*, eds. A. J. Scott and E. W. Soja, 225-275. Los Angeles: University of California Press.

Moodysson, J. 2008. Principles and practices of knowledge creation: On the organization of "buzz" and "pipelines" in life science communities. *Economic Geography* 84 (4):449-469.

Morgan, K. 2004. The exaggerated death of geography: Learning, proximity and territorial innovation systems. *Journal of Economic Geography* 4 (1):3-21.

Moriset, B., and E. J. Malecki. 2009. Organization versus space: The paradoxical geographies of the digital economy. *Geography Compass* 3 (1):256-274.

Morse, J. M. 1991. Strategies for Sampling. In *Qualitative Nursing Research: A Contemporary Dialogue*, ed. J. M. Morse, 117-131. Newbury Park, CA: Sage.

Morse, J. M., M. Barrett, M. Mayan, K. Olson, and J. Spiers. 2002. Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods* 1 (2):13-22.

Needleman, C. 1979. *The Work of Craft: An Inquiry into the Nature of Crafts and Craftsmanship*. New York: Kodansha America.

Oakes, K. 2009. *Slanted and Enchanted: The Evolution of Indie Culture*. New York: Henry Holt and Co.

Oakley, K. 2004. Not so cool Britannia: The role of creative industries in economic development. *International Journal of Cultural Studies* 7 (1):67-77.

Oldenburg, R., and D. Brissett. 1982. The third place. *Qualitative Sociology* 5 (4):265-284.

Patton, M. Q. 1999. Enhancing the quality and credibility of qualitative analysis. *Health Services Research* 34 (5):1189-1208.

Peck, J. 2005. Struggling with the creative class. *International Journal of Urban and Regional Research* 29 (4):740-770.

Perelman, M. 2002. *Steal This Idea: Intellectual Property Rights and the Corporate Confiscation of Creativity* New York: Palgrave.

Polanyi, M. 1958. *Personal Knowledge*. Chicago: University of Chicago Press.

Pole, C., and M. Morrison. 2003. *Ethnography for Education*. Maidenhead: Open University Press.

Porter, M. E. 1990. *The Competitive Advantage of Nations*. New York: Free Press.

Porter, M. E. 1998. Clusters and the new economics of competition. *Harvard Business Review* 76 (6):77-90.

Porter, M. E. 2000. Location, competition, and economic development: Local Ccusters in a global economy. *Economic Development Quarterly* 14 (1):15-34.

Power, D. 2003. The Nordic "cultural industries": A cross-national assessment of the place of the cultural industries in Denmark, Finland, Norway and Sweden. *Geografiska Annaler: Series B, Human Geography* 85 (3):167-180.

Power, D., and A. J. Scott. 2004. A Prelude to the Cultural Industries and the Production of Culture. In *Cultural Industries and the Production of Culture*, eds. D. Power and A. J. Scott, 3-15. London: Routledge.

Pratt, A. C. 2000. New media, the new economy and new spaces. *Geoforum* 31 (4):425-436.

Pratt, A. C. 2004. The cultural economy: A call for spatialized 'production of culture' perspectives. *International Journal of Cultural Studies* 7 (1):117-128.

Pratt, A. C., and P. Jeffcutt. 2009a. Creativity, Innovation and the Cultural Economy: Snake Oil for the 21st Century? In *Creativity, Innovation and the Cultural Economy*, eds. A. C. Pratt and P. Jeffcutt, 3-20. New York: Routledge.

Pratt, A. C., and P. Jeffcutt eds. 2009b. *Creativity, Innovation and the Cultural Economy*. London: Routledge.

Press, M. 2007. Handmade Futures: The Emerging Role of Craft Knowledge in Our Digital Culture. In *NeoCraft: Modernity and the Crafts*, ed. S. Alfoldy, 249-266. Halifax, Nova Scotia: The Press of the Nova Scotia College of Art and Design.

Pye, D. 1968. *The Nature of Art and Workmanship*. Cambridge: Cambridge University Press.

Rantisi, N. 2004. The ascendance of New York fashion. *International Journal of Urban and Regional Research* 28 (1):86-107.

Reimer, S., S. Pinch, and P. Sunley. 2008. Design spaces: Agglomeration and creativity in British design agencies. *Geografiska Annaler: Series B, Human Geography* 90 (2):151-172.

Rice, M. D., and J. A. Pooler. 2009. Subsidiary headquarters: The urban geography of the "second tier" of corporate decision-making activity in North America. *Urban Geography* 30 (3):289-311.

Rosenberg, J., and G. Garofalo. 1998. Riot Grrrl: Revolutions from within. *Feminisms and Youth Cultures* 23 (3):809-841.

Rossman, G. B., and S. F. Rallis. 1998. *Learning the Field: An Introduction to Qualitative Research*. Thousand Oaks, CA: Sage.

Santagata, W. 2004. Creativity, Fashion, and Market Behaviour. In *Cultural Industries and the Production of Culture*, eds. D. Power and A. J. Scott, 75-90. London: Routledge.

Saxenian, A. 1994. *Regional Advantage: Culture and Competition in Silicon Valley and Route 128*. Cambridge, MA: Harvard University Press.

Schlit, K. 2004. "Riot Grrrl Is...": Contestation Over Meaning in a Music Scene. In *Music Scenes: Local, Translocal, and Virtual*, eds. A. Bennett and R. A. Peterson, 115-130. Nashville, TN: Vanderbilt University Press.

Schnell, S. M., and J. F. Reese. 2003. Microbreweries as tools of local identity. *Journal of Cultural Geography* 21 (1):45-69.

Schoales, J. 2006. Alpha clusters: Creative innovation in local economies. *Economic Development Quarterly* 20 (2):162-177.

Schoenberger, E. 1991. The corporate interview as a research method in economic geography. *The Professional Geographer* 43 (2):180-189.

Schor, J. 1998. *The Overspent American: Downshifting and the New Consumer*. New York: Basic Books.

Scott, A. J. 1996. The craft, fashion, and cultural-products industries of Los Angeles: Competitive dynamics and policy dilemmas in a multisectoral image-producing complex. *Annals of the Association of American Geographers* 86 (2):306-323.

Scott, A. J. 1997. The cultural economy of cities. *International Journal of Urban and Regional Research* 21 (2):323-339.

Scott, A. J. 1998. Multimedia and digital visual effects: An emerging local labor market. *Monthly Labor Review* 121 (3):30-38.

Scott, A. J. 2000a. *The Cultural Economy of Cities*. London: Sage.

Scott, A. J. 2000b. Economic Geography: The Great Half-Century. In *The Oxford Handbook of Economic Geography*, eds. G. L. Clark, M. P. Feldman and M. S. Gertler, 18-44. Oxford: Oxford University Press.

Scott, A. J. 2001. Capitalism, cities, and the production of symbolic forms. *Transactions of the Institute of British Geographers* 26 (1):11-23.

Scott, A. J. 2004. Cultural-products industries and urban economic development: Prospects for growth and market contestation in global context. *Urban Affairs Review* 39 (4):461-490.

Scott, A. J. 2005. *On Hollywood: The Place, the Industry*. Princeton, NJ: Princeton University Press.

Scott, A. J. 2006a. Creative cities: Conceptual issues and policy questions. *Journal of Urban Affairs* 28 (1):1-17.

Scott, A. J. 2006b. Entrepreneurship, innovation and industrial development: Geography and the creative field revisited. *Small Business Economics* 26:1-24.

Shapiro, J. M. 2005. Smart cities: quality of life, productivity and the growth effects of human capital. Cambridge, MA: Working Paper No. 11615, NBER.

Shirky, C. 2008. *Here Comes Everybody: The Power of Organizing Without Organizations*. New York: Penguin Group.

Shumway, J. M., and S. M. Otterstrom. 2001. Spatial patterns of migration and income change in the mountain west: The dominance of service-based, amenity-rich counties. *Professional Geographer* 53 (4):492-502.

Smith, N. 1979. Gentrification and capital: Practice and ideology in Society Hill. *Antipode* 11 (3):24-35.

Smith, N. 1982. Gentrification and uneven development. *Economic Geography* 58 (2):139-155.

Smith, N. 1987. Of yuppies and housing: Gentrification, social restructuring, and the urban dream. *Environment and Planning D: Society and Space* 5 (2):151-172.

Spencer, A. 2005. *DiY: The Rise of Lo-Fi Culture*. London: Marion Boyars.

Spradley, J. P. 1980. *Participant Observation*. New York: Holt, Rinehart, and Winston.

Stewart, M., E. Makwarimba, A. Barnfather, N. Letourneau, and A. Neufeld. 2008. Researching reducing health disparities: Mixed-methods approaches. *Social Science and Medicine* 66 (6):1406-1417.

Storper, M. 1997. *The Regional World: Territorial development in a global economy*. New York: Guilford.

Storper, M., and A. J. Scott. 1995. The wealth of regions: Market forces and policy imperatives in local and global context. *Futures* 27 (5):505-526.

Storper, M., and A. J. Venables. 2004. Buzz: Face-to-face contact and the urban economy. *Journal of Economic Geography* 4 (4):351-370.

Sunley, P., S. Pinch, S. Reimer, and J. Macmillen. 2008. Innovation in a creative production system: The case of design. *Journal of Economic Geography* 8 (5):675-698.

Tapscott, D., and A. D. Williams. 2006. *Wikinomics: How Mass Collaboration Changes Everything*. New York: Penguin Group.

Tashakkori, A., and C. Teddlie. 2003. *Handbook of Mixed Methods in Social and Behavorial Research*. Thousand Oaks, CA: Sage Publications.

Taylor, A. 2009. Comparing and Contrasting Etsy and Artfire. In *Business Profiles*, Accessible From: http://businessprofiles.suite101.com/article.cfm/comparing_and_contrasting_etsy_and_artfire: suite101.com.

Thompson, C. J., and G. Coskuner-Balli. 2007. Countervailing market responses to corporate co-optation and the ideological recruitment of consumption communities. *Journal of Consumer Research* 34 (2):135-152.

Tilly, C. 1994. Social movements as historically specific clusters of political performance. *Berkeley Journal of Sociology* 38:1-30.

Torre, A. 2008. On the role played by temporary geographical proximity in knowledge transmission. *Regional Studies* 42 (6):869-889.

Torre, A., and A. Rallet. 2005. Proximity and localization. *Regional Studies* 39 (1):47-59.

Tremblay, V., and C. H. Tremblay. 2005. *The U.S. Brewing Industry*. Cambridge, MA: MIT Press.

Triggs, T. 2006. Scissors and glue: Punk fanzines and the creation of a DIY aesthetic. *Journal of Design History* 19 (1):69-83.

Turok, I. 2003. Cities, clusters and creative industries: the case of film and television in Scotland. *European Planning Studies* 11 (5):549-565.

Urry, J. 2004. Connections. *Environment and Planning D: Society and Space* 22:2.

Veblen, T. 1899, 1934. *The Theory of the Leisure Class*. New York: The Modern Library.

Vinodrai, T. 2006. Reproducing Toronto's design ecology: career paths, intermediaries, and local labor markets. *Economic Geography* 82 (3):237-263.

von Hippel, E. 2005. *Democratizing Innovation*. Cambridge, MA: The MIT Press.

Walker, R. 2008. *Buying In: The Secret Dialogue Between What We Buy and Who We Are*. New York: Random House.

Winchester, H. P. M. 1999. Interviews and questionnaires as mixed methods in population geography: The case of lone fathers in Newcastle, Australia. *The Professional Geographer* 51 (1):60-67.

Winkler, R., D. R. Field, A. E. Luloff, R. S. Krannich, and T. Williams. 2007. Social landscapes of the inter-mountain west: A comparison of 'old west' and 'new west' communities. *Rural Sociology* 72 (3):478-501.

Wojan, T. R., D. M. Lambert, and D. A. McGranahan. 2007a. The emergence of rural artistic havens: A first look. *Agricultural and Resource Economics Review* 36 (1):53-70.

Wojan, T. R., D. M. Lambert, and D. A. McGranahan. 2007b. Emoting with their feet: Bohemian attraction to creative milieu. *Journal of Economic Geography* 7 (6):711-736.

Zook, M. A. 2005. *The Geography of the Internet Industry*. Oxford: Blackwell.

Zukin, S. 1989. *Loft Living: Culture and Capital in Urban Change*. Piscataway, NJ: Rutgers University Press.

Zukin, S. 2004. *Point of Purchase: How Shopping Changed American Culture*. New York: Routledge.

APPENDIX A

Figure A-1

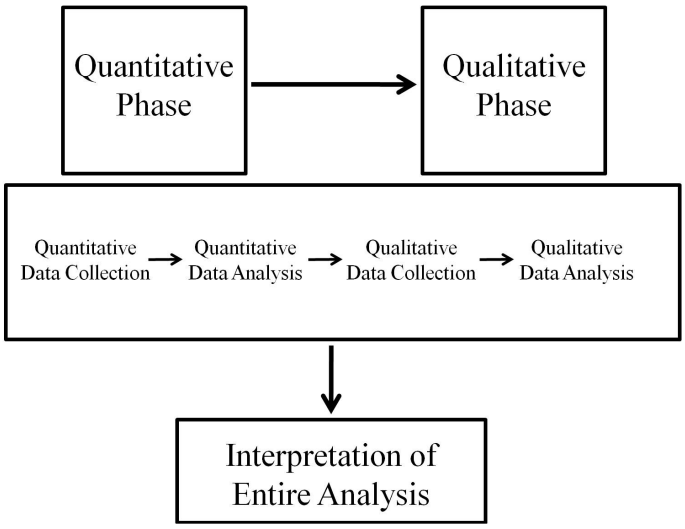

Figure A-1. Sequential Explanatory Design Adapted from Creswell (2003, 213)

APPENDIX B

Table B-1. Participant Background Information

Participant ID	City of Residence	Craft Medium	Craft Income
1	Chicago, IL	Sewing	Secondary
2	Chicago, IL	Paper Mache	Secondary
3	Knoxville, TN	Sewing	Secondary
4	Richmond, VA	Clothing	Primary
5	Knoxville, TN	Clothing	Secondary
6	Atlanta, GA	Book Making	Primary
7	Atlanta, GA	Letterpress	Primary
8	Atlanta, GA	Clothing	Primary
9	St. Louis, MO	Various/Art	Primary
10	Atlanta, GA	Clothing	Primary
11	Knoxville, TN	Decoration	Primary
12	St. Louis, MO	Various/Art	Secondary
13	Knoxville, TN	Clothing	Primary
14	St. Louis, MO	Clothing	Primary
15	Asheville, NC	Clothing	Secondary

APPENDIX C

Table C-1. Top MSAs Ranked by Total Number of Etsy Accounts

MSA	MSA Population	Total Etsy Accounts	Percentage of Etsy Total
New York, NY	17,470,799	18,384	7.03
Los Angeles, CA	12,058,018	14,784	5.65
Chicago, IL	8,813,457	10,791	4.12
San Francisco, CA	4,055,869	10,113	3.86
Seattle, WA	2,966,626	9,017	3.45
Portland, OR	1,863,035	7,763	2.97
Boston, MA	4,281,396	6,422	2.45
Dallas, TX	4,864,262	6,278	2.40
Philadelphia, PA	5,519,499	6,278	2.40
Atlanta, GA	3,989,861	6,085	2.33
Minneapolis, MN	2,866,692	5,223	2.00
Washington, DC	4,613,234	4,921	1.88
San Diego, CA	2,832,478	4,900	1.87
Phoenix, AZ	3,021,874	4,647	1.78
Austin, TX	1,141,449	4,581	1.75
Houston, TX	4,545,804	4,136	1.58
Denver, CO	2,023,699	3,270	1.25
Miami, FL	4,766,014	3,244	1.24
Baltimore, MD	2,493,249	2,990	1.14
Detroit, MI	4,492,879	2,979	1.14
Tampa, FL	2,287,586	2,929	1.12
St. Louis, MO	2,687,729	2,703	1.03
Orlando, FL	1,544,455	2,671	1.02
Kansas City, MO	1,813,675	2,556	0.98
Pittsburgh, PA	2,408,576	2,508	0.96

Population Data Source: 2000 U.S. Census Bureau

Table C-2. MSAs with Relatively Large Etsy Location Quotients (LQ)

MSA Name	Etsy LQ	MSA Name	Etsy LQ
Portland, OR	3.69	Savannah, GA	2.40
Bend, OR	3.43	Lawrence, KS	2.39
Eugene, OR	3.42	Santa Fe, NM	2.29
Bellingham, WA	3.40	San Francisco, CA	2.27
Austin, TX	3.20	Missoula, MT	2.14
Asheville, NC	3.13	Charlottesville, VA	2.13
Corvallis, OR	3.06	Boulder County, CO	2.11
Provo, UT	2.78	Raleigh-Cary, NC	2.05
Olympia, WA	2.74	Madison, WI	2.04
Santa Cruz, CA	2.70	Salt Lake City, UT	2.01
Seattle, WA	2.70	San Luis Obispo, CA	2.01
Athens, GA	2.66	Chico, CA	1.92
Ann Arbor, MI	2.44	Spokane, WA	1.91

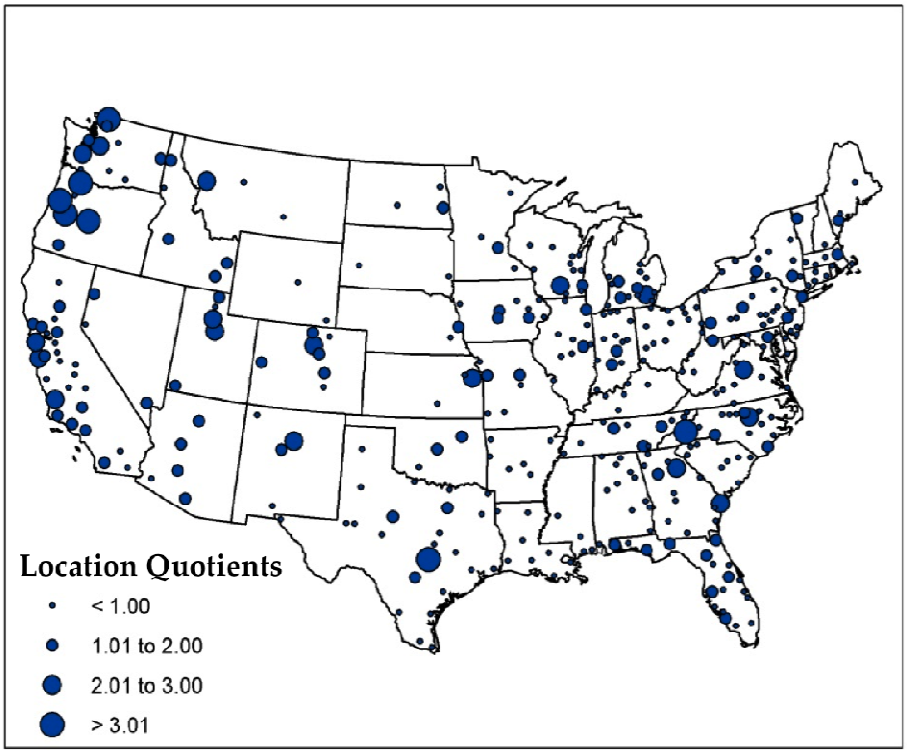

Figure C-1. Location Quotients of Etsy Accounts

Table C-3. Comparison of Location Quotients (LQ) with Related Research

Metro Area	Artistic LQ[1]	Bohemian LQ[2]	Etsy LQ	Etsy LQ Rank
Los Angeles, CA	2.99	1.93	1.29	69
New York, NY	2.52	1.82	1.04	102
San Francisco, CA	1.82	1.69	2.27	17
Washington, DC	1.36	1.65	0.91	120
Seattle, WA	1.33	1.57	2.70	11
Boston, MA	1.27	1.54	1.33	64

1. Markusen and Schrock (2006); 2. Florida (2002a)

Table C-4. Pearsons Correlations Matrix

	Crafters	Firms	Farms	Amen	Young	Ed	Int	Tol	Inst	Anc	Bus	Adv	Div	Inc	Pov
Crafters	1														
Firms	.712**	1													
Farms	.300**	.238**	1												
Amen	.124*	0.007	0.101	1											
Young	.221**	-0.009	0	0.077	1										
Ed	.756**	.741**	.283**	-0.034	.146**	1									
Int	0.052	0.015	-.107*	-.337**	-0.076	0	1								
Tol	.478**	.455**	.260**	.203**	.130*	.443**	-.134*	1							
Inst	.546**	.703**	.244**	-0.041	-.131*	.637**	.253**	.334**	1						
Anc	.413**	.570**	.127*	-0.05	-0.094	.474**	.134*	.267**	.650**	1					
Bus	.562**	.605**	.142**	.137*	0.03	.514**	.140**	.350**	.654**	.519**	1				
Adv	.363**	.449**	.124*	0.012	-0.022	.467**	0.103	.266**	.556**	.324**	.355**	1			
Div	0.06	-0.016	-0.043	.487**	.329**	-0.013	-.335**	.170**	-.139**	-0.057	0.057	-0.06	1		
Inc	0.081	-0.02	.124*	.174**	-0.018	.207**	-.177**	.120*	0.048	0.06	-.165**	0.093	.119*	1	
Pov	-.288**	-.409**	-.170**	0.031	0.101	-.360**	-0.013	-.177**	-.382**	-.332**	-.436**	-0.074	0.071	.537**	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table C-5. Descriptive Statistics: Log Transformed Data

Variable Name	N	Range	Minimum	Maximum	Mean	Std. Deviation
Crafters	346	1.660	-0.110	1.550	0.813	0.302
Firms	346	1.110	-0.090	1.010	0.405	0.182
Farms	346	3.590	-0.790	2.800	0.858	0.611
Amen	346	2.500	-1.300	1.200	0.655	0.298
Young	346	0.270	1.000	1.270	1.124	0.042
Ed	346	0.700	1.050	1.750	1.379	0.131
Int	346	0.760	0.430	1.200	0.830	0.155
Tol	346	0.990	0.210	1.190	0.725	0.163
Inst	346	1.410	0.000	1.410	0.591	0.165
Anc	346	1.670	-1.300	0.370	-0.388	0.237
Bus	346	1.070	-0.090	0.980	0.399	0.167
Adv	346	2.220	-1.300	0.920	0.227	0.266
Div	346	2.090	-0.070	2.030	0.820	0.488
Inc	346	0.140	0.580	0.720	0.647	0.024
Pov	346	0.760	0.780	1.550	1.115	0.117
Descriptive Statistics: Untransformed Data						
Crafters	346	35.05	.78	35.83	8.259	6.196
Firms	346	9.55	.81	10.35	2.775	1.248
Farms	346	626.30	.16	626.46	19.538	48.316
Amen	346	15.68	.05	15.73	5.354	2.804
Young	346	8.58	10.02	18.59	13.363	1.309
Ed	346	44.69	11.22	55.91	25.079	7.785
Int	346	12.98	2.70	15.68	7.196	2.530
Tol	346	13.99	1.61	15.60	5.675	2.085
Inst	346	24.72	.99	25.72	4.207	1.920
Anc	346	2.31	.05	2.36	0.469	.261
Bus	346	8.74	.82	9.56	2.704	1.158
Adv	346	8.28	.05	8.33	1.996	1.200
Div	346	105.17	.86	106.03	12.711	17.257
Inc	346	1.41	3.81	5.22	4.440	0.243
Pov	346	29.03	6.08	35.11	13.513	3.830

Table C-6: Model Results: Alternative Model 1

Variables	Unstd. Coefficients		Std. Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-2.242	0.416		-5.391	0.000		
Firms	0.525	0.093	0.315	5.659	0.000	0.294	3.401
Farms	0.043	0.016	0.087	2.635	0.009	0.837	1.195
Nat. Amen.	0.142	0.039	0.140	3.686	0.000	0.634	1.578
Young	0.91	0.256	0.126	3.552	0.000	0.725	1.380
Education	1.123	0.137	0.487	8.224	0.000	0.261	3.837
Internet	0.213	0.071	0.109	3.004	0.003	0.691	1.446
Tolerance	0.153	0.067	0.083	2.268	0.024	0.689	1.450
Institutions	-0.123	0.109	-0.067	-1.129	0.260	0.256	3.901
Ancillary	-0.012	0.054	-0.009	-0.217	0.828	0.514	1.945
Business	0.253	0.084	0.139	3.014	0.003	0.427	2.340
Advocacy	-0.056	0.044	-0.049	-1.272	0.204	0.615	1.627
Diversity	-0.021	0.024	-0.033	-0.873	0.383	0.626	1.598
Inc. Gini	-0.616	0.629	-0.049	-0.979	0.328	0.371	2.692
Poverty	0.223	0.129	0.087	1.732	0.084	0.364	2.745
	R	R^2	Adj. R^2				
	0.835	0.698	0.685				
ANOVA	Sum of Squares	df	Mean Square	F	Sig.		
Regression	22.017	14	1.573	54.599	0.000		
Residual	9.534	331	0.029				
Total	31.551	345					

Table C-7. Model Results: Alternative Model 2

Variables	Unstd. Coefficients		Std. Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-2.454	0.287		-8.542	0.000		
Art Firms	0.541	0.089	0.325	6.115	0.000	0.322	3.110
Urban Farms	0.044	0.016	0.088	2.711	0.007	0.861	1.161
Nat. Amenities	0.121	0.035	0.119	3.515	0.001	0.788	1.269
Young Adults	0.908	0.236	0.126	3.845	0.000	0.852	1.174
Education	1.056	0.117	0.458	9.062	0.000	0.357	2.804
Internet	0.238	0.068	0.122	3.487	0.001	0.741	1.350
Tolerance	0.144	0.067	0.078	2.150	0.032	0.695	1.438
Institutions	-0.153	0.101	-0.084	-1.515	0.131	0.297	3.364
Business	0.262	0.081	0.145	3.238	0.001	0.457	2.190
Advocacy	-0.046	0.043	-0.041	-1.075	0.283	0.634	1.578
Poverty	0.134	0.092	0.052	1.451	0.148	0.713	1.402
Model Summary	R	R^2	Adj. R^2				
	.834	0.696	0.686				
ANOVA	Sum of Squares	df	Mean Square	F	Sig.		
Regression	21.958	11	1.996	69.499	.000		
Residual	9.593	334	0.029				
Total	31.551	345					

Table C-8. Model Results: Final Model 3

Variables	Unstd. Coefficients		Std. Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-2.293	0.27		-8.486	0.000		
Art Firms	0.529	0.088	0.318	5.995	0.000	0.324	3.083
Urban Farms	0.043	0.016	0.086	2.669	0.008	0.869	1.151
Nat. Amenities	0.124	0.034	0.122	3.606	0.000	0.796	1.257
Young Adults	0.950	0.234	0.132	4.052	0.000	0.866	1.155
Education	1.026	0.115	0.445	8.930	0.000	0.368	2.721
Internet	0.244	0.068	0.126	3.586	0.000	0.745	1.343
Tolerance	0.144	0.067	0.078	2.152	0.032	0.698	1.433
Institutions	-0.189	0.096	-0.103	-1.970	0.050	0.332	3.009
Business	0.237	0.078	0.131	3.024	0.003	0.490	2.042
Model Summary	R	R^2	Adj. R^2				
	.833	0.693	0.685				
ANOVA	Sum of Squares	df	Mean Square	F	Sig.		
Regression	21.879	9	2.431	84.453	.000		
Residual	9.672	336	0.029				
Total	31.551	345					

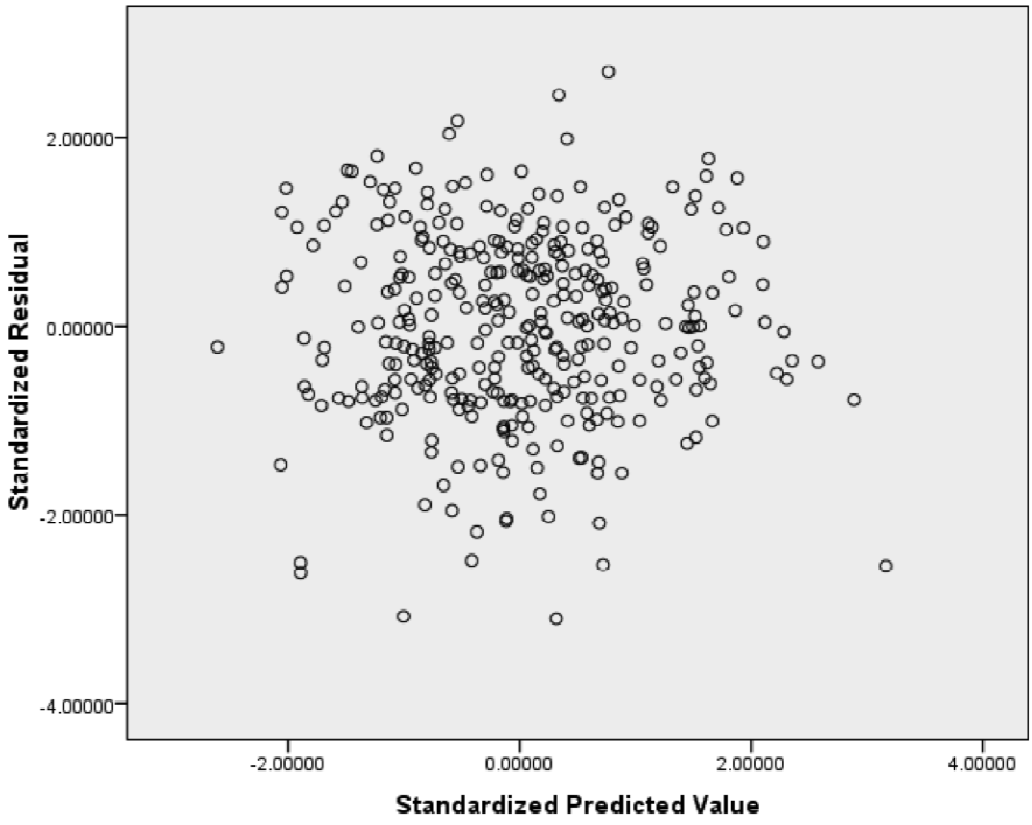

Figure C-2. Model Residuals Plotted Against Fitted Values

Table C-9. Model Results: Final Model 3

Variables	Unstd, Coefficients		Std. Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-2.084	.276		-7.541	.000		
Art Firms	.491	.087	.311	5.638	.000	.370	2.701
Urban Farms	.043	.016	.097	2.640	.009	.839	1.192
Nat. Amenities	.110	.034	.122	3.248	.001	.799	1.252
Young Adults	.796	.236	.122	3.373	.001	.865	1.156
Education	1.047	.115	.482	9.119	.000	.404	2.478
Internet	.254	.067	.146	3.779	.000	.752	1.329
Tolerance	.098	.066	.057	1.482	.139	.765	1.308
Institutions	-.200	.098	-.114	-2.046	.042	.363	2.758
Business	.187	.082	.107	2.278	.023	.508	1.970
Model Summary	R	R^2	Adj. R^2				
	.802	.643	.633				
ANOVA	Sum of Squares	df	Mean Square	F	Sig.		
Regression	15.371	9	1.708	63.434	.000		
Residual	8.535	317	.027				
Total	23.906	326					

Table C-10. Model Residuals and Rankings

MSA Name	Indie Crafts Rank	Indie Crafters	Logged Value	Predicted Value	Residual	Residual Label
Portland (OR)	1	35.827	1.554	1.289	0.265	Under
Eugene	2	33.535	1.526	1.203	0.323	Under
Corvallis	3	31.343	1.496	1.307	0.189	Under
Bellingham	4	30.927	1.490	1.174	0.316	Under
Santa Cruz	5	30.062	1.478	1.311	0.167	Under
Asheville	6	29.108	1.464	1.007	0.457	Under
Austin	7	28.798	1.459	1.255	0.204	Under
Seattle	8	27.332	1.437	1.264	0.172	Under
Bend	9	26.937	1.430	1.208	0.223	Under
Ann Arbor	10	26.183	1.418	1.339	0.079	Slightly Under
Boulder	11	25.640	1.409	1.545	-0.136	Slightly Over
Lawrence	12	25.095	1.400	1.429	-0.030	Accurate
Athens	13	24.934	1.397	1.170	0.227	Under
Olympia	14	24.923	1.397	1.140	0.257	Under
San Francisco	15	23.949	1.379	1.416	-0.036	Accurate
Madison	16	22.794	1.358	1.278	0.080	Slightly Under
Santa Fe	17	22.625	1.355	1.361	-0.007	Accurate
Missoula	18	22.150	1.345	1.373	-0.028	Accurate
Savannah	19	20.623	1.314	0.892	0.422	Under
Charlottesville	20	20.460	1.311	1.287	0.024	Accurate
Boston	45	14.290	1.155	1.238	-0.083	Slightly Over
Los Angeles	68	11.534	1.062	1.247	-0.185	Over
Chicago	71	11.356	1.055	1.016	0.039	Accurate
Phoenix	77	11.168	1.048	1.002	0.046	Accurate
Dallas	91	10.207	1.009	1.006	0.003	Accurate
New York	100	9.714	0.987	1.143	-0.155	Over
Washington DC	106	9.273	0.967	1.232	-0.264	Over
Houston	145	7.381	0.868	0.871	-0.003	Accurate

VITA

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